WARRANTY

WARRANTY to **Transbay Joint Powers Authority**
(Owner Name)
201 Mission, Suite 2100, San Francisco, CA
(Owner Address)

We hereby warrant and guarantee that the _____
(Description of Work)

which we have installed at Transbay Transit Center has been done in strict accordance with the plans and specifications, and that the work installed will fulfill the requirements of those specifications.

We agree to repair or replace, or cause to be repaired or replaced, any or all of the work which may prove to be defective in workmanship or materials, together with any adjacent work which required repair or replacement because of our defective work within a period of _____ year(s) from the filing of the Notice of Completion on all improvements, or acceptance by the Owner of the building, whichever is later.

If we fail to commence to comply with the above paragraph within ten (10) days after receipt of written notice, or fail to pursue such compliance with diligence, we jointly, and severally, do hereby authorize the Owner or the General Contractor to proceed to have the defects repaired and made good at our sole expense, and we will honor and pay the costs and charges for it together with interest at the maximum rate permitted by law upon demand. If we fail to fulfill the preceding obligations, and if Owner or General Contractor bring an action to enforce this Warranty, we agree to pay Owner or General Contractor reasonable attorney's fees incurred in connection therewith.

SUBCONTRACTOR:	CONTRACTOR:
_____	WEBCOR/OBAYASHI JOINT VENTURE
BY: _____	BY: _____
DATE: _____	DATE: _____
LICENSE NO. _____	LICENSE NO. 928731A, B, C-8

LOCAL REPRESENTATIVE TO BE CONTACTED FOR SERVICE:

NAME: _____

ADDRESS: _____

TELEPHONE: _____

Exhibit C

LIEN RELEASES

Form Number	Form Title
1034	Conditional Waiver and Release Upon Progress Payment
1035	Unconditional Waiver and Release Upon Progress Payment
1036	Conditional Waiver and Release Upon Final Payment
1037	Unconditional Waiver and Release Upon Final Payment

CONDITIONAL WAIVER AND RELEASE ON PROGRESS PAYMENT
***California Civil Code* Section 8132**

NOTICE: THIS DOCUMENT WAIVES THE CLAIMANT'S LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS EFFECTIVE ON RECEIPT OF PAYMENT. A PERSON SHOULD NOT RELY ON THIS DOCUMENT UNLESS SATISFIED THAT THE CLAIMANT HAS RECEIVED PAYMENT.

Identifying Information

Name of Claimant: _____
Name of Customer: Webcor/Obayashi Joint Venture
Job Location: Transbay Transit Center 425 Mission St. San Francisco, California
Owner: Transbay Joint Powers Authority
Through Date: _____

Conditional Waiver and Release

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for labor and service provided, and equipment and material delivered, to the customer on this job through the Through Date of this document. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. This document is effective only on the claimant's receipt of payment from the financial institution on which the following check is drawn:

Maker of Check: Webcor/Obayashi Joint Venture
Amount of Check: $_____
Check Payable to: _____

Exceptions

This document does not affect any of the following:
(1) Retentions.
(2) Extras for which the claimant has not received payment.
(3) The following progress payments for which the claimant has previously given a conditional waiver and release but has not received payment:
Date(s) of waiver and release:_____
Amount(s) of unpaid progress payment(s): $_____
(4) Contract rights, including (A) a right based on rescission, abandonment, or breach of contract, and (B) the right to recover compensation for work not compensated by the payment.

Signature
Claimant's Signature: _____
Claimant's Title: _____
Date of Signature: _____

UNCONDITIONAL WAIVER AND RELEASE ON PROGRESS PAYMENT
***California Civil Code* Section 8134**

NOTICE TO CLAIMANT: THIS DOCUMENT WAIVES AND RELEASES LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS UNCONDITIONALLY AND STATES THAT YOU HAVE BEEN PAID FOR GIVING UP THOSE RIGHTS. THIS DOCUMENT IS ENFORCEABLE AGAINST YOU IF YOU SIGN IT, EVEN IF YOU HAVE NOT BEEN PAID. IF YOU HAVE NOT BEEN PAID, USE A CONDITIONAL WAIVER AND RELEASE FORM.

Identifying Information

Name of Claimant: _____
Name of Customer: Webcor/Obayashi Joint Venture
Job Location: Transbay Transit Center 425 Mission St. San Francisco, California
Owner: Transbay Joint Powers Authority
Through Date: _____

Unconditional Waiver and Release

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for labor and service provided, and equipment and material delivered, to the customer on this job through the Through Date of this document. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. The claimant has received the following progress payment: $_____

Exceptions

This document does not affect any of the following:
(1) Retentions.
(2) Extras for which the claimant has not received payment.
(3) Contract rights, including (A) a right based on rescission, abandonment, or breach of contract, and (B) the right to recover compensation for work not compensated by the payment.

Signature

Claimant's Signature: _____
Claimant's Title: _____
Date of Signature: _____

CONDITIONAL WAIVER AND RELEASE ON FINAL PAYMENT
***California Civil Code* Section 8136**

NOTICE: THIS DOCUMENT WAIVES THE CLAIMANT'S LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS EFFECTIVE ON RECEIPT OF PAYMENT. A PERSON SHOULD NOT RELY ON THIS DOCUMENT UNLESS SATISFIED THAT THE CLAIMANT HAS RECEIVED PAYMENT.

Identifying Information

Name of Claimant: _____
Name of Customer: Webcor/Obayashi Joint Venture
Job Location: Transbay Transit Center 425 Mission St. San Francisco, California
Owner: Transbay Joint Powers Authority

Conditional Waiver and Release

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for labor and service provided, and equipment and material delivered, to the customer on this job. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. This document is effective only on the claimant's receipt of payment from the financial institution on which the following check is drawn:

Maker of Check: Webcor/Obayashi Joint Venture
Amount of Check: $_____
Check Payable to: _____

Exceptions

This document does not affect any of the following:
Disputed claims for extras in the amount of: $_____

Signature

Claimant's Signature: _____
Claimant's Title: _____
Date of Signature: _____

UNCONDITIONAL WAIVER AND RELEASE ON FINAL PAYMENT
***California Civil Code* Section 8138**

NOTICE TO CLAIMANT: THIS DOCUMENT WAIVES AND RELEASES LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS UNCONDITIONALLY AND STATES THAT YOU HAVE BEEN PAID FOR GIVING UP THOSE RIGHTS. THIS DOCUMENT IS ENFORCEABLE AGAINST YOU IF YOU SIGN IT, EVEN IF YOU HAVE NOT BEEN PAID. IF YOU HAVE NOT BEEN PAID, USE A CONDITIONAL WAIVER AND RELEASE FORM.

Identifying Information

Name of Claimant: _____
Name of Customer: Webcor/Obayashi Joint Venture
Job Location: Transbay Transit Center 425 Mission St. San Francisco, California
Owner: Transbay Joint Powers Authority

Unconditional Waiver and Release

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for all labor and service provided, and equipment and material delivered, to the customer on this job. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. The claimant has been paid in full.

Exceptions

This document does not affect the following:
Disputed claims for extras in the amount of: $_____

Signature

Claimant's Signature: _____
Claimant's Title: _____
Date of Signature: _____

CONDITIONAL WAIVER AND RELEASE ON PROGRESS PAYMENT
***California Civil Code* Section 8132**

NOTICE: THIS DOCUMENT WAIVES THE CLAIMANT'S LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS EFFECTIVE ON RECEIPT OF PAYMENT. A PERSON SHOULD NOT RELY ON THIS DOCUMENT UNLESS SATISFIED THAT THE CLAIMANT HAS RECEIVED PAYMENT.

Identifying Information

Name of Claimant: _____
Name of Customer: _____
Job Location: Transbay Transit Center 425 Mission St. San Francisco, California
Owner: Transbay Joint Powers Authority
Through Date: _____

Conditional Waiver and Release

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for labor and service provided, and equipment and material delivered, to the customer on this job through the Through Date of this document. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. This document is effective only on the claimant's receipt of payment from the financial institution on which the following check is drawn:

Maker of Check: _____
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Exceptions

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(1) Retentions.
(2) Extras for which the claimant has not received payment.
(3) The following progress payments for which the claimant has previously given a conditional waiver and release but has not received payment:
Date(s) of waiver and release:_____
Amount(s) of unpaid progress payment(s): $_____
(4) Contract rights, including (A) a right based on rescission, abandonment, or breach of contract, and (B) the right to recover compensation for work not compensated by the payment.

Signature
Claimant's Signature: _____
Claimant's Title: _____
Date of Signature: _____

UNCONDITIONAL WAIVER AND RELEASE ON PROGRESS PAYMENT
***California Civil Code* Section 8134**

NOTICE TO CLAIMANT: THIS DOCUMENT WAIVES AND RELEASES LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS UNCONDITIONALLY AND STATES THAT YOU HAVE BEEN PAID FOR GIVING UP THOSE RIGHTS. THIS DOCUMENT IS ENFORCEABLE AGAINST YOU IF YOU SIGN IT, EVEN IF YOU HAVE NOT BEEN PAID. IF YOU HAVE NOT BEEN PAID, USE A CONDITIONAL WAIVER AND RELEASE FORM.

Identifying Information

Name of Claimant: _____
Name of Customer: _____
Job Location: Transbay Transit Center 425 Mission St. San Francisco, California
Owner: Transbay Joint Powers Authority
Through Date: _____

Unconditional Waiver and Release

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for labor and service provided, and equipment and material delivered, to the customer on this job through the Through Date of this document. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. The claimant has received the following progress payment: $_____

Exceptions

This document does not affect any of the following:
(1) Retentions.
(2) Extras for which the claimant has not received payment.
(3) Contract rights, including (A) a right based on rescission, abandonment, or breach of contract, and (B) the right to recover compensation for work not compensated by the payment.

Signature

Claimant's Signature: _____
Claimant's Title: _____
Date of Signature: _____

CONDITIONAL WAIVER AND RELEASE ON FINAL PAYMENT
***California Civil Code* Section 8136**

NOTICE: THIS DOCUMENT WAIVES THE CLAIMANT'S LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS EFFECTIVE ON RECEIPT OF PAYMENT. A PERSON SHOULD NOT RELY ON THIS DOCUMENT UNLESS SATISFIED THAT THE CLAIMANT HAS RECEIVED PAYMENT.

Identifying Information

Name of Claimant: _____
Name of Customer: _____
Job Location: Transbay Transit Center 425 Mission St. San Francisco, California
Owner: Transbay Joint Powers Authority

Conditional Waiver and Release

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for labor and service provided, and equipment and material delivered, to the customer on this job. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. This document is effective only on the claimant's receipt of payment from the financial institution on which the following check is drawn:

Maker of Check: _____
Amount of Check: $_____
Check Payable to: _____

Exceptions

This document does not affect any of the following:
Disputed claims for extras in the amount of: $_____

Signature

Claimant's Signature: _____
Claimant's Title: _____
Date of Signature: _____

UNCONDITIONAL WAIVER AND RELEASE ON FINAL PAYMENT
***California Civil Code* Section 8138**

NOTICE TO CLAIMANT: THIS DOCUMENT WAIVES AND RELEASES LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS UNCONDITIONALLY AND STATES THAT YOU HAVE BEEN PAID FOR GIVING UP THOSE RIGHTS. THIS DOCUMENT IS ENFORCEABLE AGAINST YOU IF YOU SIGN IT, EVEN IF YOU HAVE NOT BEEN PAID. IF YOU HAVE NOT BEEN PAID, USE A CONDITIONAL WAIVER AND RELEASE FORM.

Identifying Information

Name of Claimant: _____
Name of Customer: _____
Job Location: Transbay Transit Center 425 Mission St. San Francisco, California
Owner: Transbay Joint Powers Authority

Unconditional Waiver and Release

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for all labor and service provided, and equipment and material delivered, to the customer on this job. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. The claimant has been paid in full.

Exceptions

This document does not affect the following:
Disputed claims for extras in the amount of: $_____

Signature

Claimant's Signature: _____
Claimant's Title: _____
Date of Signature: _____

Exhibit D

SAMPLE CERTIFICATE OF INSURANCE
AND ADDITIONAL INSURED ENDORSEMENT

Form Number	Form Title
ACCORD 25	Certificate of Liability Insurance
CG 201 10 11 85	Additional Insured - Owners, Lessees or Contractors (Form B) - Commercial General Liability
WC 04 03 06	Waiver of Our Right to Recover from Others Endorsement

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME:	
ANY AGENT OR BROKER STREET ADDRESS CITY, STATE, ZIP PHONE/FAX SAMPLE	PHONE (A/C, No, Ext):	FAX (A/C, No):
	E-MAIL ADDRESS:	
	INSU	XYZ INSURANCE COMPANY (RATED A-VII OR BETTER BY AM BEST) — NAIC #
	INSURER A :	
	INSURER B :	
	INSURER C :	
	INSURER D :	
	INSURER E :	
	INSURER F :	
INSURED ABC SUBCONTRACTOR STREET ADDRESS CITY, STATE, ZIP		

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY [X] COMMERCIAL GENERAL LIABILITY [ ] CLAIMS-MADE [X] OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: [ ] POLICY [X] PRO-JECT [ ] LOC	X	X	XYZ123456			EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ TBD $ TBD $ 1,000,000 $ 2,000,000 $ 2,000,000
A	AUTOMOBILE LIABILITY [X] ANY AUTO [ ] ALL OWNED AUTOS [ ] SCHEDULED AUTOS [ ] HIRED AUTOS [ ] NON-OWNED AUTOS			XYZ654321			COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
A	[ ] UMBRELLA LIAB [X] OCCUR [ ] EXCESS LIAB [ ] CLAIMS-MADE [ ] DED [ ] RETENTION $			XYZ123456			EACH OCCURRENCE AGGREGATE	$ $
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N [ ] If yes, describe under DESCRIPTION OF OPERATIONS below	N/A	X	XYZ123456			[X] WC STATU-TORY LIMITS [ ] OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ 1,000,000 $ 1,000,000 $ 1,000,000
A	POLLUTION LIABILTY PROFESSIONAL LIABILITY			XYZ123456 XYZ123456				

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

RE: Transbay Transit Center Building

CERTIFICATE HOLDER

Webcor/Obayashi Joint Venture
951 Mariners Island Blvd., 7th Floor
San Mateo, CA 94404-2514

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Mary Jane Doe

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WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT

This endorsement changes the policy to which it is attached effective on the inception date of the policy unless a different date is indicated below.

(The following "attaching clause" needs to be completed only when this endorsement is issued subsequent to preparation of the policy.)

This endorsement forms a part of Policy No. XYZ 1234567

Issued to: ABC SUBCONTRACTOR

By: XYZ INSURANCE COMPANY

Premium (if any) TBD

We have a right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us).

You must maintain payroll records accurately segregating the remuneration of your employees while engaged in the work described in the Schedule.

The additional premium for this endorsement shall be 2.5% of the California workers compensation premium otherwise due on such remuneration.

Schedule

Person or Organization	Job Description
WEBCOR/OBAYASHI JOINT VENTURE, Its Officers, Directors and Employees AND TRANSBAY JOINT POWERS AUTHORITY, its Board Members and Commissions, All Authorized Agents and Representatives, and Members, Directors, Officers, Trustees, Agents and Employees of Any of Them.	TRANSBAY TRANSITY CENTER BUILDING.

WAIVER OF SUBRAGATION FOR WORKERS COMPENSATION INSURANCE TO BE INCLUDED.

WC 04 03 06
(Ed. 4-84)

Countersigned by John Doe
Authorized Representative

POLICY NUMBER: XYZ 1234567 COMMERCIAL GENERAL LIABILITY

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS (FORM B)

This endorsement modifies insurance provide under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name of Person or Organization:	WEBCOR/OBAYASHI JOINT VENTURE, Its Officers, Directors and Employees
AND	TRANSBAY JOINT POWERS AUTHORITY, its Board Members and Commissions, All Authorized Agents and Representatives, and Members, Directors, Officers, Trustees, Agents and Employees of Any of Them.
RE:	TRANSBAY TRANSIT CENTER BUILDING.

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

WHO IS AN INSURED (Section II) is amended to include as an insured the person or organization shown in the Schedule, but only with respect to liability arising out of "your work" for that Insured by or for you.

If required by your agreement with such insured, this insurance shall be primary insurance for such Insured. If anyone also provides similar insurance for such Insured, then that insurance will be primary, and this insurance will be excess over, or secondary to that insurance.

"The insurance afforded by this policy for the additional insured(s) is primary insurance and any other insurance maintained by or available to the additional Insured(s) is non-contributory."

WAIVER OF SUBROGATION - WORKERS COMP

CG 20 10 11 85

Exhibit "D"

TRANSBAY TRANSIT CENTER

LEED Subcontractor Submission Letter and Data Sheet

March 13, 2014 Revision 3

WEBCOR/OBAYASHI JOINT VENTURE
SAN FRANCISCO, CA

EXHIBIT E

Exhibit E – LEED Trade Subcontractor Submission Letter & Data Sheet

Transbay Transit Center
Webcor/Obayashi Joint Venture
175 Beale Street
San Francisco, CA 94105
T 415-978-5700

To Whom It May Concern:

In our efforts to complete LEED Documentation for the **Transbay Transit Center Project** we will need the following information provided on your official company letter head:

1. Company Name & Contact Information

2. Contract Value

3. Progress Report Date

4. Scope of work included in Contract with specific Division and Sections listed.

5. **List of all materials permanently installed on the project**, within the LEED boundary that were included in the contract. A total estimated weight value and total actual material cost must be provided for each material. Please provide exact Material name & manufacturer, division and specification section number (XX XX XX).

6. Recycled content (**post-consumer and pre-consumer broken out separately**) percentages for each material from CSI Masterformat 2004 Edition Divisions 3-10, 31 (Section 31 6X XX Foundations) and 32 (Sections 32 1X XX Paving, 32 3X XX Site Improvements, 32 9X XX Planting). Please provide cut sheets of each material with the recycled content values posted.

7. List the location of material extraction (city, state, country) and material manufacturing (city, state, country) for all materials from CSI Masterformat 2004 Edition Divisions 3-10, 31 (Section 31 6X XX Foundations) and 32 (Sections 32 1X XX Paving, 32 3X XX Site Improvements, 32 9X XX Planting). Specifically, we are looking for those materials that were **both extracted and manufactured** within a weighted total travel distance of 500 miles of the jobsite. Per addendum to the BD+C v2009 Reference Guide, weighted total travel distance under Option 2 of the MR Credit 5 Regional Materials should be calculated using the following formula: (Distance by rail/3) + (Distance by inland waterway/2) + (Distance by sea/15) + (Distance by all other means) ≤ 500 miles [800 kilometers]. If you are sure that your materials do not comply as Regional Material, please note that the material was extracted/manufactured “greater than 500 miles” from the jobsite.

8. If you provided any adhesives, sealants, coatings, paints, carpet systems, etc. – please be sure to include these materials on your spreadsheet with the **actual VOC content (g/L**). Please provide proof in the form of a cutsheet, or MSDS highlighting the VOC content value.
    a. All particleboard, MDF, Agrifiber, Veneers, and composite wood products must be **Urea-Formaldehyde free**. Please note “*Urea-Formaldehyde free*” in the VOC column for these material types. All Agrifiber/composite wood products must provide proof of being Urea-formaldehyde free in the form of MSDS, Cut Sheet, or Letter from the Manufacturer.

9. For all materials that contain wood, please specific the FSC Wood **Chain of Custody number** (COC). The COC Certificate and **original purchasing invoices** must be provided as proof of purchase/certification.

LEED Submittals:

A. **Preliminary LEED Material Spreadsheet Submittal** - Within 30 days of Contract award, assemble and submit the "LEED Material Tracking Spreadsheet" complete with all data described in 4-8 above. Cover letter and back up documentation are not necessary for this submittal. The quantities, costs, products, and LEED metrics should be entered in the spreadsheet as the project/contract scope was bid/ estimated. Please see the sample LEED Material Tracking Spreadsheet that you must complete and submit back to Webcor/Obayashi Joint Venture within 30 days of awarded contract.

B. **Quarterly LEED Progress Reports (Reference 01 81 13 1.5 E 2)** – Quarterly LEED Progress Reports are due by February 10 (Q1), May 10 (Q2), August 10 (Q3), and November 10 (Q4) of each year. Assemble and submit the "LEED Material Tracking Spreadsheet" in, PDF and Excel formats, complete with all data described in 4-8 above and based on the Preliminary LEED Material Spreadsheet Submittal. All changes from the previous quarter shall be indicated in bold. Update each Material Status with one of the following: Preliminary, Approved, Bought, or Installed.
    a. Preliminary – Indicates the material has been included in its preliminary stage of planning but has yet to be approved by the design team.
    b. Approved – Indicates the material has been approved by the Design Team as meeting all requirements specified. Include Design Team submittal approval.
    c. Bought – Indicates the material has been bought out after approval by the Design Team.
    d. Installed – Indicates the material has been permanently installed on the project within the LEED boundary.

C. **Final Exhibit E Submittal** – Prior to closeout, assemble and submit all 'actual' LEED material information on the "LEED Material Tracking Spreadsheets" and forms provided in the Project Manual, together with all supplemental documentation as required by LEED. Please see the sample LEED cover letter and Material Tracking Spreadsheet that you must complete and submit back to Webcor/Obayashi Joint Venture prior to closeout on the project.

If you have any questions or concerns, please contact Webcor/Obayashi Joint Venture. If there is any information that you are not able to track down please let us know. We are here to support your LEED efforts.

Sincerely,

WEBCOR/OBAYASHI JOINT VENTURE

[Insert your company logo]
[Type the sender address]
Phone: **[Type the sender phone number]**

Document Control
Transbay Transit Center
Webcor/Obayashi Joint Venture
175 Beale Street
San Francisco, CA 94105
docctrl@webcor-obayashi.com

[**Date**]

To: Webcor/Obayashi Joint Venture,

Please find the following information regarding the scope of work that [subcontractor name] provided to the **Transbay Transit Center project** in San Francisco, CA.

1. Subcontractor's LEED Point of contact information:
   a. Name: _____
      Title: _____
      Email: _____
      Phone #: _____

2. The total contract value of our work is $_____

3. Final Status of all materials: [use LEED Material Spreadsheet]

4. Scope of work (Division/Section): [use LEED Material Spreadsheet]

5. List of Materials included in contract value (weight): [use LEED Material Spreadsheet]

6. Post-Consumer & Post-Industrial Recycled content values for each material (%):[use LEED Material Spreadsheet]

7. Location of Material Extraction & location of Material Manufacturing: [use LEED Material Spreadsheet]

8. VOC Content (g/L) for each material: [use LEED Material Spreadsheet]
   a. VOC values only required for: adhesives, sealants, coatings, paints, carpet & flooring systems
   b. Confirmation of "Urea-Formaldehyde Free" for Agrifiber products: [use LEED Material Spreadsheet]

9. Chain of Custody Number for all FSC Wood Products: [use LEED Material Spreadsheet]

Thank you,

_____

[Insert your company logo]
[Sender Name]
[Sender Title]
[Sender Company Name]
[Date signed]

TTC - LEED Materials Spreadsheet

Trade Group No.: _____
Subcontractor Name: _____
Total Contract Value: _____
Progress Report Date: _____

Material Status (Preliminary, Approved, Bought, Installed)	Official Product Name	Material Manufacturer	Division and Section # (XX XX XX)	Actual Cost of Material	Total Weight of Material Purchased	Post Consumer Recycled Content %	Pre Consumer Recycled Content %	Location of Material Extraction	Location of Material Manufacturing	VOC Content (g/L) (if applicable)	FSC Chain of Custody # (if applicable)

Exhibit G

SUBCONTRACTOR PAYMENT REQUISITION

1. Forms Checklist

2. Forms

	Form Number	Form Title
i.	1030	Subcontractor Progress Billing Invoice
ii.	1030A	Schedule of Values
iii.	1031	Subcontractor Final Retention Invoice
iv.	1031A	Schedule of Value Retention Release
v.	00 08 21/AT3-E (modified)	Progress Payment Report (With Additional SBE Columns)

Forms Checklist

**This checklist is provided as a reference, but may not be a complete list. Refer to the Contract Documents for all required submissions and their frequency.

#	FORMS	FORM	FREQ	REF
1	**CityBuild Workforce Projection Form 1 and 2** - Non-compliance results in removal from site	00 08 20/AT1 00 08 20/AT2	Initial	Div 00 08 20 1.7
2	**Schedule of Values**	1030A	Initial / Monthly	Exhibit G
3	**Daily Report** (must be CURRENT at the time of pay app submission and payment)		Daily / Monthly	Bid Manual IV. A. 4. c.
4	**Subcontract Progress Billing Invoice**	1030	Monthly	Exhibit G
5	**Conditional Waiver and Release Upon Progress Payment**	1034	Monthly	Exhibit C
6	**Unconditional Waiver and Release Upon Progress Payment**	1035	Monthly	Exhibit C
7	**TJPA ARRA Jobs Report Form**	v 1.2	Monthly	Div 00 08 13, 1.2.E & APF
8	**Manpower Projection**		Monthly	Bid Manual IV. A. 38. a.
9	**Billing Projection** / Cashflow Projection		Monthly	Bid Manual IV. A. 37. a.
10	**TJPA Progress Payment Report**	00 08 21/AT3-D	Monthly	Div 00 08 21, 1.5.B
11	**Subcontractor Payment Declaration**	00 08 21/AT3-E	Monthly	Div 00 08 21, 1.5.C
12	**Project Specific Insurance** (Must be CURRENT)		Monthly	Long Form Subcontract 16
13	**Certified Payroll**, weekly electronic submission (CURRENT at the time of pay app submission and payment) including subtiers		Weekly / Monthly	Long Form Subcontract 4.2
14	**Apprentice Training Fund Contributions** proof of payment	a) Copy of trust fund remittance report w/ copy of cancelled check OR b) DAS Form CAC 2 w/ copy of cancelled check	Monthly	Bid Manual II. F. 6. c. & Long Form Subcontract 4.2 & Div 00 08 22 1.2 D.
15	**Apprenticeship min/max ratio verification -** if under, submit a plan to satisfy requirement by the end of the project without exceeding daily max; if over, provide written explanation for each day of violation		Monthly	Bid Manual
16	**Apprenticeship Monthly Trade Subcontractor Affidavit**		Monthly	Bid Manual, Exhibit Q
17	**Request for Dispatch of an Apprentice (DAS 142 Form)** - if any	DAS 142	Monthly	Bid Manual
18	**Apprentice documentation** - documentation on employed apprentices that are current and properly registered as required by specs		Monthly	Div 00 08 13/APA, Section 23 (d) (1)
19	**EIC Form** from eligible subcontractor employees		Yearly	Div 00 08 22 1.9 C (all of 1.9)
20	**LEED - NC Version 3.0** (monthly summaries and deliverables)		Monthly	Bid Manual IV. A. 40. a. and Div 01 81 13 1.5 D.1-4
21	Reconciled Excel submittal form with Trade Package Progress Schedule (2 times a month) - NOTE: In Div 01 our updated schedule must be submitted in our Progress Payment Request, see 01 13 10 1.5 E.		Monthly	Bid Manual IV. A. 35. f. and C.1.J
22	**Weekly Safety "Tool Box" Meeting Minutes** (must be CURRENT at the time of pay app submission and payment)		Weekly / Monthly	Bid Manual IV. B.
23	**JHA Reports** (Job Hazard Analysis Reports) (must be CURRENT at the time of pay app submission and payment)	H4	Monthly	Bid Manual IV. B.
24	**Monthly Disposal and Recycling Summary Report** (Waste Management Requirements)	00 08 15 / APA - 1 and 00 08 15 / APA - 12	Monthly	Div 00 08 15 1.5 C 1 and 2
25	(Contractor) **CONSTRUCTION AND DEMO DEBRIS RECOVERY MONTHLY SUMMARY REPORT** monthly with Pay App		Monthly	Div 01 74 00 1.8 A. B.
26	**DBE Trucking Verification**, due at end of month, need amount paid by DBE Trucking companies to all firms, including owner-operators, for leasing of trucks - DUE TO TJPA by Contractor on the 15th of the month to TJPA	Monthly DBE Trucking Verification Form	Monthly	Div 00 08 21/AT2 5 b. i. and ii.
27	**Up to date As-builts drawings** on site at all times		Monthly	Bid Manual IV. K. 1. a.
28	**Stored Materials Documentation**		Monthly	Div 00 07 00, 1.4.I
29	**Daily Sign In and Out Sheet** (must be CURRENT at the time of pay app submission and payment)	TJPA Daily Sign-in Sheet	Daily / Monthly	Div 00 07 00 57, Article 11, 11.04
30	**Daily Quality Control Reports** (must be CURRENT at time of pay app submission and payment)		Daily	Dic 00 14 00 1.12 and Exhibit J
31	**Trade Package Progress Schedule** update in electronic format (must be CURRENT at the time of pay app submission and payment)		Monthly	
32	**LEED Progress Reporting** with each pay app		Monthly	
33	**Updated Bidders / Proposers Information Request Form** - must be submitted whenever subcontractor information is updated, regardless of SBE participation	00 08 21/AT3-B	As-needed	Div 00 08 21 1.3E
34	**Conditional Waiver and Release Upon Progress Payment** - subtiers and vendors	1034	Final	Exhibit C
35	**Unconditional Waiver and Release Upon Progress Payment** - subtiers and vendors	1035	Final	Exhibit C
36	**Subcontractor Final Retention Invoice**	1031	Final	Exhibit G
37	**Schedule of Values Retention Release**	1031A	Final	Exhibit G
38	**Conditional Waiver and Release Upon Final Payment**	1036	Final	Exhibit C
39	**Unconditional Waiver and Release Upon Final Payment**	1037	Final	Exhibit C
40	**Conditional Waiver and Release Upon Final Payment** - subtiers and vendors	1036	Final	Exhibit C
41	**Unconditional Waiver and Release Upon Final Payment** - subtiers and vendors	1037	Final	Exhibit C
42	**Final** weekly electronic submission of **Certified Payroll** (must be CURRENT at the time of pay app submission and payment) including subtiers		Final	Long Form Subcontract 4.2
43	One compact disk containing electronic files in .dwg format and pdf format and three (3) sets of accurate and complete As-built drawings - Complete As-builts are due upon completion. - prior to requesting final payment		Final	Bid Manual IV. K. 1. e and f.
44	**Operations and Maintenance Manuals** shall be submitted 12 months prior to start of commissioning and prior to requesting final payment		Final	Bid Manual IV. K. 1. f.
45	Evidence of final payment to Unions and Union Trust Funds, State Apprenticeship Programs (subs who are not signatory to unions)		Final	Long Form Subcontract 4.2

Forms Checklist

**This checklist is provided as a reference, but may not be a complete list. Refer to the Contract Documents for all required submissions and their frequency.

#	FORMS	FORM	FREQ	REF
46	**Apprenticeship Trade Subcontractor Affidavit** - that the required number of apprentices were employed and/or records showing that the apprenticeship committee(s) either denied or failed to respond to a request for the dispatch of apprentices in accordance with Labor Code Section 1777.5		Final	Bid Manual, Exhibit Q
47	**Warranties** must be submitted prior to requesting final payment		Final	Div 01 17 00 1.4 A 3. b.
48	Spare Parts and material extra stock		Final	Div 01 17 00 1.4 A 3. d.
49	**Final (Contractor) CONSTRUCTION AND DEMO DEBRIS RECOVERY SUMMARY REPORT**		Final	Div 01 74 00 1.8 D.
50	**Final LEED Final Reports and Documentation**		Final	Bid Manual IV. A. 40. a. and Div 01 81 13 1.5 D.1-4
51	**Final Disposal and Recycling Summary Report** (Waste Management Requirements)	00 08 15 / APA - 1 and 00 08 15 / APA - 12	Final	Div 00 08 15 1.5 C 1 and 2

Subcontractor Progress Billing Invoice

Send invoice to:
EMAIL: ap@webcor.com
FAX: (510) 748-3474
MAIL: 1751 Harbor Bay Parkway, Suite 200 Alameda, CA 94502

Billing Information		*Subcontractor Contact Information*	
Owner Pay App NO.		Subcontractor Name:	
Vendor Number		Remittance Address:	
Webcor/Obayashi Joint Venture Subcontract Number:		City, State, Zip:	
Webcor/Obayashi Joint Venture Job Number:	30100.XX	Contact Name:	
Job Name:	Transbay Transit Center	Contact Email Address:	
Pay App Number:		Contact Phone Number:	
Invoice Number:		Contact Fax Number	
Invoice Date:		Print Signer's Name and Title:	
Sub Job Number:			
Period From:		**Signature**	
Period To:		**Date Signed**	

The following invoice covers work completed through the last day of _____

Original Contract Amount:		$0.00
Executed Change Orders (CO) though CO No:		$0.00
Total Revised Contract Amount:		$0.00
Gross Amount Complete to Date %		$0.00
Less Gross Amount Previously Invoiced:		$0.00
Current Gross Billing Amount:		$0.00
Less Current Retention:		$0.00
Current Net Amount:		$0.00

Webcor/Obayashi Joint Venture Approvals below this line

Schedule of Values

Sub:
Sub No.:

Transbay Transit Center

Sub Application Number:
Invoice Date:
Webcor/Obayashi Joint Venture Job No: 30100.XX

In tabulations below, amounts are stated to nearest dollar

Period From:
Period To:

A			B	C	D	E	F	G	H	I	J
Item No.	CSI Division	Spec Section	Description of Work	Scheduled Value	Previous Application	Work Completed This Application		Total To Date (C+D+E)	% (F/B)	Balance To Finish (B-F)	Retention To Date
						In Place	Stored				
1											
2											
3											
4											
5											
6											
7											
8											
			Sub Total								
PCO #	CSI Division	SCO No.	Approved Change Orders								
			Total Change Orders								
			Grand Total								

Subcontractor Final Retention Invoice

Send invoice to:
EMAIL: ap@webcor.com
FAX: (510) 748-3474
MAIL: 1751 Harbor Bay Parkway, Suite 200 Alameda, CA 94502

Billing Information		***Subcontractor Contact Information***	
Vendor Number (W/O JV Use Only)		Subcontractor Name:	
Invoice Number:	RETENTION:	Remittance Address:	
Invoice Date:		City, State, Zip:	
Webcor/Obayashi JV Subcontract Number:		Contact Name:	
Webcor/Obayashi JV Job Number:	30100.XX	Contact Email Address:	
Job Name:		Contact Phone Number:	
Transbay Transit Center		Contact Fax Number	
		Print Signer's Name and Title:	
		Signature & Date	
			Date Signed

The following invoice covers work completed through the last date of _____ (Month), _____ (Year):

Contract Amount:		$ -
Executed Change Orders Through Change Order NO:	_____	$ -
Total Revised Contract Amount:		$ -
Gross Amount Complete to Date % (_____ %)		$ -
Less: Total Net Amount Previously Billed:		$ -
Total Amount Due:		$ -

****

For Webcor /Obayashi JV Use only

Schedule of Values Retention Release

Sub:
Sub No.:

Transbay Transit Center

Sub Application Number:
Invoice Date:
Webcor/Obayashi Joint Venture Job No: 30100.XX

In tabulations below, amounts are stated to nearest dollar

Period From:
Period To:

A			B	C	D	E	F	G	H	I	J
Item No.	CSI Division	Spec Section	Description of Work	Scheduled Value	Previous Application	Work Completed This Application		Total To Date (C+D+E)	% (F/B)	Balance To Finish (B-F)	Retention To Date
						In Place	Stored				
1											
2											
3											
4											
5											
6											
7											
8											
			Sub Total								
PCO #	CSI Division	SCO No.	Approved Change Orders								
			Total Change Orders								
			Grand Total								

TRANSBAY JOINT POWERS AUTHORITY
PROGRESS PAYMENT REPORT
(WITH ADDITIONAL SBE COLUMNS)

To be completed by Trade Subcontractor and submitted to Project Manager with every monthly invoice.

PART 1: PROJECT SUMMARY

Contract Award Date:	TJPA Contract No.:	Contract Title:	
Trade Subcontractor:	Contact Person:	Contact Phone No.:	Contact Email:
Trade Subcontractor Address	Signature:		
Invoice Date:	Invoice No.:	For the Period:	

1. Award amount of Trade Subcontract	$ -
2. Amount of Change Orders, Amendments and Modifications to Date	$ -
3. Total Contract Amount to Date including Change Orders, Amendments and Modifications (Line 1 + Line 2)	$ -
4. Total Amount for this Invoice (Less Retention)	$ -
5. Total Previously Invoiced Awaiting Payment (Less Retention)	$ -
6. Total Amount Paid to Date (not including Lines 4 and 5)	$ -
7. Total Invoice Amount Requested to Date (Line 4 + Line 5 + Line 6)	$ -
8. Total Retention to Date[1]	$ -
9. Percent Complete ([Line 7 + Line 8] / Line 3)	0%

TRANSBAY JOINT POWERS AUTHORITY
PROGRESS PAYMENT REPORT
(WITH ADDITIONAL SBE COLUMNS)

PART 2: CONSULTANT/SUBCONSULTANT PAYMENT DETAIL SUMMARY

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
Name of Firm (Including Prime, Subs, Vendors, and Joint Ventures)[4]	DBE or SBE (Y/N)	Portion of Work (%)	Contract Amount ($)	Amount of Change Orders to Date ($)	Total = Contract Amount + Change Orders (D+E) ($)	Amount Invoiced This Period ($)	Previously Invoiced Awaiting Payment ($)	Total Amount Paid to Date ($)	Total Retention to Date[1] ($)	Percent Complete to Date ([G+H+I +J] / F) (%)	SBE Participation Type[2]	SBE Participation Percentage[3] (%)	SBE Participation Lump Sum[3] ($)	SBE Total Contract Amount[3] FxM+N ($)	Percent SBE Contract Amount (O/F) (%)	SBE Amount Paid to Date ($)	Percent SBE Paid to Date (Q/I) (%)
					$0.00					#DIV/0!				$0.00	#DIV/0!		#DIV/0!
					$0.00					#DIV/0!				$0.00	#DIV/0!		#DIV/0!
					$0.00					#DIV/0!				$0.00	#DIV/0!		#DIV/0!
					$0.00					#DIV/0!				$0.00	#DIV/0!		#DIV/0!
					$0.00					#DIV/0!				$0.00	#DIV/0!		#DIV/0!
					$0.00					#DIV/0!				$0.00	#DIV/0!		#DIV/0!
					$0.00					#DIV/0!				$0.00	#DIV/0!		#DIV/0!
					$0.00					#DIV/0!				$0.00	#DIV/0!		#DIV/0!
					$0.00					#DIV/0!				$0.00	#DIV/0!		#DIV/0!
					$0.00					#DIV/0!				$0.00	#DIV/0!		#DIV/0!
TOTAL		0	0	0	0	0	0	0	0	#DIV/0!	0	0	0	0	#DIV/0!	0	#DIV/0!

[1] As retention is requested and paid, move out of "Total Retention to Date" and into "Amount Paid to Date"

[2] SBE Participation Types: (Select 1 Only) SBE Prime Contractor, SBE Subcontractor, SBE Joint Venture Partner, SBE Regular Dealer,Other SBEs, SBE Trucking Company (refer to TJPA Board Policy No. 015 Section IV)

[3] If SBE participation is Other SBE, SBE Joint Venture Partner or SBE Trucking Company enter lump sum participation in column N in lieu of column M (Refer to TJPA Policy No. 015 Section IV)

[4] If SBE Firm has multiple participation types each type should be listed as separate line item

TRANSBAY TRANSIT CENTER

Site Specific Safety Program
Revision 9

July 10, 2014

WEBCOR/OBAYASHI JOINT VENTURE
SAN FRANCISCO, CA

EXHIBIT H

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Webcor/Obayashi Joint Venture Statement on Safety

It is the policy of Webcor/Obayashi Joint Venture to provide employees a safe place to work. The personal safety and health of each employee of this company is of prime importance. The prevention of accidents and injury will be given precedence over operating productivity whenever necessary. To the greatest degree possible, management will provide facilities required for personal safety and health.

Our objective is a program that will reduce the number of injuries to a minimum and to surpass the best experience of other operations similar to ours. Our goal is zero accidents and injuries.

Our policy will be implemented as follows:

- Management will continue to develop policies and procedures that will assist in the control of personal injury, property damage and losses and fleet damage. Direct and indirect costs associated with these types of losses contribute unfavorably to operating expenses. These policies and procedures will be reviewed and updated as needed.
- Safety is the direct responsibility of all personnel. Safety is of prime importance to production and quality. Everyone has the right to stop work to address safety concerns.
- Safety on the job in all company facilities and job sites is a priority. In no instance will safety become secondary to any other considerations. Any recognized safety activity or hazard will be corrected.
- It is mandatory that all personnel engaged in work on this project comply with all federal, state and local safety codes and regulations throughout the duration of their construction on this project.
- Each site will have a Supervisor available to support the safety effort.
- Each Supervisor will be assigned various levels of safety responsibility and authority.
- All employees will be held accountable for the safety policy.
- An established system of communication, measurement, and documentation exists throughout the company.
- A Safety Committee is in place to formulate and update the company safety program and policies. This committee operates under the supervision of management.

Health and Safety Communication

This Webcor/Obayashi Joint Venture project plan will be developed incrementally as trade packages are awarded and trade subcontractors are brought on board. Each trade subcontractors plan will become part of Webcor /Obayashi's overall project plan and will be submitted to the Transbay Joint Powers Authority (TJPA) as they are received.

Orientation

The Webcor/Obayashi Joint Venture training will contain required elements stipulated by Webcor/Obayashi Joint Venture Code of Safe Conduct and Work Practices.

Webcor/Obayashi Joint Venture and ClickSafety have partnered to create a web-based Contractor Safety orientation course for the Transbay Transit Center. All contractors requiring access to the Transbay Transit Center project must successfully complete the three (3) required sessions online through ClickSafety prior to working on site. This site-specific safety orientation will take approximately one (1) hour to complete the three (3) sessions:

- Webcor/Obayashi Safety Passport
- Webcor/Obayashi Click Green Construction Practice
- Webcor/Obayashi Transbay Transit Center Project

The three sessions' includes a discussion on site protocol, evacuation procedures, a description of the logistics of the site, safety expectations and requirements that employees are expected to understand and comply with while working on the premises. These sessions are available in both English and Spanish.

Subcontractors are required to provide other task specific orientations as needed.

ClickSafety - Project Fees

The fee structure for ClickSafety services is a *$100 annual fee per user.

**Prorate will apply to those that begin the training after the first quarter of the current year.*

The prorate schedule is as follows:

January – June	$100	Valid January – December
July – December	$50	Valid July 1 – December

ClickSafety – Account Setup

These steps are to assist Contractors in setting up their account, user registration and implementation of ClickSafety.

1. Access ClickSafety's Transbay Safety Passport home page at http://www.clicksafety.com/safetypassport-transbay/
2. Create a company account. Click on the *Company* tap, then on *Register Company*, follow the prompts
    a. If your Company already have an account, your Company will still need to register your existing account for this project
3. Assign the three sessions:
    a. Webcor/Obayashi Safety Passport
    b. Webcor/Obayashi Click Green Construction Practice
    c. Webcor/Obayashi Transbay Transit Center Project

4. Prepay for employee training with a credit card and create an access code
    a. Keep this access code available as your employees will be required to enter it when they register
5. Direct all employees to ClickSafety's home page to conduct their on-line orientation
6. Employee Registration:
    a. Click on the *User* tab
    b. Then on *Register For Training* tab
    c. Select *Webcor/Obayashi TransBay Terminal* from the drop down menu
    d. Enter first name, last name, last 4 digits the employees social security number (SSN)
        i. Employees user name will be the first letter of their first name and there full last name, there password is the last 4 of their SSN
    e. Select preferred language to receive training in
    f. Select your Companies name from the drop down menu
    g. Enter access code
    h. Continue
    i. The three sessions will appear in the employees screen. Please ensure all employees complete each session

ClickSafety - Contact

A ClickSafety representative is available to answer any of your questions about this program. For general information about this project or registration assistance, please contact ClickSafety Support at (925)855-SAFE (7233) ext. 629 or cshelp@clicksafety.com. ClickSafety's Account Manager is Christina Parkin, (925)208-2618, Email: cparkin@clicksafety.com.

Should you have specific questions regarding the project or safety requirements, you may contact Webcor Builders Administrative Assistance for the EHS Department Kyla Burke at (510)748-1994 or at kburke@webcor.com.

ClickSafety - Disclaimer

ClickSafety and Webcor/Obayashi Joint Venture make this training material available with the understanding that users exercise their own skill and care with respect to its use. It is the duty of each employer as specified in the Occupational Safety and Health Act of 1970 (P.L. 91-596)

> (a1) Shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees;
> (a2) shall comply with occupational and health standards promulgated under this Act.
> (b) Each employee shall comply with occupational safety and health standards and all rules, regulations, and orders issued pursuant to this Act which are applicable to his own actions and conduct.

Emergency Response Procedures

Webcor/Obayashi Joint Venture provides a safe and healthful work environment for all workers through progressive, proactive injury prevention planning. Job pre-planning and identification of up-coming potentially hazardous activities is supported by regularly reviewing trend analysis. Everyone on site has a

responsibility for their own safety and the safety of their work environment. If an activity is deemed unsafe workers have several ways to communicate these activities to management. Workers shall always contact their immediate supervisor and Webcor/Obayashi Joint Venture SSM if something is unsafe or an incident occurs.

Prior to starting work on this project a designated area for emergency service vehicles to enter without any delay shall be established. A current, certified First Aid/CPR/AED trained individual must be on site during work operations. All employees shall be instructed in the proper chain of command for reporting emergencies. 9-1-1 may be called at any time for an emergency by anybody on site. Each trade subcontractor and tiered subcontractor shall maintain a Cal/OSHA approved First Aid Kit on the Project at all times. An investigation will be conducted by the controlling employer's Project Management, Supervisor and SSM/DSP, under the direction of Webcor/Obayashi Joint Venture Project Management and SSM.

Reporting and documenting all accidents, incidents and near misses, is extremely important to track trends and investigate possible root causes. All on-site incidents, accidents and near misses shall be reported to Webcor/Obayashi Joint Venture Project Management and SSM immediately. All accidents resulting in industrial injuries or illnesses occurring on the jobsite will be thoroughly investigated. Completion of appropriate forms, as defined in the Incident Reporting Instruction section must be completed and submitted immediately after occurrence. Depending on the severity of the incident a Detailed Incident Analysis (DIA) may take place.

The scene shall be left *as is* for investigation purposes as well as safeguarded to ensure the safety of other nearby workers until Webcor/Obayashi Joint Venture Management Team releases it. Identification and review process of root causes shall be completed. Corrective actions, identification of persons responsible for corrective actions, and date of completion must be established. Follow up documentation verifying corrective action completion is required. Lessons learned from the DIA reviews will be shared with the project.

OSHA and the National Safety Council (NSC) define the following:

> "Accident - The National Safety Council defines an accident as an undesired event that results in personal injury or property damage.
>
> Incident - An incident is an unplanned, undesired event that adversely affects completion of a task.
>
> Near Miss - Near misses describe incidents where no property was damaged and no personal injury sustained, but where, given a slight shift in time or position, damage and/or injury easily could have occurred."
>
> *(osha.gov)*

Near Miss

A near miss is an unplanned event that does not result in injury or property damage.

First Aid

A first aid case is one where a person is injured requiring minor first aid treatment that does not required medical attention or prescription medication.

Minor Injuries

Minor injuries are those which require only immediate first-aid treatment and do not result in modified work or lost work days.

Major Injuries

A significant accident is where personal injury is sustained or tangible property loss is sustained, or where the event posed a significant threat of loss or personal injury. Major injuries or illness may be those which require extended medical treatment, hospitalization resulting in loss of work time, or result in death, disfigurement, or dismemberment.

In the event of a major injury, emergency vehicles shall be directed to enter the Project at a site entrance that will be determined as conditions change on the logistic map. Upon entering the project, the emergency personnel shall be directed to the exact location of the injured person/s. While awaiting arrival of the Emergency Vehicle(s), the injured shall not be moved unless he/she is in immediate danger of additional injury in his/her current location. Equipment and material involved in or responsible for the accident shall not be disturbed unless it presents an additional danger to the injured person(s).

Immediately after the accident, Webcor/Obayashi Joint Venture Management team will meet with the responsible trade subcontractor's Superintendent and/or Foremen, review the conditions, and direct the appropriate corrective action. The trade subcontractor is responsible for ensuring the injured employee/s are escorted to and from medical facilities, reporting employee/s condition to Webcor/Obayashi Joint Venture regularly and completing and submitting a copy of all required incident reports to Webcor/Obayashi Joint Venture SSM.

Persons who have sustained head injuries, major impacts, or whose injuries are the result of a fall shall be evaluated and stabilized by a professional medical personnel and provided transportation to the medical facility. Upon return from treatment, the employee shall return to work ONLY if so released in writing by the attending physician. If required by law, injury notification to OSHA must be coordinated through the Webcor/Obayashi Joint Venture Corporate Safety Director.

Within 24 hours of a major injury, Webcor/Obayashi Joint Venture shall conduct a Safety Meeting with attendance required of all jobsite personnel.

The recommended local Emergency Medical Facilities are:

St. Francis Health Center	**St. Francis Memorial Hospital**	**SF General Hospital**
24 Willie Mays Plaza	900 Hyde St	1001 Potrero Ave
San Francisco, CA 94107-2134	San Francisco, CA 94109	San Francisco, CA 94110
(415) 972-2249	(415) 353-6000	(415) 206-8000

Incident Reporting

This Section will conform to Specification Sections 01 13 40 (1.5 A thru C) 01 15 45 (1.9 A thru C) found in The Transbay Transit Center Contract Number 08-04-CMGC-000

A TJPA Representative will inform Contractors of any additional hazardous condition encountered in writing. Trade subcontractor shall respond indicating there action or disposition of the matter by returning

an annotated copy of the written communication to the TJPA Representative within three (3) days. If death, serious injury, multiple injuries or serious damages occur, the accident shall be reported at once by telephone or messenger to the TJPA as well as to the proper governing authorities. In addition, trade subcontractors shall promptly report in writing to the TJPA all accidents whatsoever arising out of or in connection with the performance of the work whether on or adjacent to the site, giving full details and statements of witnesses. Within three (3) days of occurrence, the trade subcontractor shall provide the TJPA with two (2) copies of the trade subcontractor's accident and near-miss reports.

If a claim is made by anyone against the any trade subcontractor on account of any accident, the trade subcontractor shall promptly report the facts in writing to the TJPA, giving full details of the claim. Contractor shall provide the TJPA Representative copies of any laboratory test data, and medical monitoring results for record and evaluation within three (3) days of receipt of the above information or upon the request of the TJPA Representative.

All incidents, accidents and near misses shall be immediately reported to Webcor/Obayashi Joint Venture Project Management/SSM and fully investigated. Investigation shall be completed to identify the possible contributing factors and the corrective actions. A DIA will be completed for major injuries, severe property damage and as needed per Webcor/Obayashi Joint Venture Management Team. Trade subcontractors shall complete required incident packages and return them to Webcor/Obayashi Joint Venture SSM within 24-hours.

Accident Investigation

The initial accident investigation is to be completed within 24 hours, with immediate notification of Webcor/Obayashi Joint Venture safety. Identification and review process of contributing factors of the accident, incident or near miss must be completed. Corrective actions, identification of persons responsible for corrective actions, and date of completion must be established. Follow up documentation verifying corrective action completion is required. Lessons learned from a DIA may be shared with the project, regionally and globally.

Detailed Incident Analysis (DIA)

To identify details in incidents, accidents, near misses and at-risk behavior Webcor/Obayashi Joint Venture and trade subcontractor management will be required to, within 48 hours of the incident, conduct a Detailed Incident Analysis (DIA). The DIA will analyze any accidents, incident, near misses, environmental incident, or impact to existing facilities and operations. Accident trends will be identified and plans developed to prevent additional incidents from occurring. The DIA will be performed involving at least the Webcor/Obayashi Joint Venture Manager and SSM and trade subcontractor project teams. The mission of these meetings will be to identify problem areas, develop specific action plan(s) to address contributing factors and to immediately implement corrective actions. Webcor/Obayashi Joint Venture will periodically review implemented plans for effectiveness. Lessons learned from the DIA will be shared with the project, regionally and globally.

Responsibilities for Safety & Loss Control

The objective of this Project Safety Overview (PSO) is to establish that safety and health must be addressed throughout the entire project. The prevention of accidents and protection of property are company values and are integral to our success. All safety issues shall receive active support and participation by the entire project team.

The principles of safety and loss control are intended to prevent injuries on the jobsite and to reduce the potential for damage to property and equipment. No phase of construction is of greater importance than incident and accident prevention.

Planning for safety starts with project design and continues through purchasing, fabrication and construction in all phases of the project. Practical steps will be taken to maintain an injury free environment. All trade subcontractors must accept responsibility for preventing accidents and be responsible for thorough safety and loss control training and instruction for their workers.

The primary objective of the Webcor/Obayashi Joint Venture PSO is to coordinate the elimination or reduction of risk associated with the construction of the project. Associated missions are to promote safe work practices/behaviors, prevent accidents, prevent worker injuries, prevent damage to property, and promote maximum efficiency and effect savings by reducing unplanned business interruptions.

Active participation by Webcor/Obayashi Joint Venture management, trade subcontractors, tiered subcontractors and all workers will make the program effective and successful by coordinating the participants' efforts in performing the following tasks:

- Providing a safe environment in which workers can perform high quality work.
- Using Job Hazard Analysis (JHA) as a tool to reduce injury to persons and property.
- Conduct jobsite safety audits to locate and abate unsafe work practices/behaviors and unsafe conditions.
- Protecting the public and property potentially affected by Webcor/Obayashi Joint Venture sites.
- Educating and training workers through new hire and site specific orientation and safety meetings.
- Task specific safety training.
- Personal Protective Equipment (PPE) programs.
- Immediate injury reporting and effective record keeping to maintain an up-to-date accident experience and trends analysis.
- Use of audit forms to abate deficiencies and eliminate any additional losses.

Webcor/Obayashi Joint Venture Responsibilities

Management Team

Webcor/Obayashi Joint Venture Management Team is responsible for construction management services for the Transbay Transit Center. The Management Team is also responsible for encouraging, reinforcing and modeling Webcor/Obayashi Joint Venture culture, including injury free environment initiatives, participating in the development and assessment of Environmental Health and Safety (EHS) leading indicators, reviewing and approving project corrective action/recovery plans. Furthermore the Management Team shall institute accountability when action plans and culture are not maintained and has the authority to stop any operations that pose a potential threat.

Project Manager

The Webcor/Obayashi Joint Venture Project Manager(s) are responsible for construction management services for the Transbay Transit Center as well as determining if contract documents and specifications support the project's safety missions and objectives. The Project Manager shall also monitor trade subcontractor selection process and adherence to established guidelines, conduct periodic auditing of trade subcontractor's safety plans for compliance with the Webcor/Obayashi Joint Venture 's Environment Health & Safety Procedures (EHSP), participating in pre-task planning and trade

subcontractor pre-construction safety meetings, document weekly jobsite safety audits and support Webcor/Obayashi Joint Venture SSM for obtaining corrective actions necessary to comply with Webcor/Obayashi Joint Venture EHSP. The Project Manager must be aware of loss control and public protection requirements of the project, they must participating in fact finding, Detailed Incident Analysis (DIA), and the implementation of corrective actions. Project Manager's shall promote and support our injury free culture.

Superintendent

It is the responsibility of Webcor/Obayashi Joint Venture Superintendents are to oversee safety on the jobsite. The Superintendent's EHS responsibilities include overseeing the planning and execution of all work in compliance with the Webcor/Obayashi Joint Venture EHSP and contract specifications. The Superintendent needs to be aware of loss control and public protection requirements identified in the safety specifications of the contract documents, promote and support our injury free culture and support Webcor/Obayashi Joint Venture SSM in obtaining corrective actions necessary to comply with Webcor/Obayashi Joint Venture EHSP. Furthermore, the Superintendent shall complete and review daily jobsite safety audits to ensure identified hazards are addressed in a timely manner, monitor and participate in JHA planning and shall participate in incident investigation, DIA meetings, tailgate meetings, pre-construction meetings, kick off meetings and implementation of corrective actions. Superintendents must take appropriate action to abate identified unsafe conditions and practices and document corrective actions.

Site Safety Manager

The Webcor/Obayashi Joint Venture Project Site Safety Managers (SSM) has a responsibility for the safety and health on the project. The Webcor/Obayashi Joint Venture SSM is considered to be the program administrator and has the authority delegated by Webcor/Obayashi Joint Venture Corporate EHS Department to implement and promote safety as well as setting project missions and milestones goals and reporting indicators for all project personnel. Webcor/Obayashi Joint Venture SSM manager may assign all or some of these tasks to other responsible persons as appropriate.

The SSM must help ensure that the guidelines, rules and procedures in this document are followed for site work. The SSM shall be familiar with local emergency services, help ensure that the proper steps are taken in the case of emergencies when a major event resulting in a fatality, multiple injuries, or property loss occurs. The SSM is responsible for requiring that we preserve the accident scene in an "as is" condition, including any construction equipment involved, to allow for a proper investigation. The SSM must order, if necessary, the area or piece of equipment to be stabilized to preclude further injuries or loss. Furthermore, the SSM shall notify Webcor/Obayashi Joint Venture Project Manager should an OSHA inspection be required. Should citations, warnings or safety violations be issued Webcor/Obayashi Joint Venture Management Team shall receive copies within 48 hours.

The SSM will be conducting or taking the necessary steps to help ensure that tool box/tailgate safety meetings are conducted before work startup. Additional meetings may be required for specific job tasks or site activities. Webcor/Obayashi Joint Venture SSM also must help monitor the maintenance and inspection of PPE, onsite hazards, the physical condition of site personnel, and perform daily safety audits of work site activities. Furthermore the SSM shall maintain safety files, which will include training and applicable medical certifications, environmental testing and special associated training, tool box/tailgate meeting notes and rosters, safety observation/audit reports, investigation reports including near-misses, injury summaries, required safety permits, security issues, or other safety and health documentation, as applicable.

The SSM is responsible for supporting Project Management in achieving an injury, incident and impact free environment as well as reporting all accidents and incident to the Project Manager in a timely manner as well as a responsibility for overseeing development, implementation and maintenance of the project's safety program by expediting corrective action(s) to abate any observed or potential safety exposure(s) to workers. The SSM shall continuously monitor trade subcontractor's safety performance and expedite abatement action(s) report unsafe acts and conditions and notify Webcor/Obayashi Joint Venture Project Manager and Superintendent regarding advisable corrective actions.

More duties of Webcor/Obayashi Joint Venture SSM include monitoring the subcontractor's compliance with the Webcor/Obayashi Joint Venture EHSP and to help familiarize sub-contractors and trade subcontractor Project Managers, Superintendents and Supervisors with the Webcor/Obayashi Joint Venture EHSP. These individuals must be familiar with safety and health hazards to which all workers may be exposed, as well as applicable laws, regulations and safety rules and policies and how to handle emergency situations. SSM is to help assure that all workers are trained in accordance with applicable requirements and ensure that observations, inspections, recognition, evaluations and abatement of hazards are conducted on a continuous basis. If the subcontractor does not make immediate corrections after initial notification, Webcor/Obayashi Joint Venture EHS will notify the subcontractor's Project Management in writing to make prompt corrective action to help eliminate construction safety concerns, forward copies of the written notice to Webcor/Obayashi Joint Venture Project Management and develop the direction to help resolve outstanding construction safety issues and maintain documentation of corrective actions.

The SSM is responsible for ensuring a Hot Work Permit is completed prior to hot work commencing and shall keep a log of all Permits.

Project Engineer
The Webcor/Obayashi Joint Venture Project Engineer assists the Webcor/Obayashi Joint Venture Project Manager with his/her responsibilities for construction management services for the project. This person will complete weekly jobsite safety audits, participate in pre-task planning, subcontractor pre-bid, pre-construction, and/or kick-off meetings, assist with jobsite safety startup, safety orientations, participate in fact finding, Detailed Incident Analysis (DIA), implementing corrective actions to prevent further occurrences on all injury/incident investigations and attend and/or participate in jobsite safety meetings.

Subcontractor Responsibilities

The subcontractor has overall responsibility for accident prevention and implementation of this Webcor/Obayashi Joint Venture EHSP for anyone under their control, including their respective employees, tiered subcontractors, vendors and suppliers.

Where subcontractor is not using a Site Safety Manager (SSM) the subcontractor will assign safety responsibilities to a member of their Project Management, that person(s) will be considered a Designated Safety Person (DSP). This assignment is subject to approval by Webcor/Obayashi Joint Venture Management and Webcor/Obayashi Joint Venture SSM. The subcontractor may be responsible for providing their SSM or DSP with a reliable communication method or device in order to contact Webcor/Obayashi Joint Venture Project Management and Webcor/Obayashi Joint Venture SSM during emergency response and/or other safety related communications. Although many existing hazards may be corrected through informal communications between the trade subcontractor's and tiered subcontractor's SSM or DSP with members of Webcor/Obayashi Joint Venture Project Management, all corrective actions must be documented, with copies forwarded to Webcor/Obayashi Joint Venture Project SSM.

Subcontractors will submit a copy of their companies and their tiered subcontractors company's safety program prior to beginning work. All subcontractor workers must be orientated to their company's safety program as well as to applicable sections of this Webcor/Obayashi Joint Venture EHSP. Furthermore, subcontractors and tiered subcontractors are required to incorporate the requirements of the Webcor/Obayashi Joint Venture's EHS Plan into their safety programs and safety orientation if theirs are less protective than those of Webcor/Obayashi Joint Venture.

Project Manager
The subcontractor's Project Manager is responsible for planning and monitoring all work performed in compliance with the objectives of this Webcor/Obayashi Joint Venture EHSP, trade subcontractor's safety program, federal, state and local safety and health regulations. Authorizing immediate correction of any existing construction safety-related concerns, fully supporting the SSM or DSP and cooperating with all designated project safety personnel in obtaining corrective actions necessary to comply with the Webcor/Obayashi Joint Venture EHSP. Furthermore, trade subcontractors Project Managers shall complete weekly safety audits, participate in pre-task planning and subcontractor kick-off meetings, participating in fact finding, DIA, and resolution on all injury/incident investigations as well as when requested, attend special construction safety meetings.

Superintendent/Supervision/Foremen
Responsibilities of the trade's subcontractor Superintendent/Supervisor/Foremen are the same as Webcor/Obayashi Joint Venture Superintendent/Supervisor/Foremen and they shall attend weekly contractors' safety meetings.

All supervisory personnel shall have as a minimum the OSHA 30 Hour Construction Safety training within the prior four years and possess a current CPR /First Aid and AED certification. In addition supervisory personnel shall have at a minimum 5 years' experience as a superintendent in a similar type of project.

Site Safety Manager / Designated Safety Person
Every trade subcontractor employing **40** or more workers, including their lower tier sub-subcontract employees, must provide a full-time SSM/DSP that has no other job duties and is present on the project anytime work is being performed. An additional DSP shall be required for each additional **60** workers thereafter. Subcontractor shall also provide EHS Administrative support personnel as necessary to implement their EHS program. Contractor reserves the right to determine appropriate qualifications for Subcontractor's SSM/DSP personnel, based on project demands and reserves the right to interview candidates to determine qualifications.

The SSM/DSP shall be current in First aid/CPR/AED and hold a Construction Health and Safety Technician (CHST) and OSHA 500 certificate and have three (3) years prior full time safety duty experience working on a similar type of project at a minimum. The SSM / DSP is responsible for ensuring a Hot Work Permit is completed prior to hot work commencing. The Fire Safety Manager shall keep a log of all Permits. Subcontractors SSM shall serve as technical advisors to their project management team on safety and health planning, training and problem resolution issues.

The SSM/DSP shall report all incidents and injuries immediately to Webcor/Obayashi Joint Venture Project Management and SSM. In the event of an accident or injury the trade subcontractors Project Manager and SSM shall complete and forward all claim forms; injury, liability, property damage, and the

like, to Webcor/Obayashi Joint Venture SSM immediately. The SSM shall participate in accident investigations and recommend proper courses of corrective action. When serious accidents occur, this task will be performed in conjunction with Webcor/Obayashi Joint Venture SSM and Webcor/Obayashi Joint Venture and the subcontractor Project Management or their representatives. Each SSM/DSP has the right and authority to stop any and all hazardous work activities being performed by his/her company or their subcontractors until necessary corrective actions are taken or if there is an immediate danger to lift and/or health present.

The SSM/DSP shall perform continuous safety audits of all their respective trade subcontractors and their tired subcontractors' work areas throughout the entire workday and take immediate action to eliminate all unsafe acts and/or conditions. These observations, along with corrective actions taken shall be reported in writing to the appropriate member of Webcor/Obayashi Joint Venture Project Management, SSM and the subcontractor's own management. The SSM/DSP shall ensure that prior to the commencement of any work activity every Supervisor/Foreman reviews each task assignment with every affected employee to ensure a comprehensive understanding of the safety requirements and precautions to be followed while performing this work. This shall be documented using a JHA. The SSM/DSP shall ensure that appropriate PPE is provided and its use enforced, ensure that all of the necessary guards are in place, safety equipment is provided, and other required steps are taken prior to starting the work.

The SSM / DSP shall attend and participate in required safety meetings. The SSM / DSP shall provide appropriate materials for those conducting weekly tool box/tailgate meetings or safety meetings, as well as, review safety meeting reports for attendance and implement required safety training programs for subcontractor employees and supervisors. The SSM / DSP shall enforce their company's safety program and disciplinary procedures, accompany Webcor/Obayashi Joint Venture's supervisory personnel as directed and perform joint inspections of work areas and activities, orient all new personnel to the site's safety program prior to work commencement and the SSM/DSP are subject to Webcor/Obayashi Joint Venture's approval and may be removed at any time with or without cause and replacement personnel shall be provided at the subcontractor's / employer's expense.

Everyone's Responsibilities

Everyone has the ability to stop work for safety reasons. Everyone shall report injuries, near misses, unsafe acts and conditions immediately to supervision. Everyone shall work according to good safety practices as posted, instructed and discussed. Everyone shall comply with Webcor/Obayashi Joint Venture EHSP and subcontractor's safety program. The use of all required safety devices shall be used. Everyone shall come to work alert and free of any impairment that may affect safety. Everyone is to keep their work areas clean and orderly as well as promote and support the Injury Free Environment. Everyone agrees to be held accountable for your safety, and the safety of others. Furthermore, everyone is held accountable for their designated assignments of responsibilities as denoted in their respective definitions. Refrain from performing any work which may feel unsafe or for which proper equipment and/or training have not been provided. Everyone has the right to stop work when an unsafe condition or act occurs.

Weekly Safety Meetings

Trade subcontractors and tiered subcontractors are required to hold Weekly Safety "Tool Box" Meetings with their field crews. Copies of the meeting minutes and attendees shall be submitted to Webcor/Obayashi SSM at the end of each week. Webcor/Obayashi Joint Venture may provide assistance and information to trade subcontractors and their tiered subcontractors as requested.

In addition, subcontractors and tiered subcontractors are to attend monthly or whenever determined by Webcor/Obayashi Joint Venture all hands safety meeting.

Pre-Task Planning

Pre-planning tasks has been proven to reduce incident and accidents. All workers engaged in a specific task are required to participate in pre-planning activities. Every worker has the right to stop work and contact management if unsafe acts or conditions occur.

Job Hazard Analysis (JHA) Guidelines

A JHA is to be conducted daily, led by the Supervisor of the crew, documented in writing and signed by all crew members prior to starting work. JHA's shall include hazards relating to the task being done and the plan of actions the crew shall take to mitigate that hazard from occurring.
The JHA shall be readily available at the work site and posted and/or placed where crew members have knowledge of its location at the work area. JHA's should be reviewed and revised whenever work conditions or crew membership change that may affect the ability to safely complete the work.

A JHA is required for the following activities (at a minimum):

• Chemicals: hazardous & irritant	• Concrete: pre-cast, tilt up, vertical, form work
• Confined Space	• Hoisting & Rigging activities
• Demolition	• Framing activities
• Excavation & Trenching	• Fall Hazards: elevated work, overhead work
• Material Handling	• Non-routine activities
• Public Exposure	• Scaffolding
• Steel Erection	• Startup/Shut down/ System testing
• Working with hazardous materials	• Introducing chemicals into systems

Safety & Health Training/Information

This Section will conform to Specification Section 01 15 45 (1.10A) found in The Transbay Transit Center Contract Number 08-04-CMGC-000

Trade subcontractors and their tiered subcontractors shall maintain, on-site, all training records in accordance with federal, state, and local statutes, regulations, and policies, and provide copies of these records to Webcor/Obayashi Joint Venture Management and the TJPA upon request.

New workers will be provided with initial training and/or orientation prior to assignment or when assigned to a new task for which training has not been received. Training will include general area and specific assignment topics. Refresher training will be provided in accordance with Federal/State OSHA guidelines. Completed training records are to be submitted to Webcor/Obayashi Joint Venture SSM in a timely manner. Supervisors are expected to be knowledgeable and informed on hazards and safe work practices in their area of responsibility and to coordinate the disbursement of this information to crews.

Training may include, but not be limited to:

• Aerial / Boom Lifts	• Asbestos awareness
• Confined Space	• CPR / 1ST aid / AED
• Electrical	• Excavation & Trenching

• Fall Protection	• Fire Watch
• Forklift	• Hazard Communication
• Hazardous Chemicals	• Ladder
• Lasers	• Lead Awareness
• Lockout / Tagout (LOTO)	• Powder Actuated Tools
• Respirator Protection	• Rigging
• Scaffolding: Use & Erection / Dismantle	• Steel Erection
• Job Hazard Analysis	• Accident Investigation (Management)

Code of Safe Conduct and Work Practices

The following Safety Procedures will be complied with on the Transbay Transit Center project**.** These Safety Procedures are in accordance with Webcor/Obayashi Joint Venture Safety Program, the TJPA and the division of Industrial Safety Cal/OSHA Construction Safety Orders.

General

All subcontractors must submit their Company's Project Safety Program to the Project Site Safety Manager (SSM) prior to the start of their work. As a minimum, the subcontractor's Safety Program shall meet or exceed Webcor/Obayashi Joint Venture safety requirements, the applicable parts of the Webcor/Obayashi Joint Venture Corporate Safety Manual, the contract documents and federal, state, local or other applicable regulations.

Prior to trade subcontractors arrival, measures to identify, monitor and control the workers and the general public from identified hazards shall be included in their safety plans. The Program shall be reviewed by the Webcor/Obayashi SSM who may require additional written Safety Procedures and training records as may be necessary to address the potential hazards of the operations.

Personal Protective Equipment (PPE)

All persons entering the work area shall wear the proper PPE at all times.

Hardhats

All persons entering the work area on this project are required to wear ANSI Z89.1 approved hardhats. 100% hardhats use is required at all times while on this project. Any person refusing to wear a hardhat will be immediately dismissed from the project site. Metal hardhats and "Cowboy" hardhats are not allowed to be worn.

Eye Protection

The wearing of eye protection will be strictly enforced at all times. 100% safety glasses use is required at all times while on the project. ANSI approved prescription glasses with side shield are acceptable as well as ANSI approved goggles.

Hearing Protection

Each trade subcontractor shall provide and enforce the use of hearing protection for all workers exposed to noise levels exceeding 85 decibels (db). Where hearing protection is required, signs stating so shall be posted.

Hand Protection
Hand protection must be worn 100% of the time in any situation where hand/finger exposure to hazards exists, unless the manufacture of the equipment/material being used states gloves should not be worn. Supervisory Positions, Visitors, and Observers of work are not required to wear hand protection 100% of the time as they are not performing work, but must have gloves readily available in case a situation where hand/finger exposure to hazards arises.

Clothing & Foot Protection
All personnel shall wear safety vests, work boots or acceptable work shoes while employed on this project and keep their clothing and footwear in good condition at all times. Long pants and shirts with "T-shirt-length sleeves or longer shall be worn at all times. No sneakers, tennis shoes, soft-suede/canvas hiking boots, shorts, tank tops, tattered clothing etc., will be allowed.

Additional foot protection shall be used with jumping jack compactors and jackhammers.

Safety Disciplinary Policy
Under Webcor/Obayashi Joint Venture, all employees are required to follow company safety policies and operating procedures. When needed, employees will be provided with additional training and information, or retraining to maintain their knowledge.

Although Webcor/Obayashi Joint Venture reserves the right to discharge "at will," we believe that employees found performing work in an unsafe manner that would endanger the employee or another employee shall be subject to discipline or termination by management. Webcor/Obayashi Joint Venture strictly maintains a zero tolerance policy towards violations involving, but not restricted to: fall protection, lock-out/tag-out, and confined space violations. The Webcor/Obayashi Joint Venture Project Management and SSM shall determine the course of action best suited to the circumstances. The steps to be taken at a minimum shall include the following:

Verbal Warning – As the first step in correcting unacceptable behavior, the Supervisor shall review the pertinent facts with the employee. The Supervisor will consider the severity of the problem, and the employee's past performance. A verbal warning will be issued to the employee, if necessary; the employee will be placed on probation.

Written Warning – If the unacceptable performance continues, the next step will be a written warning. The written warning will clearly state the safety policy that was violated. Probation will be a part of the written warning. It may also include time off without pay. At the completion of the probationary period, the Supervisor will meet with the employee to determine if the employee has achieved the required level of performance.

Termination – The employee may be terminated if said employee does not improve their performance while on probation, or has violated another company safety policy within twelve (12) months.

Dismissal from Project
The following is prohibited and the individual(s) engaging in such activity(s) may be subject to dismissal from this project:

- Fighting and horseplay.
- Alcohol consumption or controlled-substance use on the site.

- Crowding or pushing while accessing work levels on ladders, scaffolds, etc.
- Throwing trash or any objects from heights.
- Using fire equipment irresponsibly.
- Destroying property or the work of other trades.
- Stealing.
- Gambling on the project site.
- Unsafe work habits.
- Persons using prescribed medication must notify his/her employer of such use prior to going to work or taking the medication.
- Working while your ability or alertness is so impaired by illness or fatigue or other causes that it might unnecessarily expose you or others to injury.
- Noncompliance of any safety rules or regulations.
- Lewd or abusive language towards jobsite personnel, Owner's personnel, or any member of the public.
- Smoking Cigarettes/E-Cigarettes in unauthorized areas

Job Vehicular Traffic

Only company-owned vehicles with signage are continuously required for the pursuit of trade subcontractor's and tiered subcontractor's work, and trucks delivering materials may be allowed access to the project site. All construction vehicle traffic access will be coordinated by Webcor/Obayashi Joint Venture.

There is no trade subcontractor or tiered subcontractor onsite parking on this project. Trade subcontractors and tiered subcontractors in violation of this request will be towed at their expense without further notice.

Subcontractors are to notify Webcor/Obayashi Joint Venture 48 hours in advance for approval of material deliveries. Material storage and layout must be approved by Webcor/Obayashi Joint Venture prior to delivery. Delivery vehicles will unload and depart the project site as soon as possible with the assistance of a qualified flagger to ensure pedestrian and vehicular traffic is controlled.

Subcontractors are reminded that continuous 2-way vehicular traffic must be maintained at all times for safe public accessibility unless posted otherwise. Two-way traffic control is to be provided by trade subcontractors prior to delivery vehicles entering the property.

Due to general liability exposure created by improper traffic control, all flagging, training, lane closures, etc. shall conform to the most current edition of the Manual on Uniform Traffic Control Devices (MUTCD). Local permitting issues shall be addressed by Webcor/Obayashi Joint Venture prior to the start of work. All workers in the traffic control area must be trained according to local, state and federal requirements and wear the appropriate reflective vest or high visibility clothing. Stop/Slow paddles shall be used to control traffic flow.

Temporary Offices

Temporary offices will be constructed of fire-resistant materials only and heated with approved fire-safe heating devices in accordance with manufacturers' instructions. Shall be equipped with a minimum of one 20lb ABC fire extinguisher and shall have a 40-gallon waste container adjacent to it. Temporary office locations must be approved by Webcor/Obayashi Joint Venture prior to installation.

Fire Protection

The purpose of the Fire Protection is to reduce to a minimum the possibility of fire damage and associated losses incurred during the construction of the Project. The following is a guide to be used on the Project to aid in preventing the spreading of materials loosed by fires and gases associated with combustion.

Appropriate action is the key to the prevention of loss of life and property damage. Emergency phone numbers will be posted in such a manner so as to be clearly visible. If a fire occurs, notify the local fire department and Webcor/Obayashi Joint Venture Management Team immediately. Extinguish fire with a noncombustible, such as sand, or an available fire extinguisher if properly trained to do so. Remove or shut off fuel supply and combustible material if trained and safe to do so.

General Fire Safety

- All temporary electric service, equipment, and wiring must be in accordance with Cal OSHA and NFPA 70, National Electric Code.
- Storage of any material within ten (10) feet of fire hydrants is strictly prohibited.
- Work areas shall be inspected on a regular basis to prevent accumulation of material.
    - All combustible waste material, dust, and debris shall be removed from the building and its immediate vicinity at the end of each work shift, or more frequently as necessary, for safe operations.
- No motors or machinery shall be left running during nonworking hours except as specifically directed by Webcor/Obayashi Joint Venture.
- All heating equipment shall have necessary Safety devices and shall be operated according to all applicable codes, rules and regulations, and manufacturers' instructions.
- All tarps and blankets shall be of fire-retardant material.
- All fuel and solvent containers shall be in approved containers and placed on drip pans.
    - Storage of these materials shall be in accordance with product Safety Data Sheet (SDS), statutory Hazardous Material requirements, and Fire Department requirements.
- No open or burning fires shall be permitted onsite.
    - Anyone doing so will be subject to immediate dismissal.
- No solid fuel shall be permitted on the site.
- Fire extinguishers shall be placed and maintained on the job in conspicuous and identified locations.
    - These fire extinguishers shall not be moved or discharged, except for fighting a fire.
- All gas bottles, such as propane, oxygen, and acetylene, shall be stored and secured in a vertical position in areas designated by Webcor/Obayashi Joint Venture.
    - All stored bottles shall be capped.
    - Oxygen and acetylene will not be stored within 20 feet of each other or must be separated by a one-half-hour-rated fire barrier.
    - At no time during construction shall propane or LPG be stored inside of a structure or building.
- All oxygen and acetylene in use shall be in proper carts with required separations and with at minimum a 10lb ABC fire extinguisher.
- During welding or cutting operations, a hot work permit and a fire watch with the proper fire extinguisher will be required and shall be the responsibility of the subcontractor or its tired subcontractor performing the work.
    - Hot work permits can be obtained from the SSM/DSP.

- Each trade is responsible for providing fire extinguishers and a fire-watch program for their work as required.

Hot Work Activities
When all fire prevention measures are taken, permits shall be authorized for the work. New construction work shall require the presence of a dedicated fire extinguisher (20lb, ABC), provided by the trade subcontractor performing the work, and any other preventive measures as may be necessary for protection of life and property such as but not limited to fire blankets and water supply.
The trade subcontractor and the SSM/DSP shall ensure that the surrounding area(s) are free of combustible material. When the work is of the nature that hot material may fall to areas below, the trade subcontractor and the SSM/DSP shall ensure that those areas are free of combustible material or material that may otherwise be damaged. Work in place must be protected by the trade subcontractor performing the work.

Each trade subcontractor and tiered subcontractor shall notify Webcor/Obayashi Joint Venture of proposed Hot Work activates through a Welding/Cutting Permit. The SSM/DSP shall review the Permit form with the trade subcontractor to assure that all areas of concern are accounted for in fire protection. Hot Work shall not be performed near fuel storage areas or other areas where combustible vapors may accumulate.

In occupied building, Hot Work shall not be performed in occupied buildings without notification of the local Fire Department responding agency. The fire suppression system for the building must be in operation. The appropriate Building or Department Managers must be notified and the work coordinated with their operations. Preparation for the work and clearing of combustible materials shall be in accordance with federal and state standards. Combustible material shall be cleared from the work area by a distance of 35 feet.

Material Handling

Housekeeping is an extremely important contributing factor for ensuring the safety and health in the workplace. Keeping aisles and passageways clear to provide for the free and safe movement of material handling equipment and employees is of the upmost importance. Other important contributing factors to ensure a safe working environment is as follows:

- Wear proper PPE at all times while handling material, equipment and tools.
- Post conspicuously the maximum safe load limits of floors within buildings and structures, in pounds per square foot, in all storage areas, except for floor or slab on grade.
    - Do not exceed the maximum safe loads.
- Do not store materials on scaffolds or runways in excess of supplies needed for immediate operations.
- Use ramps, blocking, or grading when a difference in road or working levels exists to ensure the safe movement of vehicles between the two levels.
- Do not place materials stored inside buildings under construction within six (6) feet of any hoist way or inside floor openings, or within ten (10) feet of an exterior wall which does not extend above the top of the material stored.
- Do not drop or throw blocks from an elevation or deliver blocks through chutes.
- Remove all nails from used lumber before stacking.
- When bending reinforcing steel on the job, use a strong bench set up on even dry ground or a floor to work on.

- Do not remove frozen material in a manner that would produce an overhang.
- Use proper lifting techniques.
- Stacking Material
    - Make sure that all materials stored in tiers are stacked, racked, blocked, interlocked, or otherwise secured to prevent sliding, falling, or collapse.
    - Stack bagged materials by stepping back the layers and cross-keying the bags at least every ten bags high.
    - When bags are removed from the pile, keep the length of the pile at an even height and maintain the necessary step backs every five bags.
    - When stacking inside a building, distribute the piles to prevent overloading the floor.
    - If not racked, stack and block structural steel, poles, pipe, bar stock, and other cylindrical materials as to prevent spreading or tilting.
    - Carefully pile structural steel to prevent danger of members rolling off or the pile toppling over.
    - Keep structural steel in low piles, giving consideration to the sequence of use of its members.
    - Stack corrugated and flat iron in flat piles, with the piles not more than 4 feet high; place spacing strips between each bundle.
    - Frequently inspect stock piles of sand, gravel, and crushed stone to prevent their becoming unsafe by continued adding to or withdrawing from the stock.
- Stacking Lumber
    - Do not stack lumber more than 20 feet high; if handling lumber manually, do not stack more than 16 feet high.
    - Stack lumber on level and solidly supported sills, and such that the stack is stable and self-supporting.
    - Stack stored lumber on timber sills to keep it off the ground. Sills must be placed level on solid supports.
    - Place cross strips in the stacks when they are stacked more than 4 feet high.
- Stacking Bricks
    - Do not stack bricks more than 7 feet high. When a loose brick stack reaches a height of 4 feet, taper it back 2 inches for every foot of height above the 4-foot level.
    - Never stack bricks, for storage purposes, on scaffolds or runways.
    - Always stack blocks; do not throw in a loose pile.
    - When stacking masonry blocks higher than 6 feet, taper back the stack one-half block per tier above the 6-foot level.
- Cement Bags
    - Carefully handle cement and lime delivered in paper bags to prevent the bags from bursting.
    - Do not pile cement and lime bags more than ten bags high except when stored in bins or enclosures built for the purpose of storage
    - When handling cement and lime bags, wear eye protection preventing any contact with the substance (such as goggles or other sealed eye protection) and wear long sleeve shirts with close fitting collar and cuffs.
    - Do not wear clothing that has become hard and stiff with cement.
    - Make sure to report any susceptibility of skin to cement and lime burns.
    - Make sure that a hand cream or Vaseline and eyewash is provided and kept ready for use to prevent burns.

- Store lime in a dry place to prevent a premature slacking action that may cause fire

Cleanup and Housekeeping

Trade subcontractors and tired sub-subcontractors shall leave the site clean and free of debris and hazardous materials by the end of each working day to the satisfaction of Webcor/Obayashi Joint Venture. Each subcontractor is responsible for removal of debris created by their work. Rubbish containers will be placed at a central location for the removal of trash and debris. Accumulation of trash and debris will not be tolerated. Webcor/Obayashi Joint Venture will perform necessary cleanup of same, at trade subcontractors' expense, upon failure to comply with cleanup notice request.

Ensure compliance with local fire regulations if disposing of waste material or debris by burning. Remove all scrap lumber, waste material, and rubbish from the immediate work area as the work progresses. Keep all solvent waste, oily rags, and flammable liquids in fire-resistant covered containers until removed from the work site.

Whenever materials are dropped more than 20 feet to any point lying outside the exterior walls of the building, use an enclosed chute of wood or equivalent material. When debris is dropped without the use of chutes, make sure that the area onto which the material is dropped is completely enclosed with barricades at least 42 inches high and 20 feet back from the projected edge of the opening above. Post at each level warning signs of the hazard of falling materials. Do not remove debris in this lower area until debris handling ceases above.

Security Services

Trade subcontractors and tired subcontractors shall be responsible for the security of toolboxes, onsite storage materials, etc.

Noise Control

This Section will conform to Specification Section 01 35 65 (1.2E) (1.8B), (1.8C) found in The Transbay Transit Center Contract Number 08-04-CMGC-000

Trade subcontractors shall conduct noise inspections and noise testing of equipment to ensure that all equipment on site is in good condition and effectively muffled per manufacturer's recommendation. Noise control shall be maintained by the trade subcontractors in all areas of construction, guarding against undue noise.

All motor-drive equipment shall have a proper exhaust system, which shall meet Cal/OSHA Standards on noise levels. Subcontractors are to post signage and provide proper hearing protection to employees using chipping guns, jackhammers, rock drills, or similar devices where the decibel level exceeds 85 and double hearing protection as required by state law.

Playing of radios, including headsets, is prohibited.

Combustible Material

Separate storage areas for acetylene, oxygen, and gasoline will be established by Webcor/Obayashi Joint Venture. The trade subcontractor shall post proper warning signs where combustible material is being used or stored. All gasoline will be in containers that meet NFPA and Cal/OSHA requirements, and will be stored in designated areas only.

All acetylene and oxygen bottles shall be secure and in a vertical position. All carts must be equipped with a fire extinguisher. All stored oxygen and acetylene must be separated from each other, by a minimum of 20 feet or a fire-rated barrier, with bottle caps secured in place as required by Cal/OSHA.

Crane

The safe operation and proper maintenance of cranes and rigging on the site shall be the overall responsibility of the trade subcontractor. Each trade subcontractor shall also be held accountable for compliance with CAL/OSHA crane regulations for all cranes or derricks on the site, whether contractor owned, leased or rented. All rigging inspection logs shall be completed and submitted to Webcor/Obayashi Joint Venture SSM monthly.

A thorough inspection by a certified independent 3rd party company shall be conducted prior to initial use and post repair of a crane or derrick. Any deficiencies found shall be corrected before the equipment is placed into service. A copy of the annual certification inspection performed by a certified independent 3rd party shall be submitted to the Webcor/Obayashi Joint Venture SSM prior to the crane being operated on site.

Each contractor shall designate a competent person who shall inspect all cranes and derricks daily as part of the trade subcontractor's job site inspection program. Such inspections shall be documented and submitted to Webcor/Obayashi Joint Venture SSM weekly. Defective equipment shall be removed from service and repaired; service/repair shall be documented and submitted to Webcor/Obayashi Joint Venture SSM.

Loads shall not be passed or suspended over persons. Routes of suspended loads shall be preplanned to ensure no workers or the public are directly below suspended loads. Lifts shall not be conducted over employees, visitors, or areas occupied by the public. Tag lines shall be used for controlling all loads. Tag lines or guide ropes shall be used to control all loads. Accessible areas within the swing radius of the rotating superstructure shall be properly barricaded to prevent employees from being struck or crushed by the crane.

Crane Lift Plan

A complete, competent and Webcor/Obayashi Joint Venture approved Crane Lift Plan is required prior to any crane lift while working. The Crane Lift Plan must be submitted to Webcor/Obayashi Joint Venture 48 hours (2 business days) prior to mobilization at a minimum. Neither TJPA nor Webcor/Obayashi Joint Venture shall be held responsible for any delay allegations as a result of the trade subcontractor failing to submit Crane Lift Plans on a timely basis. The Trade Subcontractor / Crane Company / Rigging Company is responsible for the accuracy of all calculations and inspections. This planning process has been established to help ensure proper coordination between trade subcontractors and Webcor/Obayashi Joint Venture. No warranty or certification of the suitability of this plan is accepted by Webcor/Obayashi Joint Venture.

The Crane Lift Plans must be based on a "worst case" combination of load weight with chart deductions and lift radius for a specific crane configuration in a specific location. Work that is not anticipated but may arise due to site conditions (moving equipment, loading materials onto floors, etc.) must be reviewed with Webcor/Obayashi Joint Venture prior to hoisting. Changes affecting crane configuration may require the Crane Lift Plan to be amended.

Lifts exceeding 75% of the cranes stability / structural capacity chart, requiring movement of a crane carriage with the load, personnel platforms, critical loads (long lead time, cost), tripping loads, work over occupied facilities, or work involving encroachment on public rights of way, will require the preparation, submittal and review of a specific JHA (Note: These lifts are discouraged). These lifts must be reviewed in advance. The Crane Lift Plan(s) may have to be prepared and stamped by a licensed Professional Engineer to be approved by Webcor/Obayashi Joint Venture.

Attachments to the Crane List Plan may include but are not limited to:

- Plot plan with crane location (identify swing path, delivery truck locations, location of any overhead power lines, etc)
- Elevation plan
- Crane load charts and calculations including any notes
- Dimension illustration and specifications for crane and range chart
- Operators license, training information, USDOT medical certificate and OSHA training
- Rigging plan, lists and diagram
- Names and qualifications for designated and competent persons (crane operator, A/D Supervisor, rigger and signal person
- JHA
- Logistics and assembly / dismantle plan
- 3rd party annual inspection certification
- Weight of material
- Lighting and wind restrictions (from operators manual)

The Crane Lift Plan may be valid for more than one day, as long as the configuration, location, maximum expected load, and maximum expected radius does not change. Multiple lift plans will be required for multiple locations.

Responsibility
It is the responsibility of the Trade Subcontractor and the Crane Operator to ensure that they and their employees are qualified, competent, properly equipped and properly trained to perform the activities outlined in this plan.

Management
The trade subcontractor is responsible to visit the site prior to the lift date to review documentary information pertaining to the site, which is maintained by Webcor/Obayashi Joint Venture. The trade subcontractor is responsible to obtain all information that is necessary to develop a power line safety plan, if needed. Furthermore, trade subcontractors are responsible for ensuring rigging equipment is in good condition and provided with safety devices as applicable. This includes such things as safety latches on hoisting hooks, chains, wire rope and slings are free from defects and conform to standard load ratings for work being done and eye splices conform to safety standards. Trade subcontractor's employee training is current and each contractor shall ensure that all of its employees involved in crane activities receive

comprehensive training as to their responsibilities. This training shall include hand signals and those authorized to give signals. Said training shall be documented.

Each trade subcontractor shall ensure that its crane operators is not engaged in any practices that may divert their attention while engaged in crane operations, ensure the operator is physically and mentally fit for duty, responds to only clear signals and stop signals. The trade subcontractor shall ensure the operator is intimately familiar with the equipment being used and is empowered to discuss any issues with their Supervisor.

Operator

Each crane operator will be specifically assigned the responsibility for safe operations and shall be given written instructions as applicable. Only designated operators who have been licensed by an approved agency or union and meet the requirements shall be in or on the crane during operations. The crane operator shall be responsible for determining the safe operation of their crane and the safety of each lift. The operator has the authority to refuse a lift due to safety concerns. For example refusing to lift any loads that are not safely rigged. Any manager, supervisor or person attempting to bypass the crane operator's authority on this issue will be immediately removed from the project. The operator shall immediately shut down the crane if the operator suspects any problems with the crane or if any part of the crane, rigging or load strikes any object. Immediately report the issue to Webcor/Obayashi Joint Venture Supervisor and SSM.

The operator is also responsible for assuring that routine maintenance is performed, as well as necessary repairs and to coordinate testing and maintenance personnel when necessary. Daily inspections shall be conducted to include but not limited to condition of brakes, functioning of safety devices and limiting devices, electric power installation, overload controls, conditions of the structural membrane and ensure a fire extinguisher is available and current.

Verification of a current annual inspection certification shall be available for the crane. Verification that manufacturer's rated load capacities, recommended operating speeds, and special warnings or instructions are posted on the crane and are visible from the operator's station. Upon request the operator may be asked to demonstrate their knowledge of the crane and the crane load chart among other items.

Responsibility for assuring that signaling and communications are adequate. This includes making sure that personnel at materials loading and receiving areas use correct hand signals. Where conditions require, radio communications will be used with a clear channel for crane operations. Making sure that adequate clearances exist between operating areas and nearby structures, especially power lines. Ensure that good housekeeping is maintained in and around the equipment. The operator shall never leave the controls while there is a load on the hook.

Training Requirements

Training records must be submitted to Webcor/Obayashi Joint Venture SSM prior to the employee(s) first day on site.

Riggers shall meet the qualified rigger requirements of subpart CC – Cranes and Derricks in Construction, as specified in 29 CFR 1926.1401, 1926.1404, and 1926.1425. These provisions are effective November 8, 2010. The more stringent rule shall apply.

Operators shall meet the qualified operator requirements found in 29 CFR 1926.1427. The operator has been licensed by an approved agency or union and meet the requirements in Chapter 5, ANSI B30 and the operator has passed their physical exam conducted by a license Physician approved by the DOT.

Fall Protection

Work activities that expose worker(s) to fall hazards of six (6) feet or greater measured from the work platform to the bottom of the sole of the foot are activities defined by Webcor/Obayashi Joint Venture to be High Hazard and therefore require detailed, written Job Hazard Analysis (JHA). Webcor/Obayashi Joint Venture maintains a zero tolerance policy for fall protection infractions. Anyone found violating this policy may be removed from the site immediately. All trade subcontractors shall provide appropriate fall protection at the Companies cost.

Possible conditions that may require fall protection:

- Ladders
- Aerial Lifts / Scissor Lifts
- Scaffold work
- Precast erection
- Unprotected Sides & Edges / Leading edges
- Excavations & Trenching
- Wall Openings
- Holes

Trade subcontractor are required to provide training and fall protection for their employees. This can be accomplished through the use of the following systems:

- Guardrail System
- Positioning Device System
- Warning Line System
- Personal Fall Arrest system
- Safety Net System
- Controlled Access Zone

The building perimeter cable is placed as a guardrail protection, and is not provided for tie-off protection.

Webcor/Obayashi Joint Venture does not allow the use of body belts or a Safety Monitor System.

Fall Protection Training

Trade subcontractors and tiered subcontractors must provide, as a minimum, by a competent person, the following training. Documentation of training must be forwarded to Webcor/Obayashi Joint Venture upon request:

- The nature of the fall hazards in the work area.
- The correct procedure for erecting, maintaining, disassembling and inspecting the fall protection systems to be used.
- The use and operations of guardrail systems, personal fall arrest systems, safety net systems, warning line systems, controlled access zones and any other methods of protection to be used.
- The limitations on the use of mechanical equipment.
- The correct procedures for the handling and storage of equipment and materials
- The erection of overhead protection.
- The role of workers in rescue plans.

Rail Systems

A standard railing should consist of a top rail, intermediate/mid-rail, toe board and posts. The top rail should be approximately 42 inches from the upper surface of the rail to the floor, platform, or ramp level. The top rail should have a smooth surface throughout its length and be made of at least 2-inch by 4-inch

stock, 3/8-inch double clamped wire rope or its equivalent. It should be secured to withstand a 200-pound, horizontal force with minimum deflection.

The midrail should be halfway between the top rail and the floor, runway, platform, or ramp. The ends of the rail should not overhang the terminal posts except when it does not constitute a projection hazard. The midrail sill should be made of at least 1-inch by 6-inch stock or its equivalent.

The toe board should have a 4-inch minimum height and should be securely fastened in place with no more than 1/4 inch clearance above the floor level.

Wooden railing posts (verticals) should be made of at least 2-inch by 4-inch stock or its equivalent, and be spaced so as not to exceed 8 feet on center.

Other types, sizes and arrangements of railing construction are acceptable, provided they meet the following requirements. Have a smooth surfaced top rail approximately 42 inches above the floor, strength to withstand the minimum of 200 pound top rail pressure with a minimum of deflection and for specific material requirements, refer to applicable regulations.

Guard Rail Openings

Work that requires the opening of guardrails or the removal of hole covers shall be approved in advance by the Webcor/Obayashi Joint Venture Project Management. Particular attention shall be given to the alternate means of fall protection required to safely perform the work and protect other workers in the vicinity of the fall exposure. Those who remove the rail, are responsible for replacing it in a manner meeting or exceeding local, state, federal, or Webcor/Obayashi Joint Venture practices, whichever may be more stringent.

Floor & Wall Openings

To control conditions where there is a danger of workers or materials falling through floor, roof, perimeter edges or wall openings, such openings shall be securely covered and/or protected, capable of withstand 2x the load, be secured to the floor and shall be inspected daily by the trade subcontractor competent person. Trade subcontractor's Competent Person is responsible for identifying any floor opening or hole requiring to be protected. Covers should be clearly marked "Hole Do Not Remove" in a high visible color and anchored.

For purposes of covering, a floor opening is defined as any opening from 2" up to 16 square feet. All others must be protected with top and intermediate rail and toe board. All protection systems are to be maintained at all times. Any violation that is not rectified immediately will result in removal of the responsible Supervisor. Further violations will result in termination for cause of the responsible subcontractor's contract.

The building perimeter, shafts, and floor openings shall be protected with guard rails and toe boards. Personnel working at a stationary position within 6'-0" of the building perimeter or the edge of a shaft or a floor opening will wear a full body harness and be tied off with an appropriate lifeline. Trade subcontractors and tiered subcontractors shall not remove any guard rail or fall protection device without the express consent of Webcor/Obayashi Joint Venture. Any employee removing such protection without authorization will be removed from the project without recourse. Any area where guardrails and toe boards have been removed shall not be left unattended during a shift. In no case will any guardrail or toe board be left down at the end of a shift.

In locations where temporary protection conflicts with scheduled construction, the trade subcontractor or the tiered subcontractor shall notify Webcor/Obayashi Joint Venture in advance of the work of necessary modifications. The trade subcontractor or the tired subcontractor shall remove the temporary protection and provide other appropriate temporary measures for the performance of their work.

Personal Fall Arrest Systems
Personal fall arrest systems are designed to control the fall of a worker and minimize the injury once a worker has fallen. Personal fall arrest systems consist of a full body harness, a shock absorbing lanyard or retractable, and a tie off point.

General Fall Protection

- Any safety harness, lifeline or lanyard actually subjected to in-service loading must be immediately removed from service and should not be used again for worker safeguarding
- Fall arrest equipment should be removed from service when evidence of wear is detected.
- All safety harnesses, lifelines and lanyards must have a nominal breaking strength of 5,000 lbs (5,400 lbs in CA).
- All fall protection equipment shall be inspected daily/monthly and before each use, with documentation made available upon request that it is in proper working order.
- Body Harness
    -
- Lanyards
    - Retractable lifelines are preferred where direct anchorage is not available.
    -
    - All lanyards must be equipped with locking snap hooks.
    - Appropriate shock absorbing lanyards will be used for fall protection when they do not create a greater hazard due to the length of the potential fall.
    - Shock absorbing lanyards are not to be used in combination with a retractable lanyard.
- Anchorage point
    - The anchorage (tie off point) must be capable of withstanding a minimum 5,000 lbs (5,400 lbs in CA) tensile strength per worker attached.
    - Anchorage used for attachment of personal fall arrest equipment should be secured above the point of operation whenever possible
        - Anchorage, tie off, must generally be above the worker's head.
    - Anchorage must be high enough that the worker will not strike any lower level surface or object should a fall occur.

Safety Nets
The use of safety nets may be allowed only after a written fall protection plan, limited to the actual work to be performed, is reviewed and approved by Webcor/Obayashi Joint Venture. Safety nets should be provided by the trade subcontractor or tiered subcontractor when work places are more than 25 feet above the ground or other surfaces where the use of ladders, scaffolds, catch platforms, temporary floors, safety lines or safety harnesses are impractical. When safety net protection is required, operations should not be undertaken until the net is in place and has been thoroughly tested.

Safety nets should extend 8 feet beyond the edge of the work surfaces where workers are exposed and should be installed as close under the work surface as practical. In no case should the safety net be more

than 25 feet below the work surface. Nets should be hung with sufficient clearance to prevent the user's contact with surfaces or structures below. Clearances should be determined by impact load testing. The mesh size of the nets should not exceed six (6) inches by six (6) inches. All nets should meet accepted standards of 17,500 foot pounds minimum impact resistance, as determined and certified by the manufacturer, and should bear a label of proof test. Edge ropes should have a minimum breaking strength of 5,000 pounds. Forged steel safety hooks or shackles should be used to fasten the net to its supports. Connections between net panels should develop the full strength of the net.

Rescue Plans
Specific plans for rescue of worker(s) should be developed and rehearsed prior to initiating work requiring the use of fall protection. Rescue plans and the basic work plan should be submitted to the Webcor/Obayashi Joint Venture Project Management and SSM for review and comment. Concerns expressed by Webcor/Obayashi Joint Venture Project Management and SSM or any other reviewing authority shall be addressed fully prior to exposing any worker to the elevated work area.

Falling Object Protection Systems
Anytime a potential hazard of falling objects exists, suitable systems must be provided to protect workers. Examples of suitable fall object protection systems may include covers, toe boards, canopies and debris nets. Proper barricading shall encompass the entire possible target area.

Ladders
All ladders shall be inspected prior to use and used for its intended purpose.

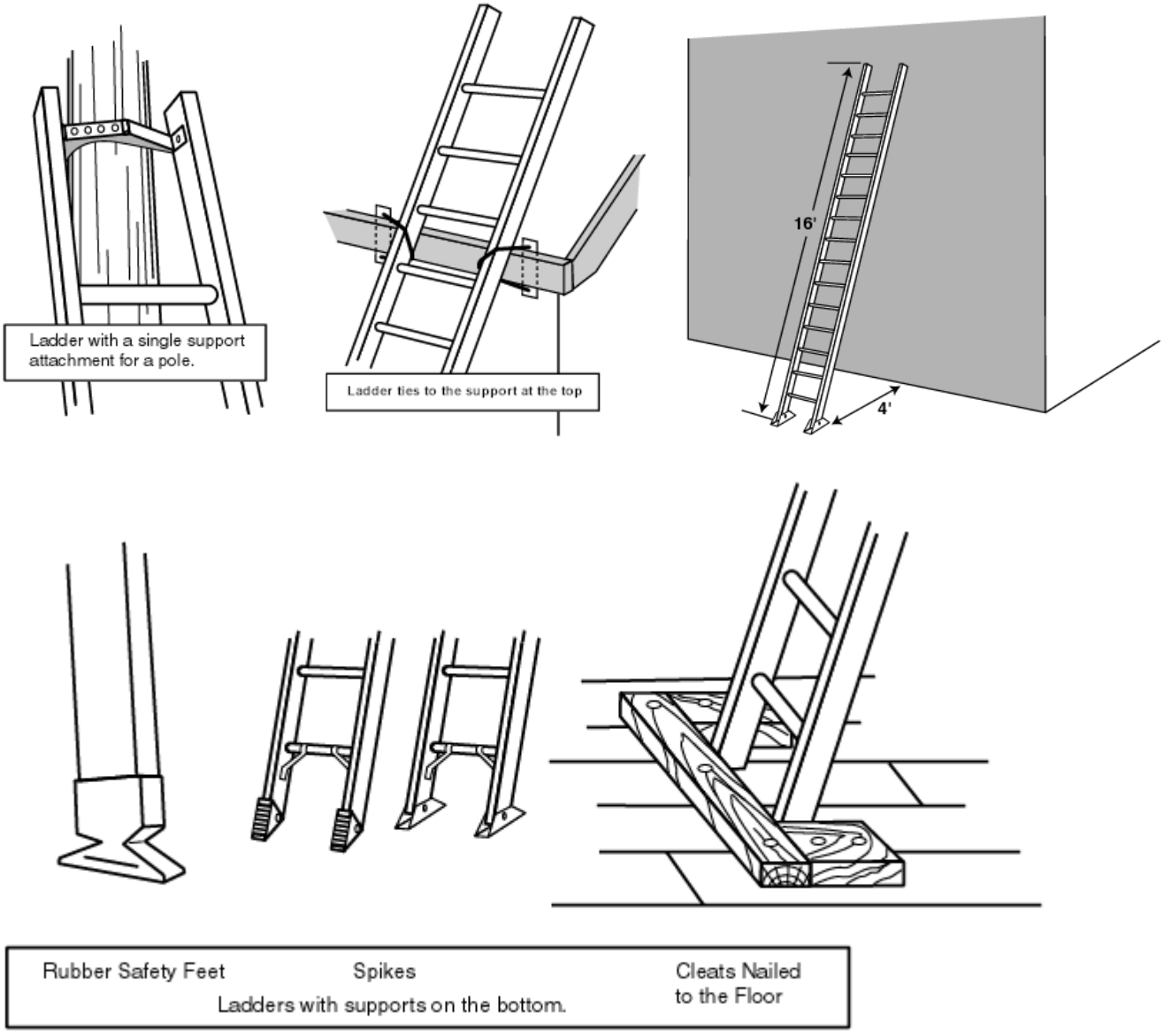
General Ladder Safety
- When ascending or descending a ladder, employees shall maintain three-points of contact and not carry anything that could cause them to fall. Pull ropes should be placed at all access ladders to lift tools or equipment from level to level.
- As a minimum, only type 1 or 1-A Heavy/Extra Heavy duty ladders, which carry a minimum of 275 lbs. to 300 lbs., will be allowed on Webcor/Obayashi Joint Venture projects.
- Metal ladders shall not be used on Webcor/Obayashi Joint Venture projects.
- Fall prevention shall be considered by the competent person if an employee works from a ladder 6’ or more above a lower level.
- Ladders are not to be painted except for numbering purposes.
- Do not use ladders for skids, braces, workbenches, or any purpose other than climbing.
- Always face the ladder when ascending and descending.
- If you must place a ladder over a doorway, barricade the door to prevent its use and post a warning sign.
- Only one person is allowed on a ladder at a time.
- Do not jump from a ladder when descending.
- All joints between steps, rungs, and side rails must be tight.
- Safety feet must be in good working order and in place.
- Rungs must be free of grease and/or oil.
- Portable ladders must be used at such a pitch that the horizontal distance from the top support to the foot of the ladder is about one-quarter of the working length of the ladder.
- All ladders must be equipped with safety (non-skid) feet.

Stepladders

- Do not place tools or materials on the steps or platform of a stepladder.
- Do not use the top two steps of a stepladder as a step or stand.
- Always level all four feet and lock spreaders in place.
- Do not use a stepladder as a straight ladder.

Straight type or extension ladders

- All straight or extension ladders must extend at least three (3) feet beyond the supporting object when used as an access to an elevated work area.
- After raising the extension portion of a two or more stage ladder to the desired height, check to ensure that the safety dogs or latches are engaged.
- All extension or straight ladders must be secured or tied off at the top and bottom.



Scaffolds

All scaffolds shall be constructed and maintained so as to meet all safety requirements of Cal/OSHA and Webcor/Obayashi Joint Venture. Failure to maintain scaffolds in good condition will result in removal by Webcor/Obayashi Joint Venture. All scaffolds must have top rails, mid rails, and toe boards at all platform levels. All scaffolds are to be built under the supervision of a competent person. The person's name and their qualifications shall be submitted in writing to Webcor/Obayashi Joint Venture prior to the start of work. Daily pre-shift inspection checklists shall be performed by a competent person, maintained by the trade subcontractor, available to all who access the scaffold and submitted to Webcor/Obayashi Joint Venture upon request.

A competent person shall determine if it is feasible to use fall protection devices while erecting /dismantling a scaffold. 100% fall protection is required at all heights above 6'. Rolling scaffold wheels shall be locked when in use. A horizontal, diagonal brace shall be in place to prevent the scaffold from "wracking". Cross bracing shall not be used as a top or mid rail.

Aerial Lifts

Only authorized persons should operate an aerial lift, and must be trained on the equipment they will be operating. A spotter may be needed when there is a potential for operator injury due to physical contact with facility systems or structures or in congested areas. Spotters may also be needed when there is a potential for damage to sensitive facility systems or structures.

Lifts should be inspected each day prior to use to verify they are in safe working condition. Any lift that does not meet inspection guidelines shall be removed from service and either returned, replaced, or modified to meet requirements. Boom and basket load limits specified by the manufacture should not be exceeded. The brakes should be locked and when outriggers are used, they should be positioned on pads or a solid surface. Wheel chocks must be used before using an aerial lift on an incline provided they can be safely installed. Aerial lifts should have both upper and lower controls. Upper controls should be in or beside the platform within easy reach of the operator. Lower controls should provide for overriding the upper controls. Controls should be plainly marked as to their function. Lower level controls should not be operated unless permission has been obtained from the employee in the lift, except in case of emergency.

Always stand on the floor of the basket, do not sit or climb on the edge of the basket or use planks, ladders, or other devices for a work position. A body harness should be worn and a shock absorbing lanyard attached to the boom or basket when working from an aerial lift. Tying off only to recommended anchorage points.

An aerial lift truck should not be moved when the boom is elevated with personnel in the basket.

Scissor Lifts

Lifts should be inspected each day prior to use to determine that they are in safe working condition. Only authorized persons should operate a scissor lift, and must be trained on the equipment they will be operating. Lifts should be operated in accordance with manufacturer's recommendations. Any lift that does not meet the required inspection guidelines shall immediately be removed from service and either returned, replaced, or modified to meet this requirement. A spotter may be needed when there is a potential for operator injury due to physical contact with facility systems or structures and in congested areas. Spotters may also be needed when there is a potential for damage to sensitive facility systems or structures.

Electrical

Ground Fault Circuit Interrupter (GFCI) protection is required for all electrical cords and tools. Each trade subcontractor shall provide GFCI protected power strips for use on the site when permanent power has been energized and permanent outlets are placed in service. Each trade subcontractor shall be responsible for providing and maintaining temporary GFCI's for their employees if a GFCI receptacle is not available.

Lockout/Tag out Procedures (LOTO)

Subcontractors shall submit their written LOTO program and documented employee training prior to beginning LOTO procedures. The program must include scope of training, pre-planning and specific LOTO procedures. All individuals who are working in or around the hazardous energy shall place their own lock and tag on the disconnect switch of the energy source. At no time will someone be allowed to remove another employee's lock unless it has been cleared through Webcor/Obayashi Joint Venture Competent Supervision.

Powder Actuated Tools

Only low-velocity-type tools will be allowed on this project. Special permission from Webcor/Obayashi Joint Venture must be obtained before high-velocity types can be used, and then only if the job requires it. All personnel working with powder-actuated tools shall be property instructed and licensed for operation of the tool and shall be in possession of current certification while using powder-actuated tools. Hearing protection signs, ear plugs and warning signs shall be posted in the work area where powder-actuated tools are in use.

Heat Illness Prevention

Heat related illnesses are avoidable if the employees are trained and the right actions are taken before, during, and after working in either indoor or outdoor hot conditions. High temperatures, humidity, air velocity and radiant heat from the sun or a furnace can stress the body's ability to cool itself making heat illness a big concern during hot weather months. These would be considered environmental risk factors. Every employee whose job duties require them to work in the outdoors during summer months, are exposed to elevated heat conditions and therefore are susceptible to heat illness.

The three major forms of heat illnesses are: heat cramps, heat exhaustion, and heat stroke. Heat stroke can be a life threatening condition. This document will outline those actions as well as describing the three major forms of heat illness, how to recognize them, and what an action to take to provide first aid before medical care is provided. If an employee is experience heat related illness notify their Supervisor and Webcor/Obayashi Joint Venture SSM immediately.

Heat Cramps

Heat cramps are the most common type of heat related injury and probably have been experienced by nearly everyone at one time or another. Heat cramps are muscle spasms which usually affect the arms, legs, or stomach. Frequently they do not occur until sometime later after work, at night, or when relaxing. Heat cramps are caused by heavy sweating, especially when water is not replaced quickly enough. Although heat cramps can be quite painful; they usually don't result in permanent damage.

Prevention/First Aid:

Drink electrolyte solutions such as Gatorade or plenty of water during the day and try eating more fruits such as bananas to help keep your body hydrated during hot weather. Call 911 and contact your supervisor immediately if the Person becomes ill.

Heat Exhaustion
Heat exhaustion is more serious than heat cramps. It occurs when the body's internal temperature regulating system is overworked, but has not completely shut down. In heat exhaustion, the surface blood vessels and capillaries, which originally enlarged to cool the blood, collapse from loss of body fluids and necessary minerals. this happens when you do not drink enough fluids to replace what you are sweating away symptoms Include: Headache, heavy sweating, intense thirst, dizziness, fatigue, loss of coordination, nausea, impaired judgment, loss of appetite, hyperventilation, tingling in hands or feet, Anxiety, cool moist skin, weak and rapid pulse (120-200), and low to normal blood.

Prevention/First Aid**:**
The employee suffering these symptoms should be moved to a cool location such as a shaded area or air-conditioned building. Have them lie down with their feet slightly elevated. Loosen their clothing, apply cool, wet clothes or fan them. Have them drink water or electrolyte drinks. Try to cool them down, and have them checked by medical personnel. Victims of heat exhaustion should avoid strenuous activity for at least a day, and they should continue to drink water to replace lost body fluids. Call 911 if the person becomes non-responsive, refuses water, vomits, or loses consciousness.

Heat Stroke
Heat stroke is a life threatening illness with a high death rate. It occurs when the body has depleted its supply of water and salt, and the victim's core body temperature rises to deadly levels. A heat stroke victim may first suffer heat cramps and/or heat exhaustion before progressing into the heat stroke stage, but this is not always the case. It should be noted that, on the job, heat stroke is sometimes mistaken for a heart attack. It is therefore very important to be able to recognize the signs and symptoms of heat stroke and to check for them anytime an employee collapses while working in a hot environment. Symptoms of heat stroke include: A high body temperature (103 degrees F); a distinct absence of sweating (usually); hot red or flushed dry skin; rapid pulse; difficulty breathing; constricted pupils; any/all the signs or symptoms of heat exhaustion such as dizziness, headache, nausea, vomiting, or confusion, and possibly more severe systems including; bizarre behavior; and high blood pressure. Advance symptoms may be seizure or convulsions, collapse, loss of consciousness and a body temperature of over 108 degrees F.

Prevention/First Aid**:**
It is vital to lower a heat stroke victim's body temperature. Quick actions can mean the difference between life and death. Pour water on them, fan them, or apply cold packs. Call 911 to get the person medical aid as soon as possible.

Guidelines for Preventing Heat Illness
If an employee is coming back to work from an illness or an extended break or is just starting a job working in the heat, it is important to be aware that they are more vulnerable to heat stress until their body has time to adjust. The employee needs to let their Supervisor know they are not used to the heat. It takes about five (5) to seven (7) days for a body to adjust. Drinking plenty of water frequently is vital to workers exposed to the heat. An individual may produce as much as two (2) to three (3) gallons of sweat per day. In order to replenish that fluid the worker should drink three (3) to four (4) cups of water every hour starting at the beginning of your shift. Taking breaks in a cool shaded area and allowing time for recovery from the heat during the day are effective ways to avoid heat illness. Avoid or limit the use of

alcohol and caffeine during periods of extreme heat, both dehydrate the body. Whenever possible wear clothing that provides protection from the sun but allows airflow to the body. Protect your head and shade your eyes if working outdoors.

During the designated warmer months of the year (April through September) all jobsites are required to incorporate heat illness prevention and awareness training into the Tailgate Safety Meetings. Training documentation shall be submitted to Webcor/Obayashi Joint Venture SSM. Shade and plenty of water shall be provided in sufficient amount to each and every employee. Emergency services must be called when an employee(s) experience a heat related illness

Drinking Water
Trade subcontractors shall provide potable drinking water, cups, and trash receptacles for their employees. All trash receptacles shall be properly emptied on a daily basis.

Use of Tools and Equipment

Each trade subcontractor is responsible to provide proper instructions for their employee's use of all tools and equipment. When the use of portable electric or pneumatic tools is needed, proper safety guards must be in place and operational. Power tool cord "whips" must meet NEC requirements. Air compressor hoses must be "clipped" together and tools are not to be raised or lowered by their cords or air hoses.

Hazardous Material

This Section will conform to Specification Sections 01 13 50 (1.4B and C) and (1.8D) found in The Transbay Transit Center Contract Number 08-04-CMGC-000

Currently Webcor/Obayashi Joint Venture does not anticipate, based on the scope of work, to have any excavations that will require special protection. In the event the situation does arise, The Trade Subcontractor will submit all appropriate documentation (protections, support systems, inspection process, access) preceding the activity.

Hazardous Communications Program
All subcontractors are to comply with Webcor/Obayashi Joint Venture's Hazard Communication Standard Policy.

If an employee is allergic to cement, or may be susceptible to lime burns, or skin disorders ensure that employees Supervisor is aware and do not assign that employee to tasks associated with those irritants. If an employee is allergic to or cannot use any other chemicals there Supervisor must be notified.

Hazard Communication Standard Policy

This Section will conform to Specification Sections 01 15 45 (1.2A1, 1.2A2),(1.13D),(1.4A), (1.4C) found in The Transbay Transit Center Contract Number 08-04-CMGC-000

The TJPA will not review the HASP for its content, nor will the TJPA be liable for Contractor's failure to have an adequate HASP or implement it. Receipt of the HASP by the TJPA neither constitutes the legality of the HASP nor incurs liability with Trade Sub contractor. Noncompliance with this portion of the Webcor/Obayashi Joint Venture Safety Policy will be written up as a Safety violation and may result in a

Safety fine and/or nonpayment to the subcontractor(s). Webcor/Obayashi Joint Venture is only required to train its employees to comply and observe the policy. It is the responsibility of each trade subcontractor and each tiered subcontractor to train their employees in the implementation and use of the Hazard Communication Policy.

Trade Subcontractors shall submit a Health and Safety Plan (HASP) in accordance with this Contract specification. Upon approval of the HASP, Trade Subcontractor shall provide two (2) copies on compact disc in Portable Document Format (PDF) with properly labeled cases. Safety Data Sheet (SDS) (previously known as Materials Safety Data Sheet (MSDS)) for all chemicals and other hazardous materials to be used.

Trade Subcontractors shall submit a site-specific environmental HASP in accordance with these specifications and 29 CFR 1910.120, 8 CCR 5192. The HASP shall remain in effect throughout the life of the Contract, and a copy of the HASP must be on site at all times. Trade subcontractors shall submit five (5) copies of the HASP at least ten (10) working days before any demolition or any building materials-disturbing activity, and no later than thirty (30) days after the Notice to precede for each Trade Subcontract package.

Each subcontractor must submit a copy of its written Hazard Communication Program to the Webcor/Obayashi Joint Venture SSM. An initial hazardous material/chemical listing for this specific jobsite must accompany the written Hazard Communication Program and all trade subcontractors shall maintain their SDS. A complete file of all SDS submitted is to be located at the jobsite office for review by all workers during job hours. Each trade subcontractor will discuss each new substance introduced on the jobsite at the weekly Safety meetings with their crews and the Superintendents of other trade subcontractors at the weekly Subcontractor Meeting. Each trade subcontractor must label the contents of all containers including secondary containers. The label must clearly identify the substance, hazard warnings, the name and address of the manufacturer and the location of the SDS.

Employees are required to be trained in Hazardous Communication, specifically in the dangers of working with these substances, chemicals, materials, required PPE and medical emergency training. Copies of training certificates shall kept on site and be submitted to Webcor/Obayashi Joint Venture SSM.

Bulk fuel storage is not allowed onsite.

Confined Space

No person shall enter a confined space such as manholes, underground vaults, tanks, pipes, tunnels, or other similar places until it is determined that it is safe to enter the space by an approved method. The trade subcontractors Competent Person is responsible for identifying any potential confined space and shall initially determine if a permit required confined space exists. A pre-planning meeting shall be held if a confined space exits and proper procedures shall be followed to ensure worker safety.

When “Hot Work” is performed in Permit Required Confined Spaces, the applicable Standards will be followed for Permit Required Confined Space work.

Equipment

Machinery and equipment shall be inspected and documented daily. Machinery and equipment shall be operated by authorized, trained personnel only. All operated equipment shall have backup alarms in working order. Operators shall inspect each work area to make sure that it is safe to operate the equipment in that area. Equipment shall not be serviced or repaired while it is in motion or running, unless there are appropriate safeguards in place to prevent injury.

Fuel-operated equipment, such as generators, air compressors, welders, etc., shall have a dedicated fire extinguisher near the equipment at all times when it is in operation. Fire extinguisher shall be rated as a minimum of 10lb ABC.

Excavation and Trenching

Currently Webcor/Obayashi Joint Venture does not anticipate based on the scope of work to have any excavations that will require special protection. In the event the situation does arise, The Trade Subcontractor will submit all appropriate documentation (protections, support systems, inspection process, access) preceding the activity.

This Section will conform to Specification Sections 00 07 00 (I), 00 08 14(1.2B), 00 08 14(1.4), 00 08 14(1.5B) and 01 35 65 (1.7C) found in The Transbay Transit Center Contract Number 08-04-CMGC-000

Pursuant to section 6705 of the California Labor Code, excavation for trenches five (5) feet or more in depth shall not begin until Webcor/Obayashi Joint Venture has received acceptance from the TJPA of Webcor/Obayashi Joint Venture detailed plan for worker protection from the hazards of cave-in's during excavation of such trenches. Webcor/Obayashi Joint Venture shoring plan shall be submitted in accordance with the requirements of the Specifications and shall show the details and supporting calculations of the design of shoring, bracing, sloping, or other provisions to be made for worker protection during such excavation. No plan shall allow the use of shoring, sloping or other protective system less effective than that required by the Construction Safety Orders of the Division of Occupational Safety and Health. If Webcor/Obayashi Joint Venture shoring plan varies from the shoring system standards established by the Construction Safety Orders, the plan shall be prepared and sealed by an engineer retained by Webcor/Obayashi Joint Venture who is registered as a civil or structural engineer in the State of California. The TJPA acceptance of Webcor/Obayashi Joint Venture shoring plan shall not be construed to relieve Webcor/Obayashi Joint Venture of its responsibility for damage or injuries related to the excavation resulting from unsafe shoring.

The trade subcontractor will comply with all requirements of Federal OSHA, Cal/OSHA, the California Labor Code, Trade Subcontractor safety requirements, and these Contract Documents. The more stringent requirements shall apply. Prior to commence of earthwork activities the trade subcontractor shall review their safety procedures. Trade subcontractors shall submit for approval a comprehensive and site specific Health and Safety Plan (HASP) prepared by a certified Industrial Hygienist. A health and safety plan shall be certified by the trade subcontractor's Competent Hazardous Materials Supervisor and submitted to the TJPA for review and comment prior to implementation. Daily, pre-shift inspection of excavations, the adjacent areas and protective systems shall be made by the Competent Person for evidence of potential cave-ins, hazardous atmospheres or protective system failure. Daily, pre-shift inspection checklists shall be maintained by the subcontractor and submitted to Webcor/Obayashi Joint Venture weekly. No person shall enter an excavation where protection from ground movement is required until such protection is in place. 100% fall prevention and/or protection is required when working next to excavations greater than

five feet (5') in depth. Ladders or other means of approved access shall be used for all excavations. Stepladders shall not be used in a "leaning" position to enter or exit excavations.

Should trade subcontractors be notified by the TJPA of any unsafe or unhealthy condition associated with the performance of the Work and be required to take remedial action to correct such conditions, trade subcontractors shall take action immediately, if so directed, or within 48 hours after receipt of a notice of violation.

Respiratory Protection

Conditions may exist which require the utilization of respiratory equipment to protect employees against exposure to the inhalation of toxic or harmful gasses, vapors, mists, fumes and dust. Each Contractor must implement and enforce a written respiratory program in accordance with CAL/OSHA standards to protect employees from these types of exposures. Trade subcontracts written Respirator Protection programs shall be submitted to Webcor/Obayashi Joint Venture prior to use of respirators.

Only respirators that are applicable and suitable for the purpose intended shall be used. Respirators and cartridges shall be selected on the basis of the hazards to which the employee may be exposed to. Respiratory protective equipment shall be inspected regularly and maintained in good condition. Cartridges shall be replaced per manufacturer's recommended or calculated filter change-out schedule so as to provide complete protection. Respiratory protective equipment, which has been previously used, shall be cleaned and disinfected before it is issued to another employee.

Dust respirators are to be replaced in accordance with manufacturer specifications.

Employee shall be medically evaluated, Fit Tested and properly trained prior to using a respirator. A copy of the employee's medical approval will be kept on site by their employer. Every employee who wears a respirator must be clean-shaven to ensure the proper fitting of the respirator

Concrete Code of Safe Practices

The Concrete Code of Safe Practices is established to assist in conforming to the requirements for all construction activities involving concrete performed on Webcor/Obayashi Joint Venture projects. This includes, but is not limited to cast in place, shoring & reshoring, formwork/false work, post tensioning, placing & finishing.

Definitions

Bull float - a tool used to spread out and smooth concrete.

Formwork - the total system of support for freshly placed or partially cured concrete, including the mold or sheeting (form) that is in contact with the concrete as well as all supporting members including shores, reshores, hardware, braces, and related hardware.

Limited access zone - an area alongside a masonry wall, which is under construction and which is clearly demarcated to limit access by employees.

Precast concrete - concrete members (such as walls, panels, slabs, columns, and beams) which have been formed, cast, and cured prior to final placement in a structure.

Reshoring - construction operation in which shoring equipment (also called reshores or reshoring equipment) is placed, as the original forms and shores are removed, in order to support partially cured concrete and construction loads.

Shore - a supporting member that resists a compressive force imposed by a load.

Fall Protection – Concrete Specific

- Workers working more than six (6) feet above any adjacent working surface or placing reinforcing steel in walls, piers, columns, etc. should be protected by personal fall arrest system, guardrail system or equivalent device.
- Workers inside a Cunningham beam for, where the form leading edge is less than 39" in height and the worker is greater than 6' above a lower working surface, should be protected by a suitable fall protection system consisting of a catenary or similar pendant type line and personal fall arrest system.
- As soon as practical, a perimeter guardrail system should be established.
- Special attention and consideration should be given to workers on ladders within 6' of leading edge such as when working on columns or wall forms. Additional fall protection measures may be required.
- When working on vertical reinforcing steel columns or false work, fall protection should be set in advance from ladders, manually propelled elevated work platforms, or similar means so that 100% fall protection can be utilized.
- Workers on wall forms greater than six (6) feet above any adjacent working surface should be protected from falling by a personal fall arrest system or equivalent system. Ensure appropriate anchorage points are provided and utilized. Where applicable, a two (2) hook system for 100% fall protection should be utilized.
- Workers who are placing or tying reinforcing steel more than six (6) feet above any adjacent working surface should be protected from falling by personal fall arrest system or equivalent system.
- When workers are exposed to falls greater than six (6) feet above any adjacent working surface while erecting or dismantling shoring systems, they should have suitable fall protection as necessary utilize an appropriate anchorage point
- In addition to the above fall protection requirements, when erecting and dismantling shoring, a minimum of two (2) scaffold grade planks should be used or other similar means, such as mobile scaffolding, lifts, etc. Planks should rest on horizontal frame members and not on cross bracing.
- The use of positioning systems as a sole means of fall protection is not permissible.
- Unless otherwise provided by a site specific fall protection plan:
    - The placing of frames and stringers should be from below via appropriate ladders, temporary work platforms, false decks, scaffolds, or other similar work platforms.
    - The first several joists spread should be from below via appropriate ladders, temporary work platforms, false decks, scaffolds, or other similar work platforms. Once the first several joists are positioned, a work platform (e.g. 4x6 sheet of plywood or similar) should be placed on top of a placed joists and all further spreading of joists should take place from this work platform or successive sheets of plywood laid to extend this platform. Work should take place from the center of the bay, with joists spaced no greater than 24" on center. Any work within 6' of the leading edge and greater than 6' above a lower working surface should be protected by a suitable fall protection system.

Formwork/False work

Formwork, false work and shoring should be designed, fabricated, erected, supported, braced and maintained so that it will be capable of supporting without failure all vertical and lateral loads that may reasonably be anticipated to be applied to the formwork. Formwork which is designed, fabricated, erected, supported, braced and maintained in conformance with ANSI A10.9-1983 Construction and Demolition Operations – concrete and masonry work, will be deemed to meet the requirements of this paragraph.

- Drawings or plans, including all revisions, for the jack layout, formwork including shoring equipment, working decks, and scaffolds, should be available at the jobsite.
- Procedures for safe installation, removal, lifting etc., should be available at the jobsite and all workers appropriately trained in these procedures as applicable.
- Work areas should be clear of all unauthorized personnel during installation, concrete placement and removal. Appropriate barricading, delineation and/or signage should be placed to limit access and alert other workers of hazards associated with the work area.
- At no time should workers place themselves underneath a live load.
- When hoisting material, the worker should be positioned to the side of the hoisted material and never into the pinch point between the hoisting equipment and the material or in the area where an operator would land material in the event of an emergency.
- Appropriate tag lines should be utilized as required and two (2) tag lines may be necessary to help align/control panels or forms.
- Safe means of access and egress should be maintained at all times.

Removal of Formwork

Forms and shores (except those used for slabs on grade and slip forms) should not be remove until the employer determines that the concrete has gained sufficient strength to support its weight and superimposed loads. Such determination should be based on compliance with one of the following:

- The plans and specifications stipulate conditions for removal of forms and shores, and such conditions have been followed, or the concrete has been properly tested with an appropriate ASTM standard test method designed to indicate the concrete compressive strength, and the test results indicate that the concrete has gained sufficient strength to support its weight and superimposed loads.
- Prior to dismantling, the entire system should be inspected to determine if there are any hazards from displacement, weakening, alterations etc. of the shoring and false work.
- Shores, cross braces etc. should only be removed in the immediate work areas and as appropriate.
- All nails should be removed or bent over immediately upon stripping.
- Shoring, formwork and all other equipment being removed should be stacked, consolidated or placed in an orderly manner as soon as practicable during the removal operation and egress/access paths maintained at all times.
- Only appropriate tools should be used for removal of shoring and formwork.

Shoring and Reshoring

- All shoring and reshoring operations should comply with all federal, state local and manufactures regulations.
- All shoring equipment (including equipment used in reshoring operations) should be inspected prior to erection to determine that the equipment meets the requirements specified in the formwork drawings.

- Shoring equipment found to be damaged, severely rusted, missing locking devices etc. should not be used for shoring. Shoring equipment that is in place and is found to be damaged or weakened, should be immediately reinforced.
- Erected shoring equipment should be inspected immediately prior to, during and immediately after concrete placement.
- The sills for shoring should be sound, rigid and capable of carrying the maximum intended load.
- Base plates should be attached to a minimum of 12' square, 2" plywood or equivalent.
- All base plates, shore heads, extension devices, and adjustment screws should be in firm contact, and secured when necessary, with the foundation and the form.
- Existing ground should be level, adequately compacted and loads distributed. Consideration should be given to adverse weather conditions such as washouts, rain impact to slopes etc. Special precautions such as hardwood wedges or bracing should be utilized on sloped surfaces.
- All clamps, screws, pins and other similar components should be in a closed or engaged position.
- Eccentric loads on shore heads and similar members are prohibited unless these members have been designed for such loading.
    - Ensure stringers are centered on these members to minimize eccentric loading.
- Adequate access should be provided to all form deck surfaces.
- When horizontal shoring is required, these should be engineered and special consideration should be given to installation and conformance to the completed design.
- Ensure all stringers and joists are fully supported and centered over shoring heads/top plates and adequately secured. Further, ensure that all stringers and joists are fully upright and not rolled.
- All horizontal shoring should be installed and erected in compliance with manufacture's requirements as well as federal, state and local regulations.

Frame Shoring

- The design of the shoring should be prepared by a qualified designer and the erected shoring should be inspected by an engineer qualified in structural design.
- The shoring design or layout drawing should be followed with no omissions of required components, or alteration in frame spacing's, types used, towers heights, locations or sizes.
- Shoring loads should be carried on all legs.
- All shoring fames should be plumb and level. This should be checked and corrected at a minimum of during erection and just prior to the pour.
- Adjustment of shoring frames should not be made once the pour begins.
- When shoring height exceeds a minimum of four (4) times the minimum base width, additional bracing and securing of the frames should be performed.
- Cross braces should never be climbed, workers should climb frames from the inside.

Screw Jacks

Screw jacks should not exceed the manufactures recommended extension height at any time. Screw jack extension should be kept to a minimum for maximum load carrying capacity. All screw jacks should be in firm contact with the foundation and frame legs.

Post Shoring

- The single post shores should be vertically aligned/plumbed.
    - This should be checked and corrected at a minimum of during erection and just prior to the pour.

- Adjustment of post shores for any reason should not be made once the pour begins.
- Refer to the manufacture's guidelines for additional stability measures and bracing requirements of each system used.
- Post shores should be adequately secured at top and bottom to prevent displacement.
- Whenever single post shores are used one on top of the other (tiered), they should comply with the following specific guidelines in addition to the general guidelines for formwork:
    - The single post shores should be spliced to prevent misalignment.
    - The single post shores should be adequately braced in two (2) mutually perpendicular directions at the splice level.
    - Each tier should also be diagonally braced in the same two (2) directions.

Ellis Shores

- Ensure shores are erected with the proper length of timbers allowing a minimum of 24" overlap between shore members.
- The shore clamps should be attached 12" apart with the upper clam at a minimum of 2" from the top of the lower shore. Each clamp should be secured with the appropriate number of type of duplex nails.
- Shores should be raised to the desired height by sliding the upper shore member upwards being careful to avoid pinch points.
- Shore hand jacks should not be used to raise decks, lift formwork or elevate concrete.
- Ensure all shores, jacks and clamps are inspected prior to use and any damaged or defective materials are removed or repaired prior to use.
- Safety nails should be secured above each clamp of the upper shore member casting to prevent uplift or movement during vibration.

Re-shoring

- Shores should not be removed, including cross bracing, until the concrete has gained sufficient strength to support its weight and superimposed loads. Such determination shall be based on compliance with one of the following:
- The plans and specifications stipulate conditions for removal of forms and shores, and such conditions have been followed or the concrete has been properly tested with an appropriate ASTM standard test method designed to indicate the concrete compressive strength, and test results indicate that the concrete has gained sufficient strength to support its weight and superimposed loads.
- Stripping and removal of shoring equipment should be performed in conformance to the approved stripping sequencing plan.
- Re-shoring should be erected, as the original forms and shores are removed, whenever the concrete is required to support loads in excess of its capacity.
- The design of the shoring should be prepared by a qualified designer and the erected shoring should be inspected by an engineer qualified in structural design.
- The shoring design or layout drawing should be followed with no omissions of required components, or alterations in spacing's, types used, heights, locations or sizes.
- Re-shores should be placed directly below load carrying legs to avoid punch through, stress reversals or other undesirable forces on the poured concrete.
- Slabs or beams should be allowed to take their permanent deflection before final adjustment of re-shoring equipment is made.
- Horizontal shoring should never be used as part of a re-shoring system.

Bracket Scaffolds

- Bracket scaffolds should only be used through bolted walls, with at least 5/8" diameter bolts.
- Scaffolds should be solidly secured to the walls or the supporting structure.
- Scaffolds should be able to support at least four (4) times the maximum intended working load.
- Spacing of brackets should not be greater than 10' apart.
- Railings should be installed on all scaffolds 6' or greater in height.
- Platforms should consist of at least two 2"x10" planks that extend at least 6" over each bracket and no more than 18".
- Platforms should be solidly planked with no more than 7" gap under the back rail and 14" gap to the face of the form.
- Planking should be scaffold grade lumber or equivalent and should be free from damage, defects, cracks, splits etc. Damaged planks should not be used.

Reinforcing Steel

All protruding reinforcing steel, onto and into which employees could fall, should be guarded to eliminate the hazard of impalement. When working at grade, impalement hazards from 4" to 6' in height, at a minimum, should be protected. Reinforcing steel for walls, piers, columns, and similar vertical structures should be adequately supported to prevent overturning and to prevent collapse. Employers should take measures to prevent unrolled wire mesh form recoiling. Such measures may include by are not limited to securing each end of the roll or turning over the roll. Reinforcing steel should be stockpiled as close as practicable to work areas. Additionally special attention should be taken towards access and egress to work areas, excavations and ensuring work areas are free from tripping hazards or other surface encumbrances.

Concrete Placement and Finishing

Appropriate PPE should be utilized during concrete placement and finishing. This includes but is not limited to safety glasses, fall protection, gloves, boots, hardhat, and long sleeves. Appropriate respiratory protection should be used for all concrete cutting, grinding, sanding, and blasting, dry mixing, jack hammering etc.

The following should be observed while working with concrete:

- When discharging concrete on a slope, the wheels of ready-mix trucks should be blocked, the brakes set to prevent movement and the operator with the vehicle at all times.
- All washout activities should be completed in the designated washout area.
- All concrete cutting, finishing and cleanup should be done in such a manner that all residue or waste water will be properly contained and disposed of.
- Appropriate precautions should be taken for specialty applications (e.g. acid washing, dyes, stains etc.); in their handling, storage use and disposal.
- Powered and rotating type concrete troweling machines that are manually guided should be equipped with a control switch that will automatically shut off the power whenever the hands of the operator are removed from the equipment handles.
- Bull float handles used where they might contact energized electrical conductors, should be constructed of nonconductive material or insulated with nonconductive sheath that's electrical and mechanical characteristics provide the equivalent protection of a handle constructed of nonconductive material.

- Masonry saws should be guarded with a semicircular enclosure over the blade.
- When operation air guns for cleaning off decks, inside forms etc., these guns should have a maximum of 30 psi nozzle pressure and be equipped with a safety release valve.
- Air guns should have pressure valves, and extension tube and the hoses well maintained with appropriate whip checks.
- Employee operating air guns should have appropriate PPE, including but not limited to, chip protection (i.e. face shield, goggles etc.), ear plugs and respiratory protection as required.
- No employee should be permitted to perform maintenance or repair activity on equipment (such as compressors mixers, screens, pumps used for concrete and masonry construction activities) where the inadvertent operation of the equipment could occur and cause injury, unless all potentially hazardous energy sources have been locked out and tagged.

Concrete Buckets

No employee shall be permitted to ride concrete buckets or work under concrete buckets while buckets are being elevated or lowered into position. Elevated concrete buckets shall be routed so that no employee or the fewest number of employees are exposed to the hazards associated with falling concrete or falling buckets. Concrete buckets equipped with hydraulic or pneumatic gates should have positive safety latches or similar safety devices installed to prevent premature or accidental dumping. Concrete buckets should be designed to prevent concrete from hanging up on top of the sides.

Pump-Crete Systems

Concrete pumping systems using discharge pipes should be provided with pipe supports designed for 100% overload. Compressed air hoses used on concrete pumping systems should be provided with positive failsafe joint connectors to prevent separation of sections when pressurized. Movement of concrete hoses should be planned to limit the amount of manual positioning of hose as much as practicable. When necessary, the use of hooks, ropes or other similar devices should be utilized when handling the concrete hose.

Buggies & Wheelbarrows

Concrete buggy handles should not extend beyond the wheels on either side of the buggy. Handles should be guarded or equipped with knuckle guards. All buggies, wheelbarrows or other similar conveyances should be properly maintained and repaired/replaced immediately if damaged, in poor repair or otherwise. Paths of access and travel should be level, free of debris and other surface encumbrances and ramps or other access ways should be appropriately built, maintained, and protected. Buggies, wheelbarrows etc. should not be overloaded.

Post-Tensioning Operations

No employee (except those essential to the post-tensioning operations) should be permitted to be behind the jack during post-tensioning operations. Signs and barriers should be erected to limit employee access to the post-tensioning area during tensioning operations. Appropriate fire protection measures should be taken during burning operations, including by not limited to spark control or blankets, fire extinguishers, wetting formwork etc.

Permitting/Documentation

Before a contractor is on site, the following items should be obtained in writing. A permit for excavation/trenching activities (Cal OSHA Excavation Notification Form as applicable) for all trenches/excavations that are equal to or greater than 5’ in depth where an employee is required to enter as

well as a permit for any false work or scaffolding 36' in height or greater total. Excavation and trenching plan, shoring/false work design or plan needs to also be submitted to Webcor/Obayashi Joint Venture in writing. Name(s) of competent person(s), soils analysis report and a copy of the trade subcontractor's safety manual are also required prior to work.

General Rigging Equipment Safety:

Inspect rigging equipment for material handling prior to use on each shift and as necessary during its use to ensure that it is safe. Remove defective rigging equipment from service.
Never load rigging equipment in excess of its recommended safe working load.
Remove rigging equipment when not in use from the immediate work area so as not to present a hazard to employees.
Mark special rigging accessories (i.e., spreader bars, grabs, hooks, clamps, etc.) or other lifting accessories with the rated capacity. Proof tests all components to 125% of the rated load prior to the first use. Maintain permanent records on the job site for all special rigging accessories.

Asbestos Abatement Program

Products that contain Asbestos can be helpful, but they can also be very harmful. Asbestos is a mineral which has many positive qualities. It is fireproof, heat resistant, lightweight, resistant to most chemicals, sound-absorbing and it does not conduct electricity. Asbestos has been used to mix with plaster and wallboard for strength and support, sprayed onto wall, ceilings, and steel girders for fireproofing, wrapped around pipes, boilers and heating ducts for insulation, in floor and ceiling tiles among others. Asbestos can break down into tiny fibers, like grains of sand or rope and can float in the air for long periods of time, allowing them to be easily inhaled. A powerful microscope is needed to see the fibers since they are invisible to the human eye, they have the strength of steel, and one cannot taste or smell them. Asbestos material that a worker may encounter generally fit into two (2) categories: Friable and Non-Friable. Friable asbestos is air born, thin, easily damaged or broken asbestos and is most dangerous to human's respiratory system. Non-friable is asbestos that is not damaged, a complete piece. The three most common materials that contain asbestos are thermal system insulation, floor tiles and sprayed-on materials. Thermal system insulation is the most common type of friable asbestos material, and can be found on boilers, utility pipes, ductwork and heating systems.

This Asbestos Abatement Program is developed to inform workers who don't really work directly with asbestos, but who may have incidental exposure, must receive at least "Asbestos Awareness" training. To help address OSHA's concerns, and provide the awareness training needed by employees under the regulation, employees shall be trained, understand monitoring activates and how to protect against potential asbestos exposure. Employees should understand how long-term exposure to asbestos can harm the human body as well as understand how to avoid potentially hazardous maintenance and custodial activities that could lead to asbestos exposure since custodians, engineers and maintenance workers have the highest chance of exposure to asbestos. Employees should understand which safe work practices should be used when helping with a minor asbestos clean-up and understand why and when there is a potential for exposure to asbestos. Air monitoring and medical surveillance can be important elements in providing a safer workplace.

Exposure to asbestos fibers can lead to a disease known as "Mesothelioma." Mesothelioma is a chronic disease, occurs over time. There is rarely acute side effects when a worker is exposed to asbestos. Symptoms of asbestos exposure may include shortness of breath, enlargement of the heart, scaring of the

lungs, cancer and death. People who smoke are especially vulnerable to Asbestos. Cigarette smoke breaks down the lungs' defensive system, and leaves them vulnerable to Asbestos fibers. Smokers are over 50 times more likely to become sick after long-term exposure to Asbestos.

While working with material that has or potentially has asbestos requires safe handling and proper PPE. Even a small tear in asbestos material can cause serious harm. If an employee suspects a piece of asbestos material is damaged their supervisor shall be notified immediately and secure measures shall be taken to ensure minimal exposure. These measure may include securing the material in a plastic bag secured with duct tape and wetting down the immediate area to ensure the material does not become friable.

Proper PPE

Although asbestos is not a skin contact hazard, by wearing disposable overalls helps reduce the potential of transferring asbestos from the work area to non-contaminated areas.

A respirator and designated filters shall be required to reduce the potential of introducing asbestos fibers into the lungs. A fit test and medical evaluation shall be conducted prior to an employee donning a respirator. The respirator must be the right size and securely fit a clean shaved face. Respirators shall be cleaned and stored as recommended by an Industrial Hygienist.

An Air Sampling Device may, at times, be worn by the employee to measure airborne concentrations of asbestos in the work are. The Air Sampling Device varies in design and appearance, however does include an air pump located near the employees face and a sampling cassette that is secured onto the employee. An Industrial Hygienist will instruct the employee in further details regarding the use of an Air Sampling Device.

Medical Surveillance

A Medical Surveillance program is put in place to monitor employees since asbestos causes chronic illnesses. The program tests the workers lung capacity and x-rays the chest cavity and lungs for any previous damage and to record current conditions. The worker may be asked to return for continued surveying depending on their potential exposure. The Medical Surveillance costs are that of the employer, free service to the employee.

Clean up Methods

The Asbestos Awareness Program is designed to make workers aware of the health hazards, locations and minor cleanup of asbestos, this program does not include Asbestos Work. Large quantities of asbestos required more detail and training than what is provided here. However, if a minor cleanup or containment is required follow these basic steps:

- Proper PPE: respirator, gloves, Tyvek body suit. Don and Done PPE properly
- Appropriate work area: the contaminated area is guarded with access available through the decontaminated area and final access to the non-contaminated area.
- Equipment: wet methods, HEPA vacuum shall be used. Low Abrasion Pad, at speeds less than 300rmp are acceptable.
    - Do not sweep or shovel material contain asbestos.
- Disposal
    - Asbestos materials must be properly bagged and labeled.
        - Use only official Asbestos Disposal Bags.
        - Use a Generator Label which lists the name and address of your facility.

- If an Asbestos Disposal Bag becomes torn, double bag and seal it immediately with tape.
- Asbestos is a regulated waste (it must be hauled to a licensed landfill).

Decontamination

After any work with Asbestos materials, workers must decontaminate themselves and their equipment. This prevents the spread of Asbestos dust and debris. Always use an official decontamination area that is equipped with a HEPA vacuum, as well as a plastic drop cloth (to contain any loose fibers). Never eat, drink or smoke in these decontamination areas, or any other area where asbestos is present. Scrub hands and face with soap and water before leaving work. If possible, shower before leaving your facility as well, if not, instruct the worker to shower immediately when they get home to prevent potential exposure to others. When decontaminating clothing, never brush off dust or debris because asbestos fibers may become airborne. Use a HEPA vacuum to remove materials from clothing before taking it off. Also vacuum equipment and Asbestos Disposal Bags. Tyvek suits will need to be disposed of in an Asbestos Disposal Bag and disposed of as regulated waste.

Lead Abatement Program

This program has been put in place because Webcor/Obayashi Joint Venture recognizes that some of the work we do has the potential to expose our employees to lead. We want to do as much as is practically possible to protect them from lead exposure.

Prior to the start of a project, professionals/Industrial Hygienist in lead detection and abatement will be brought in to do an Exposure Assessment to determine whether the work environments Webcor/Obayashi Joint Venture employees will be operating in has the potential to expose workers to lead. These professionals will be used to give Webcor/Obayashi Joint Venture direction as to how to proceed. It will be our goal to have lead abatement taken care of by licensed lead abatement professionals prior to the arrival of Webcor/Obayashi Joint Venture employees.

Lead can be found in a number of workplace environments. Until recently, lead was a common component in paints of all kinds (which can create exposure whenever sanding, sandblasting, scraping, or even demolition occurs).

Workplace experience and empirical studies have shown that lead is fairly easily absorbed into the body. Breathing airborne lead dust and fumes is the most common route of entry. Lead can also be absorbed if it comes into contact with the mouth or tongue.

Overexposure to lead can occur both on an acute basis, where large amounts of lead are absorbed into the body in a short period of time, or on a chronic basis where small amounts of lead are absorbed at any one time, for a long period eventually accumulating to cause significant health problems.

On May 4, 1993, OSHA published the Interim Final Rule for Lead Exposure in Construction. The Construction Standard establishes “Interim” procedures and work practices that must be followed in construction environments. The OSHA Standard and its compliance requirements are included at the end of this written program. The Lead Standards are “performance based”; the standard will tell you what you have to accomplish.

A General Requirement in the Lead Standards states employers must make sure that no employee is exposed to lead concentrations greater than 50 micrograms per cubic meter of air, averaged over an eight-hour period in any 24-hour day.

Typically, OSHA requires that you use the following methods to protect your employees through engineering controls, work-practice controls, respiratory protection, PPE, hygiene facilities and practices, housekeeping and employee information and training.

OSHA requires that every employer who is covered by these Standards provide information and training. For employers in the Construction Industry, it requires that they meet the training requirements of the Hazard Communication Standard. Information that must be given employees under the Hazard Communication Standard includes the hazards associated with lead exposure, warning signs and labels that can be found on materials containing lead, and how to find information about materials containing lead on Safety Data Sheet (SDS), and use of PPE.

Respiratory Protection Program

The purpose of this plan is to establish a program and procedures for wearing respiratory protection at the Transbay Transit Center. This program supports compliance with the Occupational Safety and Health Administration Respiratory Protection Standard as found in 29 CFR 1910.134. This program applies to all company employees who work in areas whose exposures to airborne contaminants require the use of respirators.

Definitions

Dusts: Particles released during work operations such as grinding and sawing.

Fit Testing: The process of making sure that an employee's respirator fits property and will provide the necessary protection without any leaks.

Fumes: Vaporized, condensed metals such as lead that may be present during welding operations.

Gases: Examples include nitrogen, methane, and carbon monoxide.

IDLH: An OSHA hazard classification: Immediately Dangerous to Life & Health. An atmospheric condition that poses an immediate hazard to life or poses immediate irreversible debilitating effects on health.

Mists: Particles of liquid released during operations such as spray painting.

NIOSH: National Institute for Occupational Safety and Health; an agency that establishes minimum performance standards for respirators and tests and approves respirators for various uses.

Vapors: Gaseous forms of a liquid such as paint solvents.

Responsibilities

Program Administrator

The Program Administrator is responsible for issuing and administering this program and making sure that the program satisfies the requirements of all applicable federal, state, or local respiratory protection requirements. Providing initial and periodic training to employees on respiratory protection requirements. Conducting hazard assessments where respiratory hazards may be present. Assisting managers and supervisors in the selection of appropriate respiratory protection for use on their jobsites.
Auditing the respiratory protection program to ensure its continued effectiveness.

Purchasing Agent

The Purchasing Agent will be the Jobsite Superintendent and is responsible for purchasing respiratory protection equipment and assuring that all equipment purchased is approved by NIOSH/MSHA.

Superintendent

Superintendents whose jobsites are required to wear respiratory equipment is responsible for knowing the hazards in their areas that require respiratory protection, knowing the types of respirators that need to be used, enforcing the wearing of respiratory protection in the areas where it is required, making sure employees are knowledgeable about the respiratory requirements for the areas in which they work and providing training on hazardous chemicals to employees.

Employees

Employees who are required to wear respirator protections is responsible for wearing appropriate respiratory protection, properly maintaining their respiratory protection equipment and keeping it in a clean and operable condition and notifying their Supervisor of any additional hazards.

Program Activities

Respiratory hazards will be assessed on the jobsite and appropriate protection will be provided for all affected employees. Employees are required to wear respiratory protection wherever respiratory hazards exist. Respiratory protection is stored and issued from the jobsite office. Efforts will be made to minimize the use of hazardous chemicals in the workplace. If the use of hazardous chemicals creates an imminent-danger situation, the operation will be discontinued.

Respirators

Respirators will be selected according to the type of activity for which they will be used and the type of potential air contaminants associated with these activities. Only NIOSH/MSHA approved respirators will be used. All respirator protection equipment will be used in accordance with the manufacturer's recommendations. In areas in which maintenance and sanitation services are unavailable or respiratory usage is limited, disposable respirators will be used. Non-disposable respirators which are used exclusively by one person will be maintained and cared for by the wearer. All non-disposable respirators which are used by more than one person will be cleaned and sanitized between each use. Chemical cartridge respirators will be stored in airtight, labeled containers between each use. All other respirators will be stored in a clean and sanitary manner and labeled with the wearer's name. Disposable respirators will be used until the cartridge or filter media requires replacement or when the face piece is dirty.

Respirators will be inspected by the wearer prior to each use. Supervisors on jobsites where respirators are used will verify that appropriate respirator protection is being used, inspected, and maintained properly. Non disposable respirators will be inspected according to the manufacturer's instructions.

All users of respirators will be fit tested to ensure a proper face piece-to-face seal. Employees whose facial hair interferes with the face piece-to-face seal will not be allowed to wear negative-pressure air-purifying respirators.

All employees who are required to wear respirators will receive training in their use, selection and appropriate maintenance. Training will provide an opportunity for the employee to handle the respirator, have it fitted property, test the face piece-to-face seal, wear it in normal air, and wear it in a test atmosphere.

Silica Exposure Program

The purpose of this policy is to establish procedures to protect employees from the health hazards associated with exposure to airborne crystalline silica generated by various construction activities. Due to the amount of work we do with concrete and masonry on almost any project; our workers have the potential for silica exposures through abrasive blasting, chipping, hammering, sawing, grinding or demolition of concrete.

Silicosis is a lung disease marked by hardening of lung tissue and symptoms such as shortness of breath, possible fever, fatigue and eventual respiratory failure. Silicosis also renders a person more susceptible to disease of the lungs, such as tuberculosis. Where there is concrete, there is a potential silica exposure so it is essential to monitor our work activities and take the necessary corrective actions to protect our employees.

Responsibilities

Supervisor

Project Supervision shall evaluate all work activities for silica exposures, institute engineering controls as a first line of protection to reduce silica exposures, institute all administrative/work practice controls to reduce silica exposures when feasible and when engineering controls have been explored and ruled out. Institute the use of respirators to reduce exposures when the above mentioned controls fail to reduce silica exposure levels, provide training identified in this policy when employees are exposed to silica hazards and provide necessary respirator protection as well as training in its proper use, when deemed necessary.

Employees

The workers shall follow all work plans that identify engineering and administrative work practice controls to reduce their exposure to crystalline silica. They will wear respiratory protection to reduce their exposure to crystalline silica when deemed necessary by their supervisor and not eat, drink, use tobacco products or apply cosmetics in areas where there is dust containing crystalline silica.

Program Activities

Crystalline silica exposures must be maintained below the OSHA PEL of 10mg/m3 Percentage Quartz) +2. Historical data from similar operations producing silica exposure can be used as exposure monitoring when feasible. Assessment of worker exposure to reparable crystalline silica dust during various tasks associated with concrete finishing and demolition activities is performed annually by an Industrial Hygienist. Specific job tasks monitored include grinding, patching, chipping, demolition, segregation, stockpile, and loading of concrete rubble.

When it has been determined that employees will be exposed to crystalline silica in excess of the PEL, engineering controls will be used as a first line of defense. Engineering controls include, but are not limited to the use of dust collection systems which are available for many dust generating tools and equipment, using wet methods to keep dust particles down, use abrasives with a low silica or no silica content or using local exhaust ventilation to prevent dust from being released into the air. When engineering controls cannot be utilized or are not effective to sufficiently reduce exposure to the inhalation of silica, administrative controls will be used when feasible to reduce the time of exposure for the employees where work crews are of sufficient size, the pool of workers skilled in the operation of applicable tools, and job duration is sufficient to accommodate worker rotation, develop a program to reduce the exposure time of individual workers to silica.
Work tasks that must be monitored for crystalline silica exposure include by are not limited to:

- Jack hammering and chipping
- Grinding concrete
- Tunneling
- Sandblasting
- Dry sweeping or blowing concrete debris, sand or rock dust
- Demolition of concrete/masonry structures
- Crushing, loading, dumping rock or concrete
- Saw cutting concrete or rock

Respirators

Respirators will be selected according to the type of activity for which they will be used and the type of potential air contaminants associated with these activities. Only NIOSH/MSHA approved respirators will be used. All respirator protection equipment will be used in accordance with the manufacturer's recommendations. In areas in which maintenance and sanitation services are unavailable or respiratory usage is limited, disposable respirators will be used. Non-disposable respirators which are used exclusively by one person will be maintained and cared for by the wearer. All non-disposable respirators which are used by more than one person will be cleaned and sanitized between each use. Chemical cartridge respirators will be stored in airtight, labeled containers between each use. All other respirators will be stored in a clean and sanitary manner and labeled with the wearer's name. Disposable respirators will be used until the cartridge or filter media requires replacement or when the face piece is dirty.

Respirators will be inspected by the wearer prior to each use. Supervisors on jobsites where respirators are used will verify that appropriate respirator protection is being used, inspected, and maintained properly. Non disposable respirators will be inspected according to the manufacturer's instructions.

All users of respirators will be fit tested to ensure a proper face piece-to-face seal. Employees whose facial hair interferes with the face piece-to-face seal will not be allowed to wear negative-pressure air-purifying respirators.

All employees who are required to wear respirators will receive training in their use, selection and appropriate maintenance. Training will provide an opportunity for the employee to handle the respirator, have it fitted property, test the face piece-to-face seal, wear it in normal air, and wear it in a test atmosphere.

Select respirators based on the criteria identified in the respirator protection section of this manual.

Air Monitoring

After the initial assessment and institution of exposure controls, follow-up air monitoring will be conducted to assess the effectiveness of the controls put in place. In the event that the follow-up monitoring reflects that instituted controls have not yet reduced employee exposures, the operations will cease, be re-evaluated and alternative controls will be explored to reduce employee exposures to silica.

Training

Employees will be trained in the hazards of silica exposure, engineering and administrative/work practice controls, if any, that have been instituted to control silica exposures and PPE.

Appendix

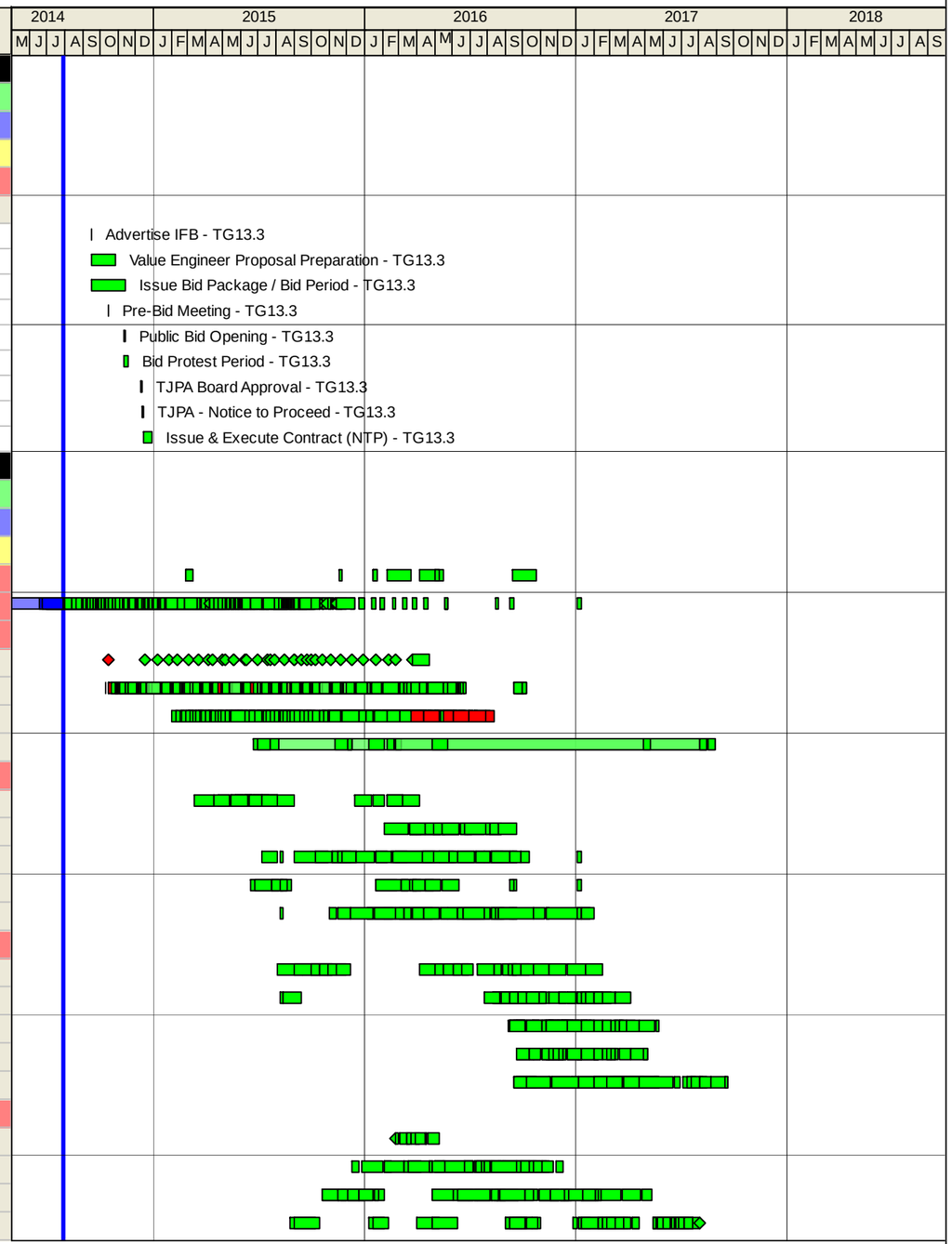
Figure 1	JHA
Figure 2	Incident Package
Figure 3	DIA
Figure 4	Notice of EHS Non-Compliance Warning Letter of EHS Non-Compliance Written Notice of Temporary Job Suspension

Project ID: 30100-TG13.3P...
Print Date: 15-Sep-14, 15:01

TRANSBAY TRANSIT CENTER

TG13.3 EXHIBIT I SCHEDULE

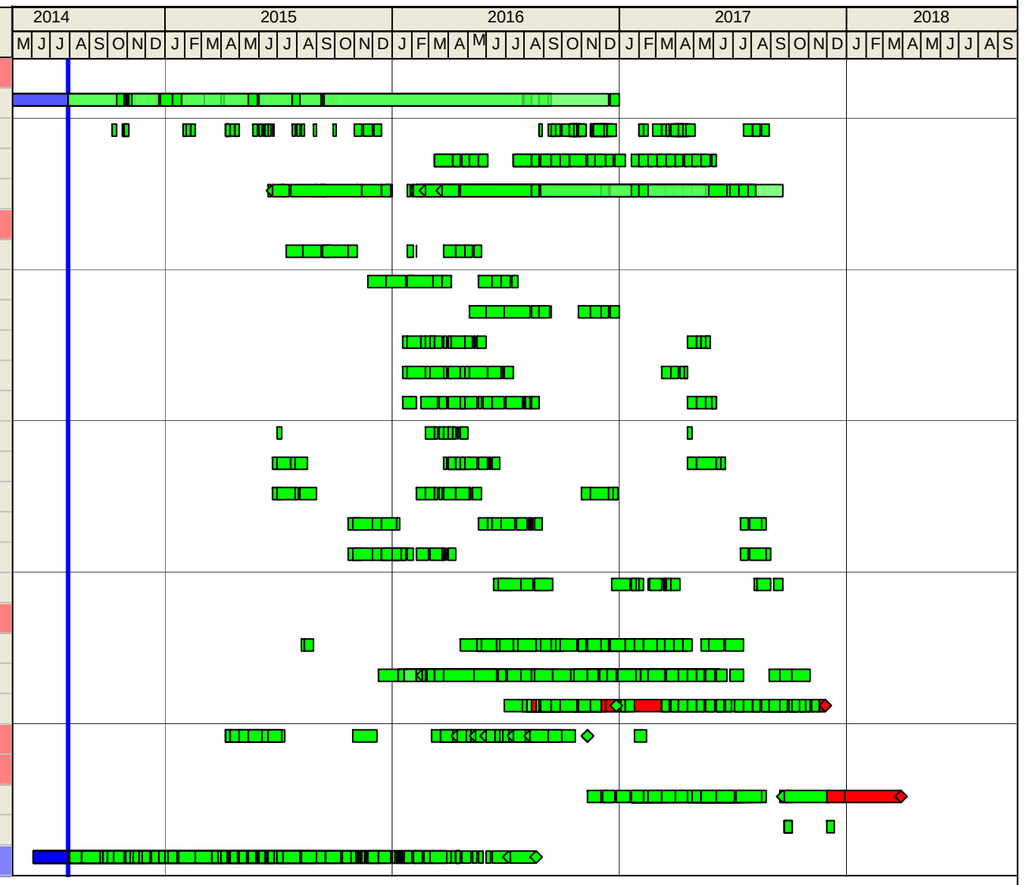
Activity ID	Activity Name	OD	Start	Finish
TTC - ***TG13.3 EXHIBIT I*** (PRECONSTRUCTION)		70	16-Sep-14	29-Dec-14
PRECONSTRUCTION		70	16-Sep-14	29-Dec-14
TRADE GROUP PLANNING AND IFB PROCESS		70	16-Sep-14	29-Dec-14
TG13 - ROOFING / WATERPROOFING / LANDSCAPE / HARDSCAPE / WATER FEATURES		70	16-Sep-14	29-Dec-14
TG13.3 - GROUND LEVEL LANDSCAPING		70	16-Sep-14	29-Dec-14
TG13.3 - BID & AWARD PROCESS (IFB)		70	16-Sep-14	29-Dec-14
CA-324552	Advertise IFB - TG13.3	1	16-Sep-14	16-Sep-14
CA-324557	Value Engineer Proposal Preparation - TG13.3	31	16-Sep-14	28-Oct-14
CA-324544	Issue Bid Package / Bid Period - TG13.3	42	16-Sep-14	12-Nov-14
CA-324554	Pre-Bid Meeting - TG13.3	1	15-Oct-14*	15-Oct-14
CA-324560	Public Bid Opening - TG13.3	1	12-Nov-14	12-Nov-14
CA-324548	Bid Protest Period - TG13.3	6	12-Nov-14	19-Nov-14
CA-324549	TJPA Board Approval - TG13.3	1	11-Dec-14	11-Dec-14
CA-324550	TJPA - Notice to Proceed - TG13.3	2	12-Dec-14	15-Dec-14
CA-324551	Issue & Execute Contract (NTP) - TG13.3	8	16-Dec-14	29-Dec-14
TTC - ***TG13.3 EXHIBIT I*** (CONSTRUCTION)		1167	17-Jul-13 A	28-Mar-18
CONSTRUCTION		1167	17-Jul-13 A	28-Mar-18
TRANSBAY CENTER BUILDING		1167	17-Jul-13 A	28-Mar-18
FIELD WORK		1167	17-Jul-13 A	28-Mar-18
BUTTRESS/SHORING/EXCAVATION BBI		414	27-Feb-15	25-Oct-16
BELOW GRADE STRUCTURE (BGS)		866	17-Jul-13 A	09-Jan-17
ABOVE GROUND SUPERSTRUCTURE		716	09-Oct-14	29-Aug-17
ABOVE GROUND SUPERSTRUCTURE SUMMARY		377	14-Oct-14	21-Apr-16
ABOVE GROUND SUPERSTRUCTURE		494	09-Oct-14	06-Oct-16
PARK LEVEL		382	02-Feb-15	11-Aug-16
RAIL CRANES		543	24-Jun-15	29-Aug-17
ROUGH INTERIORS		470	12-Mar-15	31-Jan-17
TRAIN BOX		265	12-Mar-15	04-Apr-16
LOWER CONCOURSE		157	04-Feb-16	19-Sep-16
GROUND LEVEL		374	08-Jul-15	09-Jan-17
LEVEL 2		387	18-Jun-15	09-Jan-17
BUS DECK		367	07-Aug-15	31-Jan-17
FINISH INTERIORS		530	04-Aug-15	21-Sep-17
TRAIN BOX		380	04-Aug-15	14-Feb-17
LOWER CONCOURSE		412	07-Aug-15	05-Apr-17
GROUND LEVEL		180	06-Sep-16	24-May-17
LEVEL 2		155	20-Sep-16	03-May-17
BUS DECK		252	16-Sep-16	21-Sep-17
EXTERIOR ENCLOSURES		482	25-Aug-15	03-Aug-17
STAIR/ELEVATOR TOWER WEST		55	23-Feb-16	09-May-16
GROUND LEVEL CURTAIN WALL & EXTERIOR CEILING		249	10-Dec-15	09-Dec-16
PERIMETER FASCIA & CLADDING		391	19-Oct-15	12-May-17
AWNING		482	25-Aug-15	03-Aug-17



TRANSBAY TRANSIT CENTER

TG13.3 EXHIBIT I SCHEDULE

Activity ID	Activity Name	OD	Start	Finish
	VERTICAL TRANSPORTATION & STAIRS	1026	07-Aug-13 A	21-Sep-17
	CONSTRUCTION PERSONNEL & MATERIAL HOISTS	848	07-Aug-13 A	30-Dec-16
	STAIRS	718	07-Oct-14	29-Aug-17
	ESCALATORS	309	10-Mar-16	05-Jun-17
	ELEVATORS	565	15-Jun-15	21-Sep-17
	CIVIL SITE WORK @ GRADE	557	23-Jun-15	19-Sep-17
	FIRST ST. PERMANENT UTILITIES AND CROSSING	216	14-Jul-15	24-May-16
	FREMONT ST. PERMANENT UTILITIES AND CROSSING	164	24-Nov-15	22-Jul-16
	BEALE ST. PERMANENT UTILITIES AND CROSSING	164	04-May-16	30-Dec-16
	WEST END (GRID LINES A - J)	340	19-Jan-16	25-May-17
	WEST MINNA (GRID LINES 1 - 10)	315	19-Jan-16	20-Apr-17
	WEST NATOMA (GRID LINES 1 - 10)	345	19-Jan-16	05-Jun-17
	SHAW ALLEY	456	29-Jun-15	27-Apr-17
	CENTRAL MINNA (GRID LINES 10 - 18)	495	23-Jun-15	19-Jun-17
	CENTRAL NATOMA (GRID LINES 10 - 18)	378	23-Jun-15	29-Dec-16
	GRAND HALL NORTH (GRID LINES 19 - 25)	457	23-Oct-15	24-Aug-17
	GRAND HALL SOUTH (GRID LINES 19 - 25)	462	23-Oct-15	31-Aug-17
	MUNI TERMINAL (GRID LINES 27 - 35 & A-J)	316	13-Jun-16	19-Sep-17
	ROOFTOP PARK - WATERPROOFING/LANDSCAPE/HARDSCAPE	572	07-Aug-15	28-Nov-17
	WEST (1-10)	482	07-Aug-15	18-Jul-17
	CENTRAL (10-25)	473	10-Dec-15	03-Nov-17
	EAST (25-35)	350	30-Jun-16	28-Nov-17
	BUILDING SYSTEMS - MEPS/BMS/FA	459	09-Apr-15	13-Feb-17
	COMMISSIONING /TRAINING	340	10-Nov-16	28-Mar-18
	COMMISSIONING & TESTING	340	10-Nov-16	28-Mar-18
	TRAINING	55	22-Sep-17	12-Dec-17
	BUS RAMPS	550	03-Jun-14 A	18-Aug-16



Reviewed by Webcor/Obayashi

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Alameda, CA 94502

Review is for general coordination and conformance with design intent only and for submittal in accordance with the contract documents. Review by Webcor Builders does not relieve the subcontractor and/or supplier of responsibility for full coordination, accurate dimensions, correct quantities and full compliance with the contract documents. In the event subcontractor and/or supplier intends to propose any substitution or deviation to the contract documents, each substitution or deviation must be submitted and approved prior to submitting it in a shop drawing or other submittal. Review by Webcor does not imply acceptance of any substitution or deviation.

Submittal Pkg. Number: WO-CQC0001.10

Submittal Number: WO0000-011400W01.10

Webcor Job No.: 30100 Transbay Transit Center

Reviewed By: Jackson Tukuafu

Date: 11/12/2013

Subcontractor: WOJV

WOJV Cycle of Submittal: 10

7/12 V1.4

Exhibit J

Transbay Transit Center

Webcor/Obayashi Joint Venture

Contractor Quality Control Plan

for the

Transbay Transit Center Project

November 04, 2013

REV. 10

WO0000-011400WO1.10

REVISION LOG

REVISION 0: SUBMITTED 10/07/2010 – REVISE AND RESUBMIT 10/29/2010

REVISION 1: SUBMITTED 11/03/2010 – REJECTED 11/19/2010

REVISION 2: SUBMITTED 01/04/2011 – REJECTED 01/13/2011

REVISION 3: SUBMITTED 03/09/2011 – MAKE CORRECTIONS NOTED 12/21/2011

REVISION 4: SUBMITTED 12/09/2011 – MAKE CORRECTIONS NOTED 2/23/2012

REVISION 5: SUBMITTED 05/07/2012 – REVISE & RESUBMIT 06/01/2012

REVISION 6: SUBMITTED 08/02/2012 – REVISE & RESUBMIT 08/27/2012

REVISION 7: SUBMITTED 08/27/2012 – NO EXCEPTIONS TAKEN 02/14/2013

REVISION 8: SUBMITTED 03/21/2013 – NO EXCEPTIONS TAKEN 04/17/2013

REVISION 9: SUBMITTED 08/30/2013 – REVISE & RESUBMIT 10/04/2013

REVISION 10.: SUBMITTED 11/04/2013

WEBCOR/OBAYASHI JOINT VENTURE
CONTRACTOR QUALITY CONTROL PLAN
TRANSBAY TRANSIT CENTER PROJECT

1.0 ELEMENT 1: ***MANAGEMENT RESPONSIBILITY***

2.0 ELEMENT 2: ***DOCUMENTED QUALITY MANAGEMENT SYSTEM***

3.0 ELEMENT 3: ***DESIGN CONTROL***

4.0 ELEMENT 4: ***DOCUMENT CONTROL***

5.0 ELEMENT 5: ***PURCHASING***

6.0 ELEMENT 6: ***PRODUCT IDENTIFICATION AND TRACEABILITY***

7.0 ELEMENT 7: ***PROCESS CONTROL***

8.0 ELEMENT 8: ***INSPECTION AND TESTING***

9.0 ELEMENT 9: ***INSPECTION, MEASURING, AND TEST EQUIPMENT***

10.0 ELEMENT 10: ***INSPECTION, TEST & OPERATION STATUS***

11.0 ELEMENT 11: ***NONCONFORMANCE***

12.0 ELEMENT 12: ***CORRECTIVE ACTION***

13.0 ELEMENT 13: ***QUALITY RECORDS***

14.0 ELEMENT 14: ***QUALITY AUDITS***

15.0 ELEMENT 15: ***TRAINING***

This Webcor/Obayashi JV Contractor Quality Control Plan will be developed incrementally as the trade packages are awarded and trade subcontractors are brought on board. Each trade subcontractors QC plan will become part of the Webcor/Obayashi JV's overall Contractor's Quality Control Plan and will be submitted to the Transbay Joint Power Authority as they are received.

1.0 ELEMENT 1 ***MANAGEMENT RESPONSIBILITY***

1.1 INTRODUCTION PLAN

1.2 FEDERAL TRANSIT ADMINISTRATION GUIDELINES

1.3 MANAGEMENT RESPONSIBILITY

1.4 PROJECT EXECUTIVE QUALITY RESPONSIBILITY

1.5 CQC ORGANIZATION CHART

1.0 MANAGEMENT RESPONSIBILITY

1.1 INTRODUCTION PLAN

Project quality is the responsibility of all members of the project team and starts at the highest level of management. This Quality Control Management Plan details the specific processes by which the Project's quality will be managed and forms the basis upon which Webcor/Obayashi JV will ensure that all quality policy requirements for the Transbay Transit Center are compliant, maintained and continually being evaluated and improved. This Plan integrates the quality management process into the Webcor/Obayashi JV organizational structure and construction management systems.

Key elements of this plan include:

- The commitment of the Webcor/Obayashi JV Senior management to delivering a project that meets the Transbay Transit Center Quality Management System Manual.
- Accepted project specific construction management policies, procedures and tools for the control of project information and the management of the construction documents, submittals and the work of the trade subcontractors.
- A Webcor/Obayashi JV project-specific quality plan that meets the TJPA and FTA quality requirements and contract requirements.
- Trade Subcontractor, site specific, quality plans that meet TJPA and FTA quality requirements and contract requirements.
- Consistent CQC staff oversight- the Webcor/Obayashi JV CQC Manager and the Trade Subcontractors CQC Managers will have a physical presence on site when work is in progress.

1.2 FEDERAL TRANSIT ADMINISTRATION GUIDELINES

The Webcor/Obayashi JV Contractor Quality Control Plan incorporates all 15 Essential Elements of the Federal Transit Administrations Quality Assurance and Quality Control Guidelines dated December 2012 as appropriate for Webcor/Obayashi's scope of work:

1. *Management responsibility*
2. *Documented quality management system*

3. *Design control*
4. *Document control*
5. *Purchasing*
6. *Product identification and traceability*
7. *Process control*
8. *Inspection and testing*
9. *Inspection, measuring and test equipment*
10. *Inspection, test and operating status*
11. *Nonconformance*
12. *Corrective action*
13. *Quality records*
14. *Quality audits*
15. *Training*

1.3 MANAGEMENT RESPONSIBILITIES

Webcor/Obayashi JV fully integrates this quality management plan into the organizational structure and performance management systems of the project.

- Maintain and follow a documented Quality System consisting of this Site Specific Quality Manual with policies and procedures.
- Establish and implement project management procedures.
- Maintain Quality System documents and records.

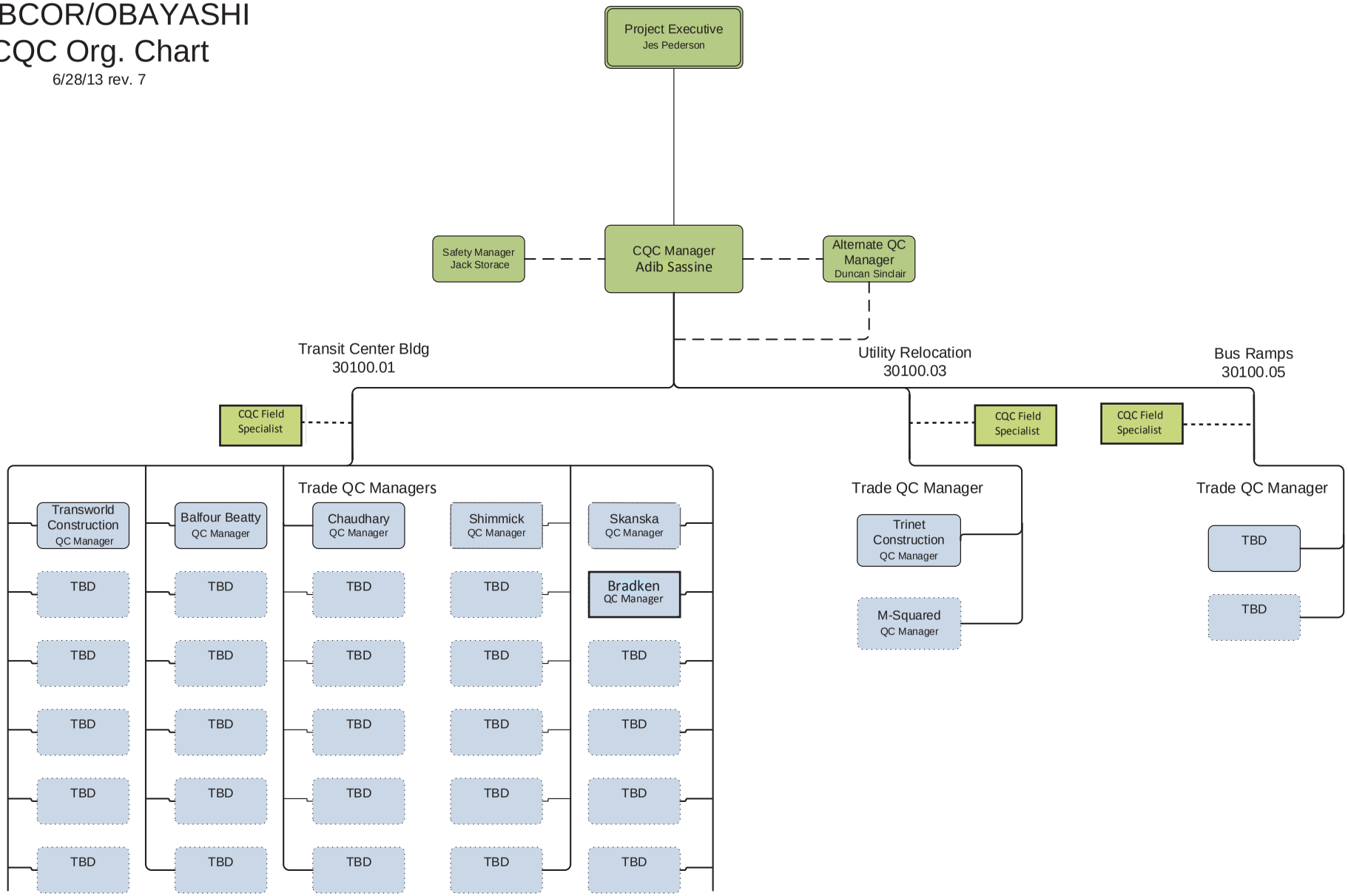
1.4 PROJECT EXECUTIVE QUALITY RESPONSIBILITIES

The Project Executive of Webcor/Obayashi JV is the one person in the company ultimately responsible for quality control function. Regardless of other duties, quality responsibilities of the Project Executive include:

- Empower the Webcor/Obayashi JV Transbay Transit Center CQC Manager to perform the CQC duties described in the contract documents.
- Oversee the projects quality plan and objectives.
- Ensure the availability of necessary resources and information for effective operation of the CQC System.
- Provide active oversight of the Trade Contractors Quality Control Plans

WEBCOR/OBAYASHI
CQC Org. Chart

6/28/13 rev. 7



2.0 ELEMENT 2 DOCUMENTED QUALITY MANAGEMENT SYSTEM

2.1 INTRODUCTION

2.2 CQC OVERVIEW

2.3 THREE PHASES OF CONTROL

2.4 TRADE SUBCONTRACTORS QUALITY CONTROL PLAN

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2.6 WEBCOR/OBAYASHI JV ALTERNATE CQC MANAGER DUTIES AND RESPONSIBILITIES

2.7 TRADE SUBCONTRACTOR'S QC MANAGER DUTIES AND RESPONSIBILITIES

2.8 QC SPECIALISTS RESPONSIBILITIES

2.9 APPOINTMENT LETTERS, RESUMES AND QUALIFICATIONS

A. WEBCOR/OBAYASHI JV CQC MANAGER APPOINTMENT LETTER

B. WEBCOR/OBAYASHI JV ALTERNATE CQC MANAGER APPOINTMENT LETTER

C. CQC MANAGER RESUME

D. ALTERNATE CQC MANAGER RESUME

E. QC SPECIALIST QUALIFICATIONS

2.10 TRADE SUBCONTRACTORS QUALITY CONTROL MEETING

2.11 DEFINITIONS

2.12 LIST OF TRADE SUBCONTRACTORS DFOW'S

2.13 PREPARATORY PHASE CHECK LIST FORM

2.14 INITIAL PHASE CHECKLIST FORM

2.0 DOCUMENT QUALITY MANAGEMENT SYSTEM

2.1 INTRODUCTION

Webcor/Obayashi JV is responsible for developing and maintaining attached written procedures and instructions regularly for activities affecting quality in design, procurement manufacturing and construction as applicable to the work performed. This will include implementing documentation of this Contractor Quality Control Plan and their assuring that Trade Subcontractors prepare, implement document trade package specific QC Plans. Webcor /Obayashi JV CQC Field Specialists will provide day to day oversight of the CQC System to assure Trade Subcontractor work conforms to the requirements of Transbay Transit Center Contract Documents and this Webcor/Obayashi JV CQC Plan.

Webcor/Obayashi JV will direct Trade Subcontractors to execute their CQC plans and maintain compliance with all project requirements as described in the Contract Documents. Contracts with Trade Subcontractors and Sub-tier Subcontractors shall include a requirement to comply with the provisions of this Plan, and to prepare and execute QC plans appropriate for their scope of work. The Trade Subcontractors, Sub-tier Subcontractors are authorized to manage their own QC Plans. All subcontractors, QC Managers, field personnel assigned to that work at the site shall conform to contract including the requirements described in this CQC Plan and their trade package specific QC Plans.

2.2 CQC OVERVIEW

Quality Control Written procedures and instructions have been developed for activities affecting quality in design, procurement, manufacturing, and construction as applicable to the work performed. Procedures and instructions have been developed for control of processes including inspection, testing, nondestructive examination, disposition of nonconforming product, corrective action, maintenance of quality records, quality audits, and training.

The procedures contain a statement of the purpose and scope, and contain any references to appropriate codes, standards, or specifications. In developing the quality approved and futrue procedures, consideration has be given to identifying and acquiring any inspection equipment, skills, or special quality processes needed to ensure quality performance. Inspection and testing techniques shall be kept up-to-date. Where new techniques are being used for construction or manufacturing, adequate time shall be allowed to develop appropriate quality procedures for the new techniques. The procedures and instructions shall contain formats for the quality records needed to ensure that the procedures and instructions are followed and documentation requirements are understood.

By providing these guideline to Trade Subcontractors and then meeting with them, along with other key members of the project team, W/OJV will assure that each of the subcontractors, whether large or small would be able to develop a CQC Quality plan that satisfies the requirements of the FTA Guidelines, and consistent from plan to plan.

Offsite Quality Control for Bradken Steel Nodes Casting, Skanska Structural Steel Fabrications, Skylight Glass and other offsite systems fabrication and equipment will be inspected in the shop for quality in coordination with special inspections by our trade subcontractors. This will cover all offsite construction operations as required per contract. This is in addition to Quality Assurance by Turner QA team as TJPA Representative.

2.3 THREE PHASE QUALITY CONTROL SYSTEM

The three phase of control for the Contractor's quality control is the means by which W/OJV, including Trade Subcontractors and supplier ensure that the construction complies with the requirements of the Contract:

PREPARATORY PHASE:

This phase is accomplished prior to beginning work on each definable feature of work, after all required contract submittals, documents, and materials are approved and accepted and after copies are at the work site. This meeting includes:

1. A review of applicable specifications, reference codes, and standards. The Trade Subcontractor QC Manager shall make available during the preparatory inspection a copy of those sections of referenced codes and standards applicable to that portion of the Work to be accomplished in the field. The Trade Subcontractor QC Manager shall maintain and make available in the field for use by TJPA Representative until final acceptance of the Work.
2. Review of the Contract drawings and approved shop drawings (approved as noted shop drawings and record shop drawings) that incorporate all CD details.
3. Identify any submittals that have not been approved.
4. Check to assure that all materials and/or equipment have been pre-tested (if required per specification), submitted, and approved.
5. Review of provisions that have been made to provide required control inspection and testing.
6. Examination of the work area to assure that all required preliminary work has been completed and is in compliance with the Contract.

7. Examination of required materials, equipment, and sample work to assure that they are on hand, conform to approved shop drawings or submitted data, and are properly stored.
8. Review of the appropriate activity hazard analysis to assure environmental requirements are met.
9. Discussion of procedures for controlling quality of the work including repetitive deficiencies. Document construction tolerances and workmanship standards for that feature of work.
10. Check to ensure that the portion of the CQC Plan for the work to be performed has been accepted by the TJPA Representative.
11. Discussion of the initial control phase, set the date, location and scope of activities.
12. Clarification of details may be added as required after work has commenced in the form of RFI's.
13. Review Status of any outstanding RFI's

The TJPA representative shall be notified at least 48 hours in advance of beginning the preparatory control phase. Include a meeting conducted by the CQC System Manager and attended by the Trade Subcontractor's CQC Manager, other CQC personnel (as applicable), and the superintendent responsible for the definable feature of work. CQC System Manager shall document the results of the preparatory phase actions by separate minutes and attach the minutes to the weekly CQC report. CQC System Manager shall instruct applicable workers as to the acceptable level of workmanship required in order to meet Contract requirements (see the "Preparatory Phase Checklist Form" in this section; Tab/Element 7).

INITIAL PHASE:

This phase is accomplished at the beginning of each Definable Feature of Work (at least 1-2 days prior to start of work). This phase includes:

1. Reviewing the minutes of the preparatory meeting and ensuring any open issues have been resolved
2. Verifying the adequacy of controls to ensure full contract compliance, inspection and testing.

3. Establishing level of workmanship and verify that it meets minimum acceptable workmanship standards. Compare with required sample panels as appropriate.
4. Resolving all differences.

The CQC System Manager shall prepare separate minutes of this phase and attach the minutes to the daily CQC report. The TJPA shall be notified at least 72 hours in advance of beginning the initial phase. The initial phase shall be repeated for each new definable feature of work (see the "Initial Phase Checklist Form" in this section; Tab/Element 7). .

FOLLOW-UP PHASE:

CQC System Manager and the Subcontractor QC manager shall perform daily checks to assure that control activities, including control testing, are providing continued compliance with contract requirements until completion of the particular feature of work. Record the checks in the CQC documentation, and file regularly in the appropriate DFOW file folder. Conduct final follow-up checks and correct all deficiencies prior to the start of additional features of work that may be affected by the deficient work. New work shall not be built upon or conceal nonconforming work. Use FCR's on BIM 360 immediately to document deficiencies with materials, installation defects or un-approved shop drawings or products.

2.4 TRADE SUBCONTRACTORS QUALITY CONTROL PLAN

After contract award and prior to beginning construction activities each Trade Subcontractor will submit (per specification section 01 13 00 Submittals, paragraph 1.4) to the Webcor/Obayashi Joint Venture CQC Manager their project specific quality control plan for review and approval. Each Trade Subcontractor will designate and provide a project specific Trade Subcontractor Quality Control Manager who reports to the W/OJV CQC Manager and who's primary responsibility will be to implement and manage the Trade Subcontractor's quality control plan and certify theTrade Subcontractor's compliance with the Webcor/Obayashi Joint Venture Quality Control Plan and all quality control requirements contained in the project documents including specification section 01 14 00 Quality Control. The Trade Subcontractors CQC program will be reviewed for compliance to the Contract Documents. In addition to the requirements contained in other sections of this Plan, the Trade Contractors Quality Control Program will include:

- QC Organization chart.
- Procedures for fabrication and installation.
- Procedures for planning and verifying compliance and controlling quality of the work (including checklist forms).
- Procedures for layout verification.

- Coordination with related contractors.
- List of specified tolerances and workmanship standards for each DFOW.

- Daily CQC Reports.
- Program for identifying and correcting defective work.
- Inspection, test and acceptance procedures when specified in the Technical Specifications to be part of the Trade Subcontractors scope
- A quality control Plan that addressed the Federal Transit Administration (FTA Quality Control Guidelines (ref: Transbay Transit Center Quality Management System Manual)

2.5 WEBCOR/OBAYASHI JV CQC MANAGER DUTIES AND RESPONSIBILITIES

The CQC Manager, or his approved alternate, oversees the overall implementation of the Webcor /Obayashi JV Quality Control Plan. The CQC manager, will be independent of the "production organization". The CQC Manager will:

- During performance of the Work will have complete authority to take any action necessary to ensure conformance with the requirements of the Contract Documents. The Webcor/Obayashi CQC Manager or Alternate CQC Manager will have a physical presence on site when work is in progress. In the event of the CQC Managers absence, the Alternate CQC Manager must be present and will have the same authority as the CQC Manager.
- Review for conformance and completeness and approve the Trade Subcontractors QC Plans prior to submittal to the TJPA for acceptance.
- Manage the development and maintenance of the list of Definable Features of Work.
- Meet with the TJPA representative at the Coordination Meeting (Meeting of Mutual Understanding) for each Trade Work Package.
- Provide WOJV management with monthly CQC updates.
- Ensure and document Trade Subcontractor's application of Three Phases of Control for each Definable Feature of Work.
- Conduct the Preparatory, Initial and Follow-up phase activity meetings.
- Stop and document work that does not comply with requirements of the Contract Documents, and direct removal and replacement of any defective work.
- Ensure and document that all Trade Subcontractor Work performed, on and off the construction site, conforms to requirements of the Contract Documents. Ensure and document that all materials and equipment comply with the

requirements of the Contract Documents. Report any deficiencies and corrective action planned and taken in BIM 360 Systems

- Ensure that all Trade Subcontractors CQC Plans are in conformance with the Webcor /Obayashi JV CQC plan and with the requirements of the Contract Documents.
- Review for conformance, completeness and clarity that all Trade Subcontractors certify their submittals for conformance with the requirements of the Contract Documents.
- Ensure W/O staff document review and approval of submittals prior to transmission to the CMO.
- Review and approve Webcor/Obayashi JV Daily Quality Control reports
- Prepare and submit Weekly Contractor Quality Control reports
- Ensure that all Trade Subcontractors prepare, complete and submit Daily Quality Control reports.
- Maintain copies of all quality control and quality program documents in Constructware.
- Support and facilitate the Audit Process per the QMS and FTA Element 14 (Quality Audits).
- Conduct internal audits
- Ensure that RUP Contractors use preplanning sheets and work plans for improved Quality Control, improved record keeping for M&TE (Measuring and Testing Equipment) and calibration data.
- W/OJV CQC Manager will ensure that CQC team provides a written plan and schedule for resolution of non-conforming work.
- W/OJV CQC team provides a weekly summary and review of CQC activities at the Quality Meeting.

2.6 WEBCOR/OBAYASHI JV ALTERNATE CQC MANAGER DUTIES AND RESPONSIBILITIES

The Alternate CQC Manager performs all duties of the CQC Manager when the CQC Manager is not on-site. The Alternate CQC manager, when performing the duties of the CQC Manager, is independent of the “production organization”. The Alternate CQC Manager’s responsibilities are the same as the CQC Managers

2.7 TRADE SUBCONTRACTORS QC MANAGER DUTIES/RESPONSIBILITIES:

The Trade Subcontractor QC Manager reports to the Webcor /Obayashi JV CQC Manager and oversees the trade specific implementation of the quality control program and whose primary responsibility will be to implement the Trade

Subcontractor's quality control plan. The Trade Subcontractor QC manager will certify that the Trade Subcontractor's work is in compliance with the Contract Documents and complies with the Webcor/Obayashi Joint Venture Quality Control Plan and all quality control requirements contained in the Contract Documents, including specification section 01 14 00 Quality Control. The Trade Subcontractor QC Manager will:

- Manage the Trade Subcontractors Quality Control Program both onsite and offsite.
- Submit a QC Plan that meets the requirements of the Webcor/Obayashi CQC Plan, Specification 01 14 00 Quality Control and the TTC Quality Management System Manual and FTA 15 Essential Elements.
- The Trade Subcontractor QC Manager or alternate QC Manager will have a physical presence on site when work is in progress.
- Designate a qualified Alternate Trade Subcontractor QC Manager to serve in the event of the Trade Subcontractor QC Manager's absence.
- During performance of the Work, will have complete authority to take any action necessary to ensure conformance with the requirements of the Contract Documents.
- Submit daily Quality Control Reports to the Webcor/Obayashi JV CQC Manager.
- Submit Preparatory and Initial Phase Checklists, along with Follow-up Phase documentation for each DFOW to the Webcor/Obayashi JV CQC Manager for review and approval.
- Establish written procedures for Trade Subcontractor document control, submittal management and material procurement.
- Maintain review for conformance and submit copies of all quality control documentation, certifications, and materials delivery receipts as required in the Contract Documents.
- Attend the Coordination meetings (Meeting of Mutual Understanding).
- Manage the Three Phases of Control process for each DFOW, including attending the Preparatory, Initial and Follow-up phase activity meetings for each of the trade subcontractors DFOW.
- Immediately stop any work, for which they are responsible, that does not comply with requirements of the Contract Documents, and direct removal and replacement of any defective work.
- Conduct daily quality inspections of Work performed prior to request for agency or special inspections to ensure compliance with requirements of the Contract Documents.

- Ensure that all Work performed, on and off the construction site, and all materials and equipment conform to requirements of the Contract Documents.

  Report nonconformances and corrective action planned and taken in BIM 360 Systems.

- Remove any person from the Project that consistently fails to perform Work properly.
- Ensure that the Trade Subcontractors submittals conform to the requirements of the Contract Documents.

2.8 QC SPECIALIST RESPONSIBILITIES

In addition to CQC personnel specified elsewhere in the Contract, Contractor shall provide as part of the CQC organization, QC specialists that are specialized personnel to implement the CQC Plan. The QC specialist will:

- Be responsible to the CQC System Manager
- Be physically present at the construction site during work on their areas of responsibility, and have the necessary education and experience.
- These induviduals may perform other duties but must be allowed sufficient time to perform their assigned quality control duties as described in the CQC plan.
- Stop and document work that does not comply with requirement of the Contract documents, and direct removal and replacement of any defective work.

CONTRACTOR QUALITY CONTROL MANAGER APPOINTMENT LETTER

To: Adib Sassine
Quality Control Manager

From: Jes Pederson
President / CEO Webcor/Obayashi Joint Venture

Date: October 24, 2013

Subject: Appointment of Quality Control Manager for Transbay Project

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Please be advised that you are hereby appointed as Quality Control Manager for the Transbay Transit Center Project. Your responsibilities include managing and implementing the Webcor/Obayashi Joint Venture Project Quality Control Plan.

You are assigned the following responsibilities:

- Implementing provisions of the Webcor/Obayashi JV Quality Control Plan as it pertains to the contract Documents.
- Assuring that the Quality Control Plan is established and implemented by persons doing work that impacts quality.
- Assuring that the Quality Control Plan complies to the FTA Guidelines, TJPA Quality Management System and Contract requirements.
- Acting as W/O JV liaison with parties outside of the company on matters relating to quality.
- Reporting to Senior Management on the performance of the Quality Control Plan, including needed improvements.
- Review for conformance, completeness and clarity of the quality control documents.
- Review for conformance, completeness and clarity of quality control records.
- Review for conformance, completeness and clarity of quality related contract submittals.
- Review for conformance, completeness and clarity of project inspection and QC activities.
- Review for conformance, completeness and clarity of subcontractors quality control programs.
- Reporting to the TJPA representative on matters pertaining to quality.
- Reviewing for conformance, completeness, clarity and distributing subcontract QC reports.

I grant you authority for carrying out the above responsibilities including:

- Stopping Work when continuing work may adversely affect quality or cover up a defect.
- To direct the removal and replacement of a nonconforming work or material by any subcontractor or supplier.

President / CEO signature and date: 10/24/13

ALTERNATE QUALITY CONTROL MANAGER APPOINTMENT LETTER

To: Duncan Sinclair
Alternate Quality Control Manager

From: Jes Pederson
President / CEO Webcor/Obayashi Joint Venture

Date: October 24, 2013

Subject: Appointment of Alternate Quality Control Manager for Transbay Project

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Please be advised that you are hereby appointed as Quality Control Manager for the Transbay Transit Center Project. Your responsibilities include managing and implementing the Webcor/Obayashi Joint Venture Project Quality Control Plan.

You are assigned the following responsibilities:

- Implementing provisions of the Webcor/Obayashi JV Quality Control Plan as it pertains to the contract Documents.
- Assuring that the Quality Control Plan is established and implemented by persons doing work that impacts quality.
- Assuring that the Quality Control Plan complies to the FTA Guideline, TJPA Quality Management System and Contract requirements.
- Acting as W/O JV liaison with parties outside of the company on matters relating to quality.
- Reporting to Senior Management on the performance of the Quality Control Plan, including needed improvements.
- Review for conformance, completeness and clarity of the QC documents with contract documents and approval.
- Review for conformance, completeness and clarity of QC records with contract documents and approval.
- Review for conformance, completeness and clarity of quality related contract submittals with contract documents and approval.
- Review for conformance, completeness and clarity of project inspection and QC activities with contract documents and approval.
- Review for conformance, completeness and clarity of subcontractors quality control programs.
- Reporting to the TJPA representative on matters pertaining to quality with contract documents and approval.
- Reviewing for conformance, completeness, clarity and distributing subcontract QC reports and contract documents an approval.

I grant you authority for carrying out the above responsibilities including:

- Stopping Work when continuing work may adversely affect quality or cover up a defect.
- To direct the removal or replacement of and nonconforming work or material by any subcontractor or supplier.

President / CEO signature and date: 10/24/13

ADIB SASSINE, AIA CA RA

PRECON AND CONSTRUCTION QUALITY CONTROL MANAGER

Design and Construction Experience: 35 years (1978)

Mr. Sassine is a California licensed architect and has over 35 years of strong experience in diverse large project types, including Construction Quality Control, Pre-construction and Construction Management. His extensive experience includes over 25 years of experience on new and renovated health care facilities primarily OSHPD projects; and balance of experience includes; education, schools, office buildings, public buildings, large airports, hotels and restoration of historic buildings.

RELEVANT EXPERIENCE

Building Envelope Sr. Consultant and Architect – Allana Buick & Bers (July 2011 to 7.2013)

Architect and Quality Control Manager on several projects including the following:
New Stanford Hospital over $1 billion; Performed peer review of the entire building envelope over 28 systems. (Rafael Vineolli)
9th and Broadway 17 story tower in San Diego; Design and construction quality control of the building envelope including several green roof areas. (Thornton Tomasetti)
Palo Alto Mitchell Park Library including several systems and green roof; Design of all building envelope and performed construction QC. (Group 4)
San Jose University Student Center, LA Harbor Science Building Design and construction monitoring of exterior envelope composite mock-up testing and similar other including UC Berkeley restorations.
UCSF Parnassus MOB and Hospital forensic work and remediation of two major buildings.
San Mateo Medical Center MOB Exterior skin upgrade design.
And several other projects.

Healthcare

Acute Care Mock-up

Santa Clara Valley Medical Center SCVMC, San Jose, CA – Turner Construction Co (2007 to 2011)

OSHPD – Construction Quality Control Manager on the Bed Building One project which includes the following:

1. A 6 story with Basement and Penthouse nursing tower replacement over 350,000 sf, with 168 beds primarily ICU and Acute Care Units and Rehab Center utilizing SidePlate moment frame system and phased incremental approvals.
2. A 1500 stall Parking Garage with 850 KWp Photovoltaic tracking system over the new garage and retrofit existing Garage for the added solar panel system
3. Design-Build Central Plant upgrade with Site Utilities Loop to include 2-1000 tons absorption chillers, two cooling towers and 2-2000KW generators and two boilers
4. And the Design-Build of Renova Drive intersection relocation
5. Make-ready projects to relocate all underground utilities from the site while the hospital is in operation.

As a QC Manager, Adib is responsible for the construction quality control as well as assisting Purchasing to writing scopes, for all bid packages and reviewing contracts. Some of the quality control responsibilities are to develop the quality control plan and its implementation, pre-inspection of the work before submitting inspection requests by the IOR, reviewing all RFI's, reviewing schedule, reviewing shops and certifying them for compliance with the permitted contract documents, certifying pay applications and certifying milestone completion dates. Adib was involved in providing Pre-construction services such as Sr. Project analyst to provide planning, coordination with all enabling and make-ready projects, scheduling, progress plan check, constructability reviews, report writing and evaluations, phasing plans, cost control and site logistics of the Parking Garage and Solar Power design-build projects and other related hospital projects from Cath Lab to MRI renovation on campus.

CHW St Joseph Women and Children Hospital Stockton, CA ($65M) - Turner

OSHPD – CM at Risk – Pre-construction

Addition of 100,000 sf of 78 beds hospital building with elevated bridge connector and underground parking Garage. Adib provided Constructability Reviews, Site Logistics and Cost Control.

Mills-Peninsula Medical Center Hospital, Burlingame, CA ($400M+) - Turner

OSHPD – CM at Risk – Pre-construction up to NTP

Addition of 440,000 sf six (6) level Hospital designed with base isolation and damper structural systems. Adib provided constructability reviews and purchasing services to include bidding multiple packages, writing scopes and developing bid spread sheets and reviewing all subcontracts for fast-track incremental approvals while project was being reviewed by OSHPD.

Historic Laguna Honda Hospital Seismic Upgrade, San Francisco, CA ($50M) - Turner

OSHPD – CM at Risk – Pre-construction PM

ADIB SASSINE, SR. Project Manager and QC Manager

Adib Managed the project through bidding to include Constructability reviews, phasing, scheduling and budgeting for seismic retrofit of Wing H of the original historic Hospital project and coordination with the new Laguna Honda hospital replacement project.

John Muir Medical Center Hospital Expansion, Walnut Creek, CA ($230M) - Turner
OSHPD – Pre-con services.
Addition of 429,000 sf 5-story tower and remodel of existing regional Trauma hospital including helipad and new Central Plant. Remodel consists of new Emergency Department and phased construction. Provided constructability reviews, phasing plans, cost controls and site logistics.

Lucille Packard Children Hospital Expansion, Palo Alto, CA ($70M) - Turner
OSHPD – Lump Sum – Constructability review during early construction phase.

CPMC Cathedral Hill Hospital Preconstruction, San Francisco, CA ($850 M) - Turner
OSHPD – Delivery Method CM at Risk – Adib provided comprehensive Constructability and Estimate Reviews in the latter part of Turner involvement on the project.
Ground up 550 beds for adults and women/children and 2,745,000 SF Women's and Children's Hospital in downtown San Francisco consisting of 19 stories above ground and 6 stories underground with base isolation. This project included a medical office building design-built with a connecting tunnel under Van Ness.

Sr. PM and Healhcare Business Development – Hathaway Dinwiddie (2004-05)
OSHPD – CM at Risk – during Schematics and DD
Responsible for managing small healthcare projects for Stanford ED and UC Clinical Lab. Adib was responsible to provide BD at Hathaway Dinwiddie. Also Adib managed and bid window replacement on 20 story high rise in Nob Hill in SF and performed cursory constructability review for the Millenium condo tower in SF during early design phase.

Sharp Memorial Hospital, San Diego, CA ($185M) – Gilbane (2000-03)
OSHPD – Project Executive - CM at Risk – during Schematics and DD
This multi-phased project includes the construction of a new six and seven-story, 302 bed patient towers of 315,000 s.f. that include 158 Acute/IMCU beds, 24 SICU/CVICU beds, 64 AC/IMCU beds, 24 CCU/MICU beds, 32 AC/IMCU-Ortho beds and shell space for 32 beds for a total of 334 beds; 14 Operating Rooms and Surgery Suite; New Emergency Department, new Hospital Entrance and Lobby; and administrative spaces. In addition to the new hospital addition, and as part of the SB1953, the Critical Care Areas within the existing hospital will be relocated to the new HMP Addition. This project

also includes the Central Plant Expansion to accommodate new hospital replacement, Coordination with other projects on site such as an Ambulatory Care Center and OSHPD 600 stall parking Garage with Helipad.

UC Davis Medical Center, Sacramento, CA ($260M) - Gilbane

OSHPD – Project Executive Agency CM - This Surgery and Emergency Services Pavilion addition at the UC Davis Medical Center. (During Schematics and DD)
This pavilion is a major addition to the Main Hospital building at UC Davis Medical Center. The project under construction will include approximately 420,000 s.f. of building construction and ten acres of site development. It includes Emergency Department, Dietary Department, Radiology, Cardiology and a 24-room Operating Room suite.

Kaiser Walnut Creek Hospital, Walnut Creek, CA – BFH (1989-96)

OSHPD – Design and Construction Administration - New multi-phase, three-story with full basement, 123 bed Hospital addition and replacement, 10 Operating Rooms, Surgery Suite, MRI Suite, Central Sterile, Clinical Lab, 4 C-Section Rooms, 24 LDR Rooms, ICN and other ancillary spaces. The Hospital was built while maintaining the entire existing hospital in operation on a 28-acre site with covered running creek and heritage Oak trees over 200 years old. Existing building had to be demolished in sections, and existing tower was later renovated and connected to the new Hospital.

Kaiser Walnut Creek Central Plant Expansion, Walnut Creek, *CA – BFH*

OSHPD – Design and CA-This Central Plant Expansion, Medical Gas Farm and Emergency Generator Plant. Project involved 3- 350-ton chillers, switchgear room, boiler room and 3-750KW Generators. Enclosure was adjacent to existing Parking garage with utilities running over creek lid in a high density site.

Kaiser Vallejo Medical Center MOB, Vallejo, CA *($50M)* – SOM (1986-89)

Design and CA - This two-story, 166,645 s.f. Medical Office Building with courtyards to accommodate 123 providers on a 38-acre site with on-site parking built with a connecting site utility loop to CUP.

Kaiser Vallejo Medical Center Central Utility Plant, Vallejo, CA - SOM

OSHPD – Design and CA - This Utility tunnel was added to connect to new Central Plant Expansion. Generator Plant

Kaiser San Rafael Medical Center MOB Renovations, San Rafael, CA *($12M)* - BFH

Design and CA - This 8,000 s.f. project, including OR, ER renovation, pharmacy and radiology renovations over 4-year plan.

Coalinga Community Hospital, Coalinga, CA (LHR)

OSHPD – Design and CA - This 56,000 s.f. project involving 35-bed hospital and 56-bed skilled nursing facility replacements to earthquake-damaged facility. Site is an approximately 12-acre parcel on a new development area.

Office Building

State Office Building at Butterfield Way, Sacramento, CA ($171.5M) - Gilbane

Project Executive - Agency CM - Franchise Tax Board Campus addition and renovation project for the State of California, Department of General Services, and Project Management Branch on this project.

This project involves 1 Million SF of new construction and 843,000 s.f. of renovation on 93 acre site. It is located in Sacramento, California, and consists of phased construction with separate contracts for Sitework, a Central Utility Plant ($25M), a Warehouse, four Building Office complex, and a Town Center. This project was designed to be a LEED certified project.

Wells Fargo Card Division Relocation Center, Concord, CA - BFH

Program Manager and Construction Administrator
Fast-track, 265,000 SF Data Center, with 100% access flooring office space and high security project completed without a single change order for the tenant improvement.

Office and Commercial Historic/Seismic Upgrade

Oakland Rotunda Seismic Upgrade, Oakland, CA ($32M) - AD

Design and CA - This 265,000 s.f. historic building over 100 year old with elliptical dome and seven-story elliptical atrium sustained serious damage during Loma Prieta earthquake in 1989. The brick and steel building had to be retrofitted seismically, including replacing mechanical, plumbing, and electrical systems including provided complete tenant improvements as part of a design-build team. The building has multiple commercial tenants on the first floor and multiple office tenants on the upper floors.

Airports

SFO International Airport, San Francisco, CA ($830M) – Skidmore Owings and Merrill – (1996-98)

Sr. Technical coordinator and Construction Administration as Owner's Rep - Over 1.8 million s.f. of base isolation SFO International Terminal Addition, two five-story office buildings, and light rail, BART station additions and elevated roadway fast-track projects, including coordination with adjacent Boarding Areas A and G. This included VE implementation of over $35 million while project being bid on a fast track delivery model. Adib was also responsible to coordinate with Boarding Areas A and G of two different architectural firms and elevated roadways for total construction cost of$2.3 billion.

Hotels/Convention Centers

Marriott Hotel Tower, Santa Clara, CA ($28M) - *JYA*

Design - This 22-story tower consists of new tower with banquet facilities to accommodate 1,500 persons, a restaurant and conference center. Entire tower was designed as reinforced concrete structure with post tension slab and pre-fabricated EIFS system as the exterior skin.

Original Moscone Convention Center, San Francisco, CA – JA/HOK (1980-83)

CA assistance for the tub design by HOK/IM Pei at 40 feet below Howard and provided punch list for the entire building.

Other Education Facilities

Foothill and De Anza Community Colleges in Los Altos and Cupertino, CA ($275M) - Gilbane

Agency CM - Measure "E" Bond improvements for FHDA. This program consists of new building and

existing building renovations over 60 major projects ranging from $1Million to $33 Million.

University of California at Berkeley, Berkeley, CA - JY
Design - Renovation projects, including Julia Morgan's Hearst Gymnasium, Manville Hall, and Administration renovations.

EDUCATION/LICENSE

Bachelor of Science, Architecture, Cogswell College, San Clara, (formerly in SF) CA
California Licensed Architect
UC Berkeley Extension Art and architecture Courses
Construction Management Certificate - Brown University thru Gilbane

CERTIFICATION

Occupational Health and Safety Administration (OSHA) 30-hour training

PROFESSIONAL AFFILIATIONS

American Institute of Architects (AIA)

OTHER LANGUAGES

Arabic and French

REFERENCES

By Request

Duncan J Sinclair
Quality Alternate

EDUCATION AND BACKGROUND

As the Contractor's Alternate Quality Manager when the W/O JV Quality Manager is not on site, Mr. Sinclair will have the primary responsibility of managing the Contractors Quality Management System. His Duties include ensuring Trade Subcontractor compliance with the projects quality requirements via implementation of specified process controls and acting as the day to day interface between project production and quality management to assure the work conforms to the project requirements. He is responsible for documenting quality compliance and providing senior management with periodic quality reports.

Mr. Sinclair graduated with a BS in Mechanical Engineering from Washington State University in Pullman, Washingtonin 1971. Mr. Sinclair alson earned a Masters in Business Administration from City University of Seattle in 1982. His 30 years of contruction management and quality managaement experience includes implementing project-specific quality mangement programs for a variety of construction projects.

RELEVANT EXPERIENCE

Transbay Transit Center *San Francisco, CA*

Pre-Construction on Subcontractor Work Packages and analyze Commissioing Trade Specifications and coorelations to Commissioning Coordinator (CxC) Specification on the Transbay Transit Center Project. Public Works; 2011- present. Total Public Works Projects is 17 years.

Lawrence Livermore National Lab *Livermore, CA*

LLNL Building HVAC Controls and Electrical Smart Meters. Construction Superintendent for Johnson Controls, Inc. (JCI) to manage field operations installing Electrical Power and HVAC DDC Controls in selective buildings at the Lawrence Livermore National Labs (LLNL) under Contract with Nuclear National Security Agency (NNSA). Duncan managed electricians and HVAC Controls Techs and field verified completeness, assured quality program compliance, Safety Program adherence & housekeeping while performing electrical power meter installations and HVAC DDC modifications and tracking. Daily Work Permits were written by JCI and approved by LLNL. Duncan verified the Work Permit was implemented and notified the JCI QC & LLNL Inspectors to witness the final installation. Public Works; 2010-2011 - 1 year.

Lawrence Livermore National Lab Livermore, CA

Construction Manager for Jacobs Engineering Group assigned to National Ignition Facility Laser CM Team at Lawrence Livermore National Lab to manage various improvements including renovation of an adjacent 3 story office use for $5M lab support facility. Duncan generated all the required Work Permits that includes Safety precautions, specific installation instructions, & Quality management to tie-in MEP Systems to existing Configured Systems under Engineering Management Control. Duncan was responsible for Safety, Facility Access, and interfaced with project QC Inspectors to confirm compliance to Contract Drawings, & Specifications. Coordinated operations with Facility personnel. Public Works; 2009-2010 - 1 year.

Millennium Tower (301 Mission) ***San Francisco, CA***

This project is a high-end condominium/mixed-use project 60 stories tall. It also includes a 12 story condominium/amenity building connected by a 3-level Atrium/Podium. Mechanical, Electrical, Plumbing and Sprinkler (MEPS) Superintendent coordinating MEPS Subcontractors work and quality compliance, $80M Subcontracts. Monitored, updated and planned the Project schedule for 3 week projections. Reviewed Submittals to confirm compliance with Projects Specifications. Inspect all MEPS installations to insure Quality compliance to Specifications. Managed the RFI process to resolve conflicts in drawings or obtain clarifications. Duncan Coordinated Subs to obtain Temporary Certificate of Occupancy with SFPD. Enforce OSHA, Company Safety and Quality Program requirements. $348 million.

St. Regis Museum Tower ***San Francisco, CA***

A five-star, 42-story mixed-use hotel and condominium project with 269 luxury hotel rooms and 102 high-end condominiums.The project also incorporates the renovation of the existing 9-story historic Williams Building, built in 1907. The renovation included a seismic upgrade and the building will house the hotel's restaurant and kitchen as well as a portion of the African American Cultural Museum. MEPS Superintendent coordinating with $80M MEPS Subcontractors, Owners Rep's and project superintendents for Webcor Builders. Duncan monitored, updated and planned the Project schedule for 3 week projections. Reviewed Submittals and field inspected the MEPS installations for Quality compliance. Write RFI's to resolve conflicts in drawings or obtain clarifications. Duncan coordinated Subs to obtain TCO with City Officials. Enforce OSHA and Company Safety Program. $173 million.

Lawrence Livermore National Lab Livermore, CA

Zone Manager for the Laser Bay for a $5M contract for LLNL to install the major components used as the base equipment for the Laser Beams in the National Ignition Facility (NIF). Duncan was the Field Manager for the Subcontractor with 45 craft performing the installation. Duncan was responsible for Quality Control Management to assure exactness of tolerances and standards for welding and metal finishes, enforces Safety requirements during the installation process. Public Works; 1999-2000 - 1 year

Lawrence Livermore National Lab Livermore, CA

Field Area Manager for Jacobs' $185M self performs activities with Union craft to install the Laser Beam Enclosures. Duncan enforced all Safety Regulations, Personal Protective Equipment, Clean Construction Protocol, Project Labor Agreement, and schedule activities. Duncan was the primary field contact with LLNL personnel for schedule coordination, engineering RFI's, Quality Control, managing non-conformance reports, and safety incidents. Conducted daily coordination with Superintendents, Subcontractors, and the Client to control installation activities in each area and avoid craft conflicts to maintain schedule objectives. Public Works; 2000-2003 - 3 years.

San Francisco City Hall Renovation
San Francisco, CA

SF City Hall Seismic Retrofit & TI Modification-$200M, w/GC: Managed MEPS Subcontractors through design coordination, submittal review, sequential scheduling, Quality management, installation, and start-up. Duncan worked closely with TI Architect to incorporate new systems with existing and new architectural designs. Worked hand in hand with SF DBI by pre-inspecting installations and notifying the Inspectors when systems were ready. Public Works; 1995-1999 - 4 years.

Singapore US Embassy
Livermore, CA

US Fed Government Embassy at Singapore-$50M, w/GC; Stateside coordinator controlling mechanical and electrical vendor's submittal documentation for approval for Quality management, construction installation and systems operations. Write requisitions and submittal requirements for mechanical equipment for purchase orders. Resolve conflicts between overseas site and domestic vendors. Public Works; 1993-1995 - 2 years.

Sharks Hockey Arena
San Jose, CA

San Jose Sharks Ice Hockey Arena-$150M, w/CM; Directed mechanical & plumbing subcontractors to comply with the City DPW ICBO Code requirements with project specifications involving wet and dry HVAC and plumbing including seismic bracing systems. Duncan verified all installation met Contract Specifications & Drawings and equipment start-up and systems operational modes. Assisted SJ DPW on completion of ICBO Plumbing Code required pipe testing and clearances. Duncan had an active ICBO Plumbing Certification from 1988 to 1998. Public Works: 1992-1993 - 1 year.

US Postal Service
860 Main Street
San Francisco, CA

US Postal Service Lost Package Facility and the US Treasury Department. US Post Offices added HVAC & Fire Protection to floors that were modified from open rooms to partitioned offices. US Treasury Dept. upgraded office spaces, Computer Room and Automated check envelope wrapping machine. Duncan performed all Quality Control and code inspections for Fire Protection, plumbing, mechanical and HVAC Controls installations. Public Works: 1991-1992 - 1 year.

Convention Center
San Jose, CA

The San Jose Convention Center is the main convention center for the city of San Jose, California. It is located in close proximity to several others of San Jose's convention and cultural structures. The San Jose McEnery Convention Center provides more than 425,000 square feet of space for conventions and events. Its flexible configuration offers 143,000 square feet of divisible, column-free prime exhibit space, a large ballroom, up to 30 meeting rooms with up to 2,400 theater-style seats and banquet facilities for up to 5,000 persons. In addition, the Convention Center has 30-foot-high finished ceilings, 12 loading bays with drive-on access to the exhibit hall floors, recessed utility boxes with electricity, water and drainage capabilities complete audio-visual, sound and lighting services, cellular, standard and ISDN telephony services and fiber optic and copper cabling throughout the facility with DS-3 high-speed Internet access. As the plumbing and mechanical inspector for O'Brien-Kreitzberg Inc., Duncan inspected all plumbing & mechanical installations to insure project Quality, and code compliance in conjunction with the ICBO Plumbing City Inspector. Active in resolving RFI and Code issues with plumbing Inspector. Duncan had an active ICBO Plumbing Certification from 1988 to 1998. Public Works 1987-1990 - 3 years.

CERTIFICATIONS AND PROFESSIONAL MEMBERSHIPS

US Army Corps of Engineers/NAVFAC Quality Certified, 2012
OSHA 10 & 30 Hour Certified
American Society of Mechanical Engineers; Life Member

Professional Profile for Mario B. Saladana, Webcor/Obayashi Quality Control Specialist

Current Position

Mario B. Saladana serves as a Quality Control Specialist/Senior Superintendent.

Experience

Mario has 35 years of construction experience and 28 years where with Webcor.

Mario has extensive familiarity with construction codes and practices, overseeing subcontractors and with residential, hospitality, and concrete projects.

Mario is familiar with a wide variety of project types and delivery methods.

As a Quality Control Specialist/ Senior Superintendent, Mr. Saldana assumes responsibility for on-site activities including overall coordination and scheduling of subcontractors and self-performed labor, safety, and quality. He develops and manages the schedule to ensure on-time performance. Together with the project management staff, Mr. Saldana collaborates in design, estimating and constructability reviews. He manages subcontractor performance on-site.

Professional Certifications

USACE Construction Quality Management for Contractors Certificate Awarded Oct 2012

Attachments

USACE CQM Certificate

U.S. ARMY CORPS OF ENGINEERS

USACE LEARNING CENTER
HUNTSVILLE, ALABAMA

NAVFAC

CERTIFICATE

Mario Saldana

SW9-02-12-00496

has completed the Corps of Engineers and Naval Facility Engineering Command Training Course

CONSTRUCTION QUALITY MANAGEMENT FOR CONTRACTORS - #784

San Francisco, California	10/1/2012 -10/2/2012	SW9 - NAVFAC Southwest	Michael Haliburton PMP, PE
Location	Training Date(s)	Instructional District/ NAVFAC	CQM-C Manager
Kugan Panchadsaram	kugan@kugan.com	858-212-2941	
Facilitator/Instructor	Email	Telephone	Facilitator/Instructor Signature

THIS CERTIFICATE EXPIRES FIVE YEARS FROM DATE OF ISSUE

Director, USACE Learning Center

Professional Profile for Jose Verduzco
Webcor/Obayashi Quality Control Specialist

Current Position

Jose Verduzco serves as a Quality Control Specialist/Assistant Superintendent.

Experience

Jose has extensive familiarity with construction codes and practices.

Jose is familiar with most major construction methods.

As a Quality control Specialist/Assistant Superintendent, Mrs. Verduzco plans, schedules, coordinates, sequences, and monitors procurement and construction activities for field teams. He conducts field reviews to inspect and assure compliance to construction policies, procedures, and standards. He reviews drawings, specifications, and subcontractor submittals and ensures that field staff and subcontractors comply with required safety standards. In addition, Mrs. Verduzco prepares correspondences and reports, generates short interval schedules, and manages self-performed labor. He assumes responsibility for weekly LDR quantities and orders necessary materials and equipment.

Education

Jose holds a Bachelor of Science, Business Management in Commerce, Santa Clara University, Santa Clara, CA 2007

Professional Certifications

USACE Construction Quality Management for Contractors Certificate Awarded Oct 2012

Attachments

USACE CQM Certificate

U.S. ARMY CORPS OF ENGINEERS

USACE LEARNING CENTER
HUNTSVILLE, ALABAMA

NAVFAC

CERTIFICATE

Jose Verduzco

SW9-02-12-00502

has completed the Corps of Engineers and Naval Facility Engineering Command Training Course

CONSTRUCTION QUALITY MANAGEMENT FOR CONTRACTORS - #784

San Francisco, California	10/1/2012 -10/2/2012	SW9 - NAVFAC Southwest	Michael Haliburton PMP, PE
Location	Training Date(s)	Instructional District/ NAVFAC	COM-C Manager
Kugan Panchadsaram	kugan@kugan.com	858-212-2941	
Facilitator/Instructor	Email	Telephone	Facilitator/Instructor Signature

THIS CERTIFICATE EXPIRES FIVE YEARS FROM DATE OF ISSUE

Director, USACE Learning Center

Professional Profile for Brian Perez
Webcor/Obayashi Quality Control Specialist

Current Position

Brian Perez serves as a Quality Control Specialist/Assistant Superintendent.

Experience

Brian has extensive San Francisco Building experience.

Brian has been involved in several of Webcor's marquis projects

Brian is familiar with construction codes and practices.

As a Quality control Specialist/Assistant Superintendent, Mr. Perez plans, schedules, coordinates, sequences, and monitors procurement and construction activities for field teams. He conducts field reviews to inspect and assure compliance to construction policies, procedures, and standards. He reviews drawings, specifications, and subcontractor submittals and ensures that field staff and subcontractors comply with required safety standards. In addition, Mr. Perez prepares correspondences and reports, generates short interval schedules, and manages self-performed labor. He assumes responsibility for weekly LDR quantities and orders necessary materials and equipment.

Education

Brian holds an Associate of Science, Fire Science, Diablo Valley College, Pleasant Hill, CA 1998

Professional Certifications

USACE Construction Quality Management for Contractors Certificate Awarded Jan 2012

Attachments

USACE CQM Certificate

U.S. ARMY CORPS OF ENGINEERS

USACE LEARNING CENTER
HUNTSVILLE, ALABAMA

NAVFAC

CERTIFICATE

Brian Perez

SW9-02-12-00062

has completed the Corps of Engineers and Naval Facility Engineering Command Training Course

CONSTRUCTION QUALITY MANAGEMENT FOR CONTRACTORS - #784

Concord, California	January 26-27, 2012	SW9 - NAVFAC Southwest	Michael Haliburton PMP, PE
Location	Training Date(s)	Instructional District/ NAVFAC	COM-C Manager
Kugan Panchadsaram	kugan@kugan.com	858-212-2941	
Facilitator/Instructor	Email	Telephone	Facilitator/Instructor Signature

THIS CERTIFICATE EXPIRES FIVE YEARS FROM DATE OF ISSUE

Director, USACE Learning Center

Professional Profile for Jordan Smith
Webcor/Obayashi Quality Control Specialist

Current Position

Jordan Smith serves as a Quality Control Specialist/Assistant Superintendent.

Experience

Jordan has extensive San Francisco Building experience.

Jordan has been involved in several of Webcor's marquis projects

Jordan is familiar with construction codes and practices.

As a Quality control Specialist/Assistant Superintendent, Mrs. Jordan plans, schedules, coordinates, sequences, and monitors procurement and construction activities for field teams. He conducts field reviews to inspect and assure compliance to construction policies, procedures, and standards. He reviews drawings, specifications, and subcontractor submittals and ensures that field staff and subcontractors comply with required safety standards. In addition, Mrs. Jordan prepares correspondences and reports, generates short interval schedules, and manages self-performed labor. He assumes responsibility for weekly LDR quantities and orders necessary materials and equipment.

Education

Jordan holds a Bachelors of Science, Construction Management, Cal Poly University, Los Posits, CA 2008

Professional Certifications

USACE Construction Quality Management for Contractors Certificate Awarded July 2013

Attachments

USACE CQM Certificate

U.S. ARMY CORPS OF ENGINEERS

USACE LEARNING CENTER
HUNTSVILLE, ALABAMA

NAVFAC

CERTIFICATE

Jordan Smith

SW9-02-13-00319

has completed the Corps of Engineers and Naval Facility Engineering Command Training Course

CONSTRUCTION QUALITY MANAGEMENT FOR CONTRACTORS - #784

San Francisco, CA	July 10-11, 2013	SW9 - NAVFAC Southwest	Michael Haliburton PMP, PE
Location	Training Date(s)	Instructional District/ NAVFAC	CQM-C Manager

Kugan Panchadsaram	kugan@kugan.com	858-212-2941	
Facilitator/Instructor	Email	Telephone	Facilitator/Instructor Signature

Chief, USACE Learning Center

THIS CERTIFICATE EXPIRES FIVE YEARS FROM DATE OF ISSUE
CQM-C Recertification online course: https://www.myuln.net

2.10 TRADE SUBCONTRACTORS QUALITY CONTROL MEETINGS:

In addition to the Three Phase of Control Meetings, A Trade Subcontractor QC Meeting will be part of the Weekly Trade Subcontractors Meetings held by the Webcor/Obayashi JV Project Superintendent or Project Manager. W/OJV CQC Manager will review with the Trade Subcontractor QC Manager will review current QC issues as a segment of the weekly meeting; addressing the schedule, testing, inspection, re-work log, failed inspection status, short-term schedule of QC activities, project tests, submittal status, factory verification requirements, inspection results and any other QC issues relevant to the current activities.

2.11 DEFINITIONS:

- Project As-Built Drawings – All changes and modifications to the Contract work as required by site conditions and inspections in accordance with the requirements of Section 01 17 20.
- **Contractor -** Webcor/Obayashi Joint Venture ***(WOJV)***
- **Coordination Meeting (Meeting of Mutual Understanding) -** A meeting held after the pre-construction conference for each Trade Work Package and before start of construction. Contractor shall meet with the TJPA Representative and TJPA QA Manager and discuss the Contractor's quality control system as it relates to the work of the trade package. Submit the CQC Plan a minimum of 15 days prior to the coordination meeting. During the meeting, a mutual understanding of the system details must be developed, including the forms for recording the CQC operations, control activities, testing, administration of the system for both onsite and offsite work, and the interrelationship of Contractor's management and control with the TJPA Representative's quality assurance. Minutes of the meeting will be prepared by the TJPA Representative, signed by both the Contractor and the TJPA Representative and will become a part of the Contract file. There may be occasions when subsequent conferences will be called by either party to confirm mutual understandings and/or address deficiencies in the CQC system or procedures that may require corrective action by the Contractor.
- **Corrective Action Plan -** A plan of action to correct nonconforming work or practices. A written document submitted by the Trade Subcontractor detailing the Trade Contractor's approach to correct an item of work that fails to conform to the project requirements.
- **Corrective Action Request -** A written request from TJPA to develop a Corrective Action Plan for non-conforming work (TJPA form QA-09-01) that establishes a method for ensuring deficiencies in process or implementation

adversely affecting quality are identified, cause determined, and an action plan to prevent recurrence is documented.

- **CQC Field Specialist -** specialized personnel to implement the CQC Plan be responsible to the CQC System Manager, be physically present at the construction site during work on their areas of responsibility, and have the necessary education or experience. These individuals may perform other duties but must be allowed sufficient time to perform their assigned quality control duties as described in the CQC Plan.

- **CQC Manager** – The Webcor/Obayashi JV Manager who is responsible for managing the Contractor's CQC System.

- **CQC Manager's Monthly CQC Report -** A section of the Contractors monthly written report prepared and submitted by the CQC Manager which reports monthly CQC activities.

- **CQC Plan -** Webcor/Obayashi JV written quality management plan that meets the requirements of the TJPA Program QMS The means by which Webcor/Obayashi JV (the Contractor/CQC) and its Trade Subcontractors (QC) ensure project quality.

- D**aily Contractor Quality Control Report -** A daily written report providing evidence that required quality control activities and tests have been performed including the work of Trade Subcontractors and Suppliers. These reports shall address deficient features and include a statement that equipment and materials incorporated in the work and workmanship comply with the Contract. These reports shall be within 5 working days after the date covered by the report. Reports shall be reviewed for completeness and accuracy, revised, signed and dated by the CQC System Manager. Reports shall be prepared by all subordinate quality control personnel and be included within the CQC System Manager's report.

- **Definable Feature of Work (DFOW)** - A definable feature of work is a task that is separate and distinct from other tasks, has separate control requirements, and may be identified by different trades or disciplines, or it may be work by the same trade in a different environment. Although each section of the Specifications may generally be considered as a definable feature of work, there are frequently more than one definable feature under a particular section. This list will be agreed upon during the coordination meeting and updated as more packages are awarded.

- **Federal Transit Administration (FTA) -** An administration within the U.S. Department of Transportation that provides stewardship to support a variety of locally planned, constructed, and operated public transportation systems throughout the United States.

- **Initial Phase Checklist –** A checklist prepared for each Definable Feature of Work (DFOW) in the Initial work Phase per 01 14 00 1.9.C.
- **Master Definable Feature of Work List -** The project list definable features of work for all trade subcontractors maintained by the Webcor/Obayashi JV CQC Manager.
- **Nonconformance Report –** A written report entered in BIM 360 Field Systems describing non-conforming Work.
- **Nonconforming Work** – Work that is unsatisfactory, faulty, defective, or deficient; Work that does not conform to the requirements of the Contract Documents; Work that does not meet the requirements of inspection, reference standards, tests, or approval referred to in the Contract Documents; or Work that has been damaged prior to Final Completion.

- **Phase 1: Preparatory Phase** – A controlled activity including a meeting conducted by the Webcor/Obayashi JV CQC Manager and ***with*** the Trade Subcontractors CQC Manager, the Subcontractor's Production Team, Trade Subcontractors Representatives, Inspectors, and TJPA representatives. This is the first of the three phases of control where all requirements of the work: drawings, specifications, submittals, RFI's, installation and coordination issues are reviewed before beginning any Definable Feature of Work (DFOW).

- **Phase 2: Initial** – A controlled activity including a meeting conducted by the Webcor/Obayashi JV CQC Manager with the Trade Subcontractors CQC Manager, the Subcontractor's Production Team, Trade Subcontractors Representatives, Inspectors, and TJPA representatives is held immediately prior to the start of the work. Using the meeting minutes from the Preparatory Phase meeting, this meeting transfers the information and requirements and agreements to the crews performing the work.

- **Phase 3: Follow-up Phase** Daily checks performed by the trade subcontractor QC an QC specialists and verified by QC System Manager to assure that control activities, including control testing, are providing compliance with contract requirements, until completion of that particular feature of work. Report the checks in the Daily QC report and upload to the DFOW records.

- **Preparatory Phase Checklist -** A checklist prepared by the CQC Manager for each Definable Feature of Work (DFOW) in the Preparatory Phase per 01 14 00 1.9.B.
- **Quality** - Conformance to the requirements established by the contract documents.
- **Quality Control Plan -** An approved written plan which includes plans, procedures, and organization necessary to produce an end product that complies with the Contract requirements. The plan covers all construction operations, both onsite and offsite, and shall be keyed to the proposed construction sequence
- **Quality Inspection** - An Inspection of the work performed as the work progresses or prior to calling for an Agency, Code or Special Inspection to confirm the work meets the requirements of the Contract Documents. Contractor shall verify all dimensions in the field and shall check all field conditions continuously during construction. Contractor shall inspect related and appurtenant work and report in writing to the TJPA Representative any conditions that will prevent proper completion of the Work in accordance with the requirements of the Contract.
- **Quality Management -–** Management of Quality Control and Quality Assurance activities instituted to achieve the quality levels established by the contract documents.
- **Quality Management System Manual -** Provides specific requirements for Program implementation based upon the Program Quality Policy and the FTA Quality Assurance and Quality Control Guidelines and is the guide for all members of the Program Management Team to deliver a project that meets the highest quality standards (reference: Transbay Transit Center QMSM, Introduction, page 1).
- **Submittal Log -** A written list indicating the status of all Submittals required by the Contract Documents, maintained by the Webcor/Obayashi Joint Venture production team.
- **Technical Specifications –** Divisions 01 through 33 of the project specifications.
- **Three Phases of Control** – The three meetings or actions that bring the Trade Subcontractors CQC Managers, Contractor's Production Team, Inspectors, TJPA representatives and/or field crews together to plan and implement project

quality: The three phases of control include: The Preparatory Phase, Initial Phase and Follow-up Phase.

- **TJPA Construction Management Oversight Manager: -** Turner Construction.
- **TJPA: -** Transbay Transit Center Joint Powers Authority.
- **Trade Subcontractor QC Manager** – The Trade Subcontractor employee who is responsible for managing the Trade Subcontractor's QC System, and reports to the Webcor/Obayashi JV CQC Manager.
- **Trade Subcontractor's QC Plan –** The Trade Subcontractors written quality control plan that meets the requirements of the TJPA Program QMS as appropriate for the Trade Subcontractors scope of work and is the means by which the Trade Subcontractors ensure project quality.
- **Trade Subcontractor's Definable Feature of Work List. -** The list of definable features of the work prepared by the Trade Subcontractors and submitted for review and approval to the Webcor/Obayashi JV CQC Manager
- **Trade Subcontractors Daily Quality Control Report -** The Trade Subcontractors Quality Manager's daily report that describes: the work completed, quality measures implemented, testing and inspections performed, rework items identified, and deliveries received and as-built drawings updated. (See Tab 12 "Forms" Trade Subcontractors Daily Quality Control Report).
- ***BIM 360*** **–** Field ***Web-Based Data*** Management Software for construction. BIM 360 Systems combines mobile technologies and BIM at the point of construction with reporting for management. BIM 360 Field Systems field management software uses a combination of technologies including the Internet, tablets, and email-capable phones. Licensed users must have a high-speed Internet connection in the office and are responsible for procuring the necessary hardware required for field staff to use the software. All Subcontractors are required to use the BIM 360 Field Systems software, as described in Specification Section 01 31 25 (The field management system will be used to manage CM/GC and Subcontractor quality control inspection and test processes including CM/GC and Subcontractor quality control inspection reports, CM/GC and subcontractor quality control inspection request, nonconforming conditions, punch list, and incomplete items list. The field management system will also be used to manage the commission process, documenting the completion of commissioning-related tests and the resolution of any identified deficiencies). Reporting features include Field Condition Reports, Inspection Requests, Nonconformance Reports and Punch lists.

DFOW Number	Baseline Schedule Activity ID	Specification Section	Required Submittals	Discription/Feature of Work	Preparatory Phase Date	Initial Phase Date	Follow Through Phase Date
BSE-001	SX-BB42160, SX-BB52100	TG03	TG0300-170 - Traffic Control TG0300-172 - Traffic Control Minna and Natoma TG0300-173 - Traffic Control Howard St. Gate TG0300-174 - Traffic Control Beale St. TG0300-177 - Traffic Control PG&E Phase II at Fremont St.	Traffic Control	5/11/2011	5/11/2011	Daily Report
BSE-002	SX-BB51900, SX-BB52000	TG03		Pre-Trench	3/30/2011	3/30/2011	Daily Report
BSE-003	SX-BB43140, SX-BB51600	TG03	TG0300-300 - Pile Removal - Trial Extraction Plan and Design Report	Test Pile Extraction	3/28/2011	3/29/2011	Daily Report
BSE-004	SX-BB51700, SX-BB51800	TG03	TG0300-310 - Pile Removal - Production Extraction Plan TG0300-311 - Existing Pile Extraction Documentation	Pile Extraction Production	4/11/2011	4/11/2011	Daily Report
BSE-005	SX-BB52400, SX-BB52500	TG03		Test CDSM Shoring Wall	5/2/2011	5/2/2011, 7/7/2011	Daily Report
BSE-006	SX-BB52600, SX-BB52700	TG03	TG0300-410 - Struct.l Steel - Part 1 TG0300-411 - Struct. Steel - Qualifications of Welders TG0300-412 - Struct. Steel - Mfc.'s Submittals (On-going) TG0300-413 - Struct. Steel - Contractor's QA Plan & Inspecor Certs TG0300-414 - Struct. Steel - Add'l Weld Procedures TG0300-415 - Struct. Steel - Add'l Welding Wire Product Data TG0300-416 - Struct. Steel - Add'l Weld Procedure - 30 Degree Welding TG0300-580 - Shoring Wall TG0300-581 - Shoring Wall - LEED Submittal TG0300-582 - BBI - Shoring Wall - CDSM Test Section No. 2 (Zone 1) TG0300-583 - CDSM Wall Corrective Action Plans TG0300-584 - CDSM Wall Beam #859 Alignment Corrective Action Plan TG0300-585 - CSSM Corrective Action - Resplicing Soldier Piles TG0300-590 - Shoring Wall - Record Doc.	CDSM Shoring Wall Production	6/1/2011	7/7/2011	Daily Report
BSE-007	SX-BB52800, SX-BB52900	TG03	TG0300-380 - Concrete - General Site Mix Design TG0300-381 - Concrete - CLSM Mix Design TG0300-382 - Concrete - CLSM Mix Designs - Buttress Shoring Wall & Pile Extraction TG0300-383 - Concrete - CLSM & Concrete Mix Designs - Buttress Shoring Work Pad TG0300-385 - Buttress Concrete - Trial Batch Program TG0300-386 - Buttress Concrete - Type 'B' Secondary Shaft Mix Design TG0300-387 - Buttress Concrete - Primary Shaft Buttress Mix Designs TG0300-388 - Buttress Concree - Primary Shaft Buttress Mix Designs - Add'l Mixes TG0300-389 - Buttress Concrete - Sechelt Coarse Aggregate TG0300-390 - Buttress Concrete - LEED TG0300-391 - Buttress Concrete - Primary Shaft Buttress Mix Designs - Add'l Mixes II TG0300-400 - Buttress Concrete - Closeout TG0300-600 - Drilled Shafts TG0300-601 - Drilled Shafts - Installation Plan - Supplemental Submittals TG0300-610 - Drilled Shafts - Close Out	Install Buttress Shafts	8/30/2011	9/13/2011	Daily Report
BSE-008	SX-BB53000, SX-BB53100	TG03	TG0300-320 - Rebar - Informational Submittals and buttress Shop Dwgs.	Buttress Rebar	8/1/2011	10/26/2011, 10/31/2011	Daily Report
BSE-009	UT-203801, UT-203901	TG03	TG0300-901 - CR T-017R1 PG&E Phase II Work at First St. TG0300-903 - PG&E Phase II Work at Fremont St.	PG&E Phase 2 Infrastructure	10/18/2011	10/19/2011	Daily Report
BSE-010	SX-BB10780, SX-BB10880	TG03	Complete	Demo Basement	11/9/2011	11/28/2011, 6/11/2011	Daily Report

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BSE-011	SX-BB17300, SX-BB53400	TG03	TG0300-490 - Geotechnical Instrumentation & Monitoring TG0300-491 - Internal Bracing Performance Monitoring TG0300-540 - Internal Bracing - Engineer & Peer Reviewer Information & Qualifications TG0300-541 - Internal Bracing - 50% Design Dwgs & Calculations TG0300-542 - Internal Bracing - 100% Design TG0300-543 - Internal Bracing - Installer Qualification, QC/Construction, & Inspection Plan TG0300-544 - Internal Bracing - Manufacturer's Certifications or Coupon Testing TG0300-545 - Internal Bracing - Preloading Procedures TG0300-546 - Internal Bracing - Qualifications of Welders TG0300-547 - Internal Bracing - Welding Procedures TG0300-548 - Internal Bracing - Welding Procedures (Shop Welding) TG0300-549 - Internal Bracing - Welding Procedures - Add'l TG0300-550 - Internal Bracing - Re-Bracing TG0300-551 - Internal Bracing Erection Dwgs.	Install Walers (Internal Bracing)	11/15/2011	1/13/2012	Daily Report
BSE-012	SX-BB10680, SX-BB52300	TG03	TG0300-420 - Mass Excavation - Qualified Person and Quality Plan TG0300-430 - Mass Exc. - Material Samples TG0300-440 - Mass Exc. - Material Backfill TG0300-450 - Mass Exc. - LEED TG0300-460 - Mass Exc. - Work Plan	Mass Excavation/Wood Pile Extraction	12/14/2011	1/13/2011, 6/15/2012	Daily Report
BSE-013	SX-BB17600, SX-BB53300	TG03	TG0300-280 - Access Trestle TG0300-281 - CLSM Mix for Pin Pile & Trestle Pile Installation TG0300-290 - Access Trestle - Preconstruction Photos	Install Pin Piles	1/25/2012	1/27/2012	Daily Report
BSE-014	SX-BB15200, SX-BB52200	TG03	TG0300-280 - Access Trestle TG0300-281 - CLSM Mix for Pin Pile & Trestle Pile Installation TG0300-290 - Access Trestle - Preconstruction Photos	Zone 1 Trestle (Combined with Pin Piles)	1/25/2012	2/8/2012	Daily Report
BSE-015	SX-BB10620, SX-BB53200	TG03	TG0300-520 - Dewatering TG0300-521 - Dewatering - Initial Installation Report TG0300-522 - Dewatering - System Pump Test TG0300-525 - Dewatering - System Pumping Data (Weekly) TG0300-527 - Dewatering - Pre-trenching Only	Dewatering	3/2/2012	3/7/2012	Daily Report
BSE-016		TG03		Struct Installation	3/7/2012	3/9/2012	Daily Report
BSE-017	SX-BB56312, SX-BB56412	TG03	TG0300-490 - Geotechnical Instrumentation & Monitoring TG0300-491 - Internal Bracing Performance Monitoring TG0300-540 - Internal Bracing - Engineer & Peer Reviewer Information & Qualifications TG0300-541 - Internal Bracing - 50% Design Dwgs & Calculations TG0300-542 - Internal Bracing - 100% Design TG0300-543 - Internal Bracing - Installer Qualification, QC/Construction, & Inspection Plan TG0300-544 - Internal Bracing - Manufacturer's Certifications or Coupon Testing TG0300-545 - Internal Bracing - Preloading Procedures TG0300-546 - Internal Bracing - Qualifications of Welders TG0300-547 - Internal Bracing - Welding Procedures TG0300-548 - Internal Bracing - Welding Procedures (Shop Welding) TG0300-549 - Internal Bracing - Welding Procedures - Add'l TG0300-550 - Internal Bracing - Re-Bracing TG0300-551 - Internal Bracing Erection Dwgs.	Trestle Struts / Supports (Part of Bracing)	3/15/2012	3/16/2012	Daily Report
BSE-018		TG03		Trestle Deck	4/20/2012	4/20/2012	Daily Report
BSE-018	SX-BB56912, SXBB75012	TG03	TG0300-281 - CLSM Mix for Pin Pile & Trestle Pile Installation TG0300-283 BSE Trestle Pile Material Product Data TG0300-290 - Access Trestle - Preconstruction Photos	Trestle Superstructure	4/20/2012	4/20/2012	Daily Report
BSE-019	SX-BB17100, SX-BB17700	TG03		Remove Struts			

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DFOW Number	Baseline Schedule Activity ID	Specification Section	Required Submittals	Discription/Feature of Work	Preparatory Phase Date	Initial Phase Date	Follow Through Phase Date
BSE-020	BG-BB12300, BG-BB42220	TG03	TG0300-620 - Micropiles TG0300-630 - Micropiles - Performance & Proof Test TG0300-640 - Micropiles - Grout Test	Test Micropiles	10/12/2012	12/6/2012	Daily Report
BSE-021	BG-BB42320, BG-BB42420	TG03	TG0300-620 - Micropiles - work Plan and Schedule, contractor Qualifications, Product Data, Equipment Descriptions, Installation Procedures, Working Drawings & calcs. TG0300-630 - Micropiles - Performance & Proof Test TG0300-640 - Micropiles - Grout Test	Micropile Production	10/12/2012	10/30/2012	Daily Report
BSE-022	SX-BB20800, SX-BB20900	TG03	TG0300-200 - Temp Bridges - Qualifications Data TG0300-201 - Temp Bridges - Struct. Dwgs & Calc TG0300-202 - Temp Bridges - Peer Review TG0300-203 - Temp Bridges - Utility Supports TG0300-204 - Temp Bridges - Traffic Plan - First, Fremon, Beale Streets TG0300-205 - Temp Bridges Geometrics - First, Fremont, Beale Streets TG0300-210 - Temp Bridges - Product Data TG0300-215 - Temp Bridges - Misc. Materials TG0300-220 - MUNI OCS Installation Plan Beale St. TG0300-230 - Temp Bridges - MUNI OCS Installation Plan First St. TG0300-240 - Temp Bridges - Welder AWS Cert. TG0300-244 - Temp Bridges - Steel Manufacturers Certificates or Coupon Tests TG0300-248 - Temp Bridges - Concrete Mix Designs TG0300-250 - Temp Bridges - Rebar Manufacturer Certificates TG0300-260 - Temp Bridges - Preconstruction Photos First St. TG0300-264 - Temp Bridges - Preconstruction Photos Fremont St. TG0300-268 - Temp Bridges - Preconstruction Photos Beale St.	First Street Bridge	4/4/2012	4/5/2013	Daily Report
BSE-023	SX-BB21000, SX-BB21100	TG03	TG0300-200 - Temp Bridges - Qualifications Data TG0300-201 - Temp Bridges - Struct. Dwgs & Calc TG0300-202 - Temp Bridges - Peer Review TG0300-203 - Temp Bridges - Utility Supports TG0300-204 - Temp Bridges - Traffic Plan - First, Fremon, Beale Streets TG0300-205 - Temp Bridges Geometrics - First, Fremont, Beale Streets TG0300-210 - Temp Bridges - Product Data TG0300-215 - Temp Bridges - Misc. Materials TG0300-220 - MUNI OCS Installation Plan Beale St. TG0300-230 - Temp Bridges - MUNI OCS Installation Plan First St. TG0300-240 - Temp Bridges - Welder AWS Cert. TG0300-244 - Temp Bridges - Steel Manufacturers Certificates or Coupon Tests TG0300-248 - Temp Bridges - Concrete Mix Designs TG0300-250 - Temp Bridges - Rebar Manufacturer Certificates TG0300-260 - Temp Bridges - Preconstruction Photos First St. TG0300-264 - Temp Bridges - Preconstruction Photos Fremont St. TG0300-268 - Temp Bridges - Preconstruction Photos Beale St.	First Street Bridge Utilities			Daily Report

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DFOW Number	Baseline Schedule Activity ID	Specification Section	Required Submittals	Discription/Feature of Work	Preparatory Phase Date	Initial Phase Date	Follow Through Phase Date
BSE-024	SX-BB48420, SX-BB48520	TG03	TG0300-200 - Temp Bridges - Qualifications Data TG0300-201 - Temp Bridges - Struct. Dwgs & Calc TG0300-202 - Temp Bridges - Peer Review TG0300-203 - Temp Bridges - Utility Supports TG0300-204 - Temp Bridges - Traffic Plan - First, Fremon, Beale Streets TG0300-205 - Temp Bridges Geometrics - First, Fremont, Beale Streets TG0300-210 - Temp Bridges - Product Data TG0300-215 - Temp Bridges - Misc. Materials TG0300-220 - MUNI OCS Installation Plan Beale St. TG0300-230 - Temp Bridges - MUNI OCS Installation Plan First St. TG0300-240 - Temp Bridges - Welder AWS Cert. TG0300-244 - Temp Bridges - Steel Manufacturers Certificates or Coupon Tests TG0300-248 - Temp Bridges - Concrete Mix Designs TG0300-250 - Temp Bridges - Rebar Manufacturer Certificates TG0300-260 - Temp Bridges - Preconstruction Photos First St. TG0300-264 - Temp Bridges - Preconstruction Photos Fremont St. TG0300-268 - Temp Bridges - Preconstruction Photos Beale St.	Fremont Street Bridge	4/4/2012	4/5/2012	Daily Report
BSE-025	SX-BB48620, SX-BB48720	TG03	TG0300-200 - Temp Bridges - Qualifications Data TG0300-201 - Temp Bridges - Struct. Dwgs & Calc TG0300-202 - Temp Bridges - Peer Review TG0300-203 - Temp Bridges - Utility Supports TG0300-204 - Temp Bridges - Traffic Plan - First, Fremon, Beale Streets TG0300-205 - Temp Bridges Geometrics - First, Fremont, Beale Streets TG0300-210 - Temp Bridges - Product Data TG0300-215 - Temp Bridges - Misc. Materials TG0300-220 - MUNI OCS Installation Plan Beale St. TG0300-230 - Temp Bridges - MUNI OCS Installation Plan First St. TG0300-240 - Temp Bridges - Welder AWS Cert. TG0300-244 - Temp Bridges - Steel Manufacturers Certificates or Coupon Tests TG0300-248 - Temp Bridges - Concrete Mix Designs TG0300-250 - Temp Bridges - Rebar Manufacturer Certificates TG0300-260 - Temp Bridges - Preconstruction Photos First St. TG0300-264 - Temp Bridges - Preconstruction Photos Fremont St. TG0300-268 - Temp Bridges - Preconstruction Photos Beale St.	Fremont Street Bridge Utilities			Daily Report
BSE-026	SX-BB48220, SX-BB43500	TG03	TG0300-200 - Temp Bridges - Qualifications Data TG0300-201 - Temp Bridges - Struct. Dwgs & Calc TG0300-202 - Temp Bridges - Peer Review TG0300-203 - Temp Bridges - Utility Supports TG0300-204 - Temp Bridges - Traffic Plan - First, Fremon, Beale Streets TG0300-205 - Temp Bridges Geometrics - First, Fremont, Beale Streets TG0300-210 - Temp Bridges - Product Data TG0300-215 - Temp Bridges - Misc. Materials TG0300-220 - MUNI OCS Installation Plan Beale St. TG0300-230 - Temp Bridges - MUNI OCS Installation Plan First St. TG0300-240 - Temp Bridges - Welder AWS Cert. TG0300-244 - Temp Bridges - Steel Manufacturers Certificates or Coupon Tests TG0300-248 - Temp Bridges - Concrete Mix Designs TG0300-250 - Temp Bridges - Rebar Manufacturer Certificates TG0300-260 - Temp Bridges - Preconstruction Photos First St. TG0300-264 - Temp Bridges - Preconstruction Photos Fremont St. TG0300-268 - Temp Bridges - Preconstruction Photos Beale St.	Beale Street Bridge	4/4/2012	9/10/2013	Daily Report

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DFOW Number	Baseline Schedule Activity ID	Specification Section	Required Submittals	Discription/Feature of Work	Preparatory Phase Date	Initial Phase Date	Follow Through Phase Date
BSE-027	SX-BB53800, SX-BB53900	TG03	TG0300-200 - Temp Bridges - Qualifications Data TG0300-201 - Temp Bridges - Struct. Dwgs & Calc TG0300-202 - Temp Bridges - Peer Review TG0300-203 - Temp Bridges - Utility Supports TG0300-204 - Temp Bridges - Traffic Plan - First, Fremon, Beale Streets TG0300-205 - Temp Bridges Geometrics - First, Fremont, Beale Streets TG0300-210 - Temp Bridges - Product Data TG0300-215 - Temp Bridges - Misc. Materials TG0300-220 - MUNI OCS Installation Plan Beale St. TG0300-230 - Temp Bridges - MUNI OCS Installation Plan First St. TG0300-240 - Temp Bridges - Welder AWS Cert. TG0300-244 - Temp Bridges - Steel Manufacturers Certificates or Coupon Tests TG0300-248 - Temp Bridges - Concrete Mix Designs TG0300-250 - Temp Bridges - Rebar Manufacturer Certificates TG0300-260 - Temp Bridges - Preconstruction Photos First St. TG0300-264 - Temp Bridges - Preconstruction Photos Fremont St. TG0300-268 - Temp Bridges - Preconstruction Photos Beale St.	Beale Street Bridge Utilities	4/4/2012	9/10/2013	Daily Report
BSE-028	BG-BB11100, BG-BB42120	TG03	TG0300-340 - Rebar Shop Dwgs - Mud Slab TG0300-350 - Mud Slab Concrete - Submittal Schedule TG0300-355 - Mud Slab Concrete - Mix Design TG0300-360 - Mud Slab Concrete - Joint Locations TG0300-370 - Mud Slab Concrete - Hazardous Materials	FRP Concrete Mud Slab	12/20/2012	1/23/2013	Daily Report
BSE-029	BG-BB10600, BG-BB42520	TG03		Struct. Removal			

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DFOW Number	Baseline Schedule Activity ID	Specification Section/ Trade Group	Required Submittals	Discription/Feature of Work	Preparatory Phase Date	Initial Phase Date	Follow Through Phase Date
UT - 4.1-001	UT-002910, UT-003310	TG04.1		Sewer Natoma & Fremont	2/4/2011	2/4/2011	Daily Report
UT - 4.1-002	UT-002610, UT-002810	TG04.1		Water Natoma & Fremont Street	1/13/2012	1/13/2012	Daily Report
UT - 4.2-001	UT-213800, UT-214500	TG04.2	TG0402-020-Dewatering Plan TG0434-024-Proposed Method of Ptholing TG0404-003-Formwork Material TG0434-002-Pipe Bedding (Crushed Rock)-Sample TG0434-003-Pipe Bedding (Crushed Rock)-Test Reports TG0434-005-Shoring Plan by Licensed CA Engineer	Trench and Excavation (AWSS)	3/26/2012	4/2/2012	Daily Report
UT - 4.2-002	UT-208000, UT-214600	TG04.2	TG0402-013-Welder Certification TG0402-008-Sample 8" pipe w/welded stops	Pipe Stop Welding (AWSS)	3/26/2012	4/2/2012	Daily Report
UT - 4.2-003	UT-208100, UT-208200	TG04.2	TG0402-016 M Squared - Cast in Place Valve Vault	CIP Concrete	6/7/2012	7/20/2012	Daily Report
UT - 4.2-004	UT-208300, UT-208400	TG04.2	TG0402-001 M Squared - Ductile Iron Pipe TG0402-006 M Squared - Pipe End Seal TG0402-008 M Squared - Sample 8" pipe w/welded stops TG0402-027 M Squared - Pipe Links and Sleeves TG0402-029 M Squared - Pipe Bedding Pea Gravel TG0406-008 M Squared - Steel Pipe Material TG0406-009 M Squared - Pipe Factory Test Results	Pipe Installation (AWSS)	3/26/2012	4/2/2012	Daily Report
UT - 4.2-005	UT-208500, UT-208600	TG04.2		Testing and Comissioning (AWSS)			
UT - 4.3-001	UT-030500, UT-030600	TG04.3		Water Howard and Beale Streets	1/13/2011	1/13/2011	Daily Report
UT - 4.4-001	UT-203700, UT-203800	TG04.4		AWSS Cap	3/3/2011	3/3/2011	Daily Report
UT - 4.4-002	UT-041000, UT-041100	TG04.4		Sewer on Natoma	2/4/2011	2/4/2011	Daily Report
UT - 4.4-003	UT-041400, UT-041500	TG04.4		Water on Natoma, First Streets	1/13/2011	1/13/2011	Daily Report
UT - 4.6-001	UT-002830, UT-002930	TG04.6		Pipe Installation Sewer/Sludge	6/21/2012	6/25/2012	Daily Report
UT - 4.6-002	UT-002830, UT-002930	TG04.6		Testing & Comissioning Sewer/Sludge	6/21/2012	6/25/2012	Daily Report
UT - 4.6-003	UT-002830, UT-002930	TG04.6		Trench and Excavation Sewer/Sludge	6/21/2012	6/25/2012	Daily Report

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DFOW Number	Baseline Schedule Activity ID	Specification Section	Required Submittals	Discription/Feature of Work	Preparatory Phase Date	Initial Phase Date	Follow Through Phase Date
BGP-001	TBD	02 41 02	02 41 02 - 1.6	Shoring Wall Demolition			Daily Report
BGP-002	BGS01-1140	03 xx xx	03 xx xx	Concrete-Forms/Place, Protection Slab	4/19/2013	7/31/2013	Daily Report
BGP-003	BGS01-1130	03 xx xx	03 xx xx	Concrete-Forms/Rebar/Structural Embeds/Place, Foundation Slab	7/24/2013	8/1/2013	Daily Report
BGP-004	BGS01-1160	03 30 20	03 30 20 - 1.3	Concrete-Place, Foundation Slab	8/1/2013		Daily Report
BGP-005	BGS01-5160, BGS01-5170	03 xx xx	03 xx xx	Concrete-Forms/Rebar/Structural Embeds/Place, Lower Concrourse			Daily Report
BGP-006	BGS01-4220	03 15 00	03 15 00 - 1.4	Concrete-Waterstop, Install			Daily Report
BGP-007	TBD	05 50 10	05 50 10 - 1.4	Metals-Pre Fabrication	3/28/2013		Daily Report
BGP-008	TBD	05 50 10	05 50 10 - 1.4	Metals-Install			Daily Report
BGP-009	TBD	07 09 16	07 09 16 - 1.4	T&MP-Seismic Joint Assemblies, Mock up			Daily Report
BGP-010	TBD	07 09 16	07 09 16 - 1.4	T&MP-Seismic Joint Assemblies, Install			Daily Report
BGP-011	TBD	07 12 10	07 12 10 - 1.4	T&MP-Waterproofing, Mud Slab Penetrations	1/21/2013	1/22/2013	Daily Report
BGP-012	TBD	07 12 10	07 12 10 - 1.4	T&MP-Waterproofing, Below Grade Package			Daily Report
BGP-013	TBD	Sections 22 xx xx, 23 xx xx, 26 xx xx, 27 xx xx, 28 xx xx	Sections 22 xx xx, 23 xx xx, 26 xx xx, 27 xx xx, 28 xx xx	MEP - Mechanical Piping & Drainage; Electrical Raceway & Boxes; Communications Ducts & Raceways; and Fire Management System			Daily Report
BGP-014	TBD	23 57 34 Note: - includes associated work covered under Section 31 23 34, Trenching and Backfill	23 57 34 - 1.4 Note: - includes associated work covered under Section 31 23 34, Trenching and Backfill	HVAC-Ground Loop Heat Exchanger, Install / Testing / Thermal Conductivity Analysis / Water Treatment / Commissioning	2/25/2013	3/18/2013	Daily Report
BGP-015	TBD	26 05 27 - 1.4	26 05 27 - 1.4	Electrical-Grounding System, Installation and Testing	1/9/2013	1/22/2013	Daily Report

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DFOW Number	Baseline Schedule Activity ID	Specification Section	Required Submittals	Discription/Feature of Work	Preparatory Phase Date	Initial Phase Date	Follow Through Phase Date
BRA-001	TBD		TBD	Cast Nodes			Daily Report

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DFOW Number	Baseline Schedule Activity ID	Specification Section	Required Submittals	Discription/Feature of Work	Preparatory Phase Date	Initial Phase Date	Follow Through Phase Date
SSS-001	TBD	05 10 00	TBD	All Structural Steel			Daily Report
SSS-002	TBS	05 10 00	TBD	Elevator Guiderail Support Framing			Daily Report
SSS-003	TBS	5 10 00	TBD	Escalator Support			Daily Report
SSS-004	TBS	5 10 00	TBD	Stair Support Framing			Daily Report
SSS-005	TBS	5 10 00	TBD	Metal Decking Studs			Daily Report
SSS-006	TBS	5 10 00	TBD	Light Columns and Rings			Daily Report
SSS-007	TBD	5 10 00	TBD	OCS Attachement			Daily Report
SSS-008	TBD	5 10 00	TBD	Removal of Construction Trestle			Daily Report

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PREPARATORY PHASE CHECKLIST

(CONTINUED ON SECOND PAGE)

SPEC SECTION	DATE
Enter Spec Section # Here	Enter Date (DD/MMM/YY)

CONTRACT NO	DEFINABLE FEATURE OF WORK	SCHEDULE ACT NO.	INDEX #
Enter Cnt# Here	Enter DFOW Here	Enter Sched Act ID Here	Enter Index# Here

PERSONNEL PRESENT

GOVERNMENT REP NOTIFIED _____ HOURS IN ADVANCE: YES ☐ NO ☐

NAME	POSITION	COMPANY/GOVERNMENT

SUBMITTALS

REVIEW SUBMITTALS AND/OR SUBMITTAL REGISTER. HAVE ALL SUBMITTALS BEEN APPROVED? YES ☐ NO ☐

IF NO, WHAT ITEMS HAVE NOT BEEN SUBMITTED? _____

ARE ALL MATERIALS ON HAND? YES ☐ NO ☐

IF NO, WHAT ITEMS ARE MISSING? _____

CHECK APPROVED SUBMITTALS AGAINST DELIVERED MATERIAL. (THIS SHOULD BE DONE AS MATERIAL ARRIVES.)

COMMENTS: _____

MATERIAL STORAGE

ARE MATERIALS STORED PROPERLY? YES ☐ NO ☐

IF NO, WHAT ACTION IS TAKEN? _____

SPECIFICATIONS

REVIEW EACH PARAGRAPH OF SPECIFICATIONS. _____

DISCUSS PROCEDURE FOR ACCOMPLISHING THE WORK. _____

CLARIFY ANY DIFFERENCES. _____

PRELIMINARY WORK & PERMITS

ENSURE PRELIMINARY WORK IS CORRECT AND PERMITS ARE ON FILE.

IF NOT, WHAT ACTION IS TAKEN? _____

TESTING

IDENTIFY TEST TO BE PERFORMED, FREQUENCY, AND BY WHOM.

WHEN REQUIRED?

WHERE REQUIRED?

REVIEW TESTING PLAN.

HAS TEST FACILITIES BEEN APPROVED?

SAFETY

ACTIVITY HAZARD ANALYSIS APPROVED? YES ☐ NO ☐

REVIEW APPLICABLE PORTION OF EM 385-1-1.

MEETING COMMENTS

NAVY/ROICC COMMENTS DURING MEETING.

OTHER ITEMS OR REMARKS

OTHER ITEMS OR REMARKS:

DATE

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INITIAL PHASE CHECKLIST

SPEC SECTION	DATE

CONTRACT NO	DEFINABLE FEATURE OF WORK	SCHEDULE ACT NO.	INDEX #

PERSONNEL PRESENT

GOVERNMENT REP NOTIFIED _____ HOURS IN ADVANCE: YES ☐ NO ☐

NAME	POSITION	COMPANY/GOVERNMENT

PROCEDURE COMPLIANCE

IDENTIFIY FULL COMPLIANCE WITH PROCEDURES IDENTIFIED AT PREPARATORY. COORDINATE PLANS, SPECIFICATIONS, AND SUBMITTALS.

COMMENTS:

PRELIMINARY WORK

ENSURE PRELIMINARY WORK IS COMPLETE AND CORRECT. IF NOT, WHAT ACTION IS TAKEN?

WORKMANSHIP

ESTABLISH LEVEL OF WORKMANSHIP.

WHERE IS WORK LOCATED?

IS SAMPLE PANEL REQUIRED? YES ☐ NO ☐

WILL THE INIITAL WORK BE CONSIDERED AS A SAMPLE? YES ☐ NO ☐

(IF YES, MAINTAIN IN PRESENT CONDITION AS LONG AS POSSIBLE AND DESCRIBE LOCATION OF SAMPLE)

RESOLUTION

RESOLVE ANY DIFFERENCES.

COMMENTS:

CHECK SAFETY

REVIEW JOB CONDITIONS USING EM 385-1-1 AND JOB HAZARD ANALYSIS

COMMENTS:

OTHER

OTHER ITEMS OR REMARKS

DATE

3.0 ELEMENT 3 DESIGN CONTROL

3.1 INTRODUCTION

3.2 DESIGN/BUILD PACKAGES

3.3 ROLES & RESPONSIBILITIES OF THE OWNER AND THE DESIGN BUILD TRADE SUBCONTRACTOR

3.4 AS-BUILT DRAWINGS

3.5 SUBMITTAL REVIEW

3.0 DESIGN CONTROL

3.1 INTRODUCTION

Design control as implied in this Element is limited to Design-Build packages where applicable, as-build drawings and submittal review and coordination by Webcor/Obayashi is primarily accomplished by QC Management, Oversight and coordination design/build package, where specified and ensuring that the design requirements are understood, planning the design interfaces and design verification activities, executing the design verification activities, and controlling design changes through project completion.

The designer shall prepare a plan for design/built activities. It should also identify the various organizational interfaces required between various groups producing and commenting on the design, and specify the information to be documented, transmitted, and regularly reviewed.

Appropriate procedures shall be established for the identification, documentation, review, and approval of all changes and modifications to the design. This responsibility should extend to those responsible for construction or manufacturing to ensure compliance to design requirements and for development of "as-built" documents as part of the design documentation at the end of the project.

Each group responsible for design/built shall provide its own written QC procedures. These include peer review of drawings and check calculations. QA activities are performed to verify compliance to established QC procedures and to determine the effectiveness of the procedures in meeting quality program objectives.

Specification Section 01-14-00 Quality Control Paragraph 1.6 B. Procedures for scheduling, reviewing, certifying, and managing submittals, including those of Trade Subcontractors, offsite fabricators, Suppliers, and purchasing agents. These procedures must be in accordance with Section 01 13 00, Submittals.

3.2 DESIGN BUILD PACKAGES

W/OJV Shall:

- Clearly define requirements of the QA/QC Program in the contract documents.
- Coordinate with owner agency oversight activities in order to assure effectiveness of the QA/QC Program.

- Require additional levels of reporting and/or detail by the DB contractor team.
- Clearly define roles and responsibilities of parties involved early in the bid documents.
- Maintain a proactive and systematic quality program that encompasses all the project lifecycle stages.

3.3 Roles and Responsibilities of the Owner and the Design-Build Trade Subcontractor

QC program effectiveness hinges on clear allocation of roles and responsibilities to the involved parties. QA/QC roles and responsibilities shall be defined clearly in the contract documents; and more importantly, are agreed upon by the parties at the outset. It is recommended that the owner agency conduct audits and testing at every stage of the QC process, and retain ownership of the resident database. TJPA has elected to retain the Quality Assurance (QA) role with the design-build contractor performing the Quality Control (QC) activities.

3.4 As-Built Drawings

Trade Subcontractors have design-build responsibilities (such as the access trestle and traffic bridges), their quality control plans shall include design control for their scope of work.

- The Trade Subcontractors shall keep an accurately marked, up-to-date set of as-built drawings for the work actually installed, and accurately indicate on as-built drawings all site conditions, locations of utilities, work scope changes, changes in dimensions, locations, and elevations of the Work, and changes in details as specified herein and as approved by the TJPA Representative. Trade Subcontractor shall keep the as-built drawings current as the Work is performed.
- Prior to acceptance of the Work, Trade Subcontractor shall furnish to the Webcor/Obayashi JV CQC Manager the final as-built drawings, showing all changes in the Contract Drawings neatly in red ink.
- Trade Subcontractors will delegate responsibility for maintenance, coordination, and accuracy of the as-built drawings to one person on their staff.
- Accuracy of as-built drawings shall be such that future searches for items shown on the Contract Documents may rely on information obtained from the approved as-built drawings.
- Trade Subcontractors shall store as-built drawings apart from documents used for performing the work; keep in a dry, legible condition, and in good order. Label each document “AS-BUILT DRAWINGS— JOB SET” in large, neatly printed letters.
- Trade Subcontractors shall record neatly on the as-built drawings all changes made by clarifications, Change Orders, Requests for Information, and other Modifications to the Contract Documents; and changes to reflect the actual

existing conditions and utility locations references to permanent accessible features of the Work.

- Trade Subcontractors shall clearly describe changes on as-built drawings by note as required.
- Trade Subcontractors shall date all entries, calling attention to the entry by a “cloud” drawing around the area or areas affected.
- Trade Subcontractors shall record in each Specification Section the manufacturer, trade name, catalog number, and supplier of each product and equipment item incorporated into the Work.
- Trade Subcontractors shall furnish a copy of the final shop drawings which have been updated to show actual conditions. Furnish additional drawings as necessary to record deviations from the sizes, locations, and other features of the Work and to locate piping, conduit, ductwork, and similar elements of utility installations by dimensions referenced to permanent accessible features of the Work.
- Trade Subcontractors shall show on the job set of as-built drawings, by dimension accurate to within 1 inch, the centerline of each run of conduits, circuits, piping, ducts, and similar items which are shown schematically on the Contract Drawings but where the final physical arrangement is determined by Trade Subcontractor.
- Trade Subcontractors shall keep as-built drawings up to date during the entire progress of the Work, and provide access for monthly. Updates shall be accurate and current and be done at the time work is performed.
- Trade Subcontractors shall also update and include the revised or newly issued drawings as part of the as built drawings. The work of reproducing and issuing Change Order drawings and updating of as built drawings shall be done as incidental work.

3.5 SUBMITTAL REVIEW

Submittals will be reviewed for coordination, completeness, clarity and coordination with other trades prior to submitting to the TJPA. To obtain approval from the Architect/Engineer/Consultant for all materials, assemblies, equipment and shop drawing submittals required by the contract documents.

The purpose is to install materials, assemblies and equipment only after approval is obtained from the appropriate reviewing Architect/Engineer/Consultant responsible for the particular scope of work.

- Webcor/Obayashi and TJPA process submittals using two different types of project management software. Webcor/Obayashi uses internal system and TJPA uses ConstructWare.
- In WOJV System submittal packages contain submittals and all of the history of the submittal is tracked at the submittal level. The submittal package is simply the nest of the submittals that are attached to it.

- Submittals are transmitted to TJPA from Webcor/Obayashi via WOJV internal system and ConstructWare.
    - The naming format of the PDF submittal is crucial for the transmission to be successful.
- Submittal Actions Status:

ACTION	STATUS
Received	Open
Sent	Submitted
Returned	No Exceptions Taken, Make Corrections Noted, Revise and Resubmit, or Rejected
Forwarded *For the Record*	Same as Returned Status *Submit for record only*

4.0 ELEMENT 4 ***DOCUMENT CONTROL***

4.1 INTRODUCTION

4.2 SUBMITTAL MANAGEMENT

4.3 SUBMITTAL MANAGEMENT AND DOCUMENT CONTROL PROCEDURES

4.3.1 DOCUMENT CONTROL

4.3.2 SUBMITTALS

SUBMITTAL REVIEW CHECKLIST

4.3.3 TRANSMITTALS

4.3.4 DISTRIBUTION MATRICES

4.3.5 MASTER PROJECT DOCUMENT LOG

4.3.6 CQC FILE STRUCTURE

4.0 DOCUMENT CONTROL

4.1 INTRODUCTION

Webcor/Obayashi's Document Control process is the means by which information Specified in the Contract Documents to be in Webcor/Obayashi's and the Trade Subcontractors' control are logged, filed, and updated to assure that the organization's staff is using the most current approved documents and they are following the most recently approved procedures and standards and that are compliance with contract and applicable FTA, 15 Element Guidelines.

Procedures for control of project documents and data have been established and shall be maintained. The document control measures should ensure that all relevant documents are current and available to all users who require them.

Control of project documents includes the review of documents by authorized personnel, the distribution and storage of these documents, the elimination of obsolete documents, and control of changes to the documents. Copies of the documents shall be distributed so that they will be available at all locations that need them for effective functioning of the quality management system. Obsolete documents will be promptly eliminated from each work location. Any superseded documents retained for the record will be clearly identified as such. The same authorized personnel who reviewed and approved the original documents, unless the control procedures specifically allow otherwise, should review changes to the documents and data. Changes will be promptly distributed to all locations, along with a master list enumerating the current revisions of each document.

Following are examples of the types of documents requiring control:

- Drawings
- Specifications
- Inspection procedures
- Test procedures
- Special work instructions
- Operational procedures
- QA program and procedures

4.2 SUBMITTAL MANAGEMENT

The Submittal process is designed to assure that all material, assemblies, equipment and shop drawings meet the Transbay Transit Center project requirements and are approved by the TJPA prior to procurement and installation. The Submittal process is the means by which the Trade Subcontractors control product purchasing. This submittal schedule will be developed incrementally and additional submittals will be added as trade packages are awarded and subcontractors are brought on board. Trade Subcontractors will submit their submittal schedules compliance with contract and FTA element guidelines for approval, as required in the Division 00, 01 and technical specifications, prior to the start of work. Element 4 guidelines state that control of project documents includes the review of documents authorized personnel, the distribution and storage of these documents, the elimination of obsolete documents and control of changes to the documents.

4.3 SUBMITTAL MANAGEMENT AND DOCUMENT CONTROL PROCEDURES

The Webcor/Obayashi JV Document Control and Submittal management procedures are part of Webcor/Obayashi's Transbay Transit Center Policy and Procedures Guide. The relevant sections of that guide addressing submittal management and document control are listed below and are included in this section of the Webcor/Obayashi JV CQC Manual:

4.3.1 Document Control

4.3.2 Submittals

4.3.3 Transmittals

4.3.4 Document Distribution matrix

4.3.5 Master project document log

4.3.6 CQC file structure

4.3.1 DOCUMENT CONTROL

The purpose of this outline is to provide guidelines for establishing the appropriate D document control system for the management of the Transbay Transit Center project. This will include the review of documents by authorized personnel.All Controlled documents will go through Document Control to be logged and tracked.

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What is a controlled document? A controlled document is defined for this project as any contract document or correspondence which includes i) contract requirements, or ii) scope definition or requirements, including distribution of all Contract Documents (e.g. addendum, ***ASI's*** bulletins, work orders, etc.) either to/from TJPA or Trade Subcontractor. Controlled documents received will be date stamped, logged, saved electronically (in some cases hard copies filed), distributed internally, monitoring response/process time (also referred to as work flow), distribute externally, and track the distribution list.

The following is a list of **controlled document** examples:

- Project Document Distribution – Internal/External
    - Design Documents
    - Construction Document
    - ASI's
    - Sketches- to be issued with ASI's or RFI's and not on their own.
    - Reference Documents
- Submittals, including all LEED submittal requirements and substitutions.
- Design Review Questions (DRQs) - Preconstruction
- Request for Information (RFIs) - Construction
- Daily Reports and Daily Quality Control Reports
- Safety Memos – Logged and tracked
- Schedules and schedule reports
- Permit Inspections
- Payment Applications
- Cash Flow Projections
- Monthly Progress Reports
- Permits
- Original Documents - Custodianship of all original documents in a Master File until they can be boxed and transferred for long term storage.
- Formal Correspondence; including all formal incoming/outgoing correspondence
- Contract Notification Correspondence; delay notification, etc.
- Contract Modifications
- Virtual Building/Models
- Meeting Minutes
- Transmittals
- Requests for Qualification (RFQ)
- Invitation for Bid (IFB)
- Subcontracts & Change Orders
- Long Form/Short Form Purchase Orders (PO)
- SBE/DBE
- Closeout documents

- Reimbursements

Uncontrolled Documents: The following are some examples of uncontrolled documents:

- Email correspondence
- Field Tags – Collected and tracked by Cost Control
- Purchase Order – Managed by Procurement/Cost Control

4.3.2 SUBMITTALS

Submittals will be reviewed for coordination, completeness, clarity and coordination with other trades prior to submitting to the TJPA. To obtain approval from the Architect/Engineer/Consultant for all materials, assemblies, equipment and shop drawing submittals required by the contract documents.

The purpose is to install materials, assemblies and equipment only after approval is obtained from the appropriate reviewing Architect/Engineer/Consultant responsible for the particular scope of work.

- Webcor/Obayashi and TJPA process submittals using two different types of project management software. Webcor/Obayashi uses internal and TJPA uses ConstructWare.
- In WOJV System submittal packages contain submittals and all of the history of the submittal is tracked at the submittal level. The submittal package is simply the nest of the submittals that are attached to it.
- Submittals are transmitted to TJPA from Webcor/Obayashi via WOJV internal system and ConstructWare.
    - The naming format of the PDF submittal is crucial for the transmission to be successful.
- Submittal Actions Status:

ACTION	STATUS
Received	Open
Sent	Submitted
Returned	No Exceptions Taken, Make Corrections Noted, Revise and Resubmit, or Rejected
Forwarded *For the Record*	Same as Returned Status *Submit for record only*

Receive Submittal from Subcontractor – 0-5 days
Was it received on time? If not, have the Trade Scope PM notify the subcontractor that it was late. Is the submittal complete? If not, return the submittal to the subcontractor, transmittal shall include notification that the submittal is incomplete, give a date that the re-submittal is required, and notify them of their potential risk in missing the submittal date.

Review the submittal using the submittal process checklist once the submittal is deemed complete, stamp, (All pages of shop drawings; front page only for product data), distribute to PM, QC and Supt. to review for conformance, completeness, compliance, clarity and transmit to TJPA.

Design Team Review – 12 days Design team will review the submittal. Each layer of review (Architect and Consultants) will stamp ALL pages and return to Webcor/Obayashi's document control manger.

Returned Submittal - 5 days
Reviewed by Document Manager – Notify Author. Document Control will receive e-mail notification that the submittal has been reviewed in ConstructWare. Document Control will forward the e-mail notification along will all attachments to Author.

PM Triage – Notification Sent to Subcontractors

- Revise & Re-submit or Rejected
    - Return R&R or Rejected submittal to author subcontractor. PM will include in the transmittal a due date for re-submittal (5 days). Director will make a case-by-case determination on whether to send a preliminary submittal to other subcontractors for coordination.

- No Exceptions Taken & Make Corrections Noted
    - Email author subcontractor and all affected trade subcontractors the approved submittal. PM will include transmittal with the action required.

Is there a Cost / Schedule Impact or Scope Change?
Subcontractors have 5 days from the returned date to respond with a cost or schedule impact.

Written Notification to Owner, draft RFI to Capture Cost.
Shop drawings, product data, and samples "are not contract documents" per our contract language. Therefore, any change in scope change during submittal review by design team must be captured via ASI. Director should also send written notification to ownership of any scope change incurred from a returned Submittal.

Storing Approved Submittals
Author of submittal will file all documents and correspondence within the storage folder and post the documents electronically.

- Put approved electronic copy of submittal in the designated folder

SUBMITTAL PROCESS CHECKLIST

Submittal Package No.:_____ Date Received:_____

Submittal Name:_____

- ☐ Review each submittal to:
  - ☐ Verify that the submittal's contents match the accompanying transmittal. Did we receive everything listed on the transmittal?
  - ☐ Verify that the submittal's contents are complete per the submittal register. Important: submittal packages need to be complete and should include all information necessary for review. Partial submittals are to be rejected by W/O (if we don't the TJPA will).
  - ☐ Verify that the contents of the submittal are in conformance with the technical specifications and other appropriate contract documents.
  - ○ Is the Submittal a Substitution?
    - ◉ No- Continue Processing Submittal
    - ○ Yes -Reject submittals that are substitution requests- There is a separate process for substitutions.
  - ☐ Verify that the trade subcontractor has checked and coordinated all dimensions, materials, field measurements, with the requirements of the Work and the Contract Documents.
  - ☐ Verify that the submittal complies with the requirements of reference specifications –SFDPW, PG&E etc.
  - ☐ Confirm that all professional certifications (stamp) w/license number and expiration date are provided and signed if required.
  - ☐ Note any variations from the Contract requirements (if there are create an issue in CMiC)
  - No questions Address all questions raised or noted in the submittals; requests to verify dimensions, etc. If there are questions with the submittal:
    - Can the questions be answered by W/O?
    - Does an RFI need to be submitted?
    - Does an issue need to be created in CMiC?
    - Identify who is responsible for answering the question
  - ☐ Identify all affected and adjacent trades that can be potentially impacted by submittal. Develop an action plan to coordinate submittal information with ALL affected and adjacent trades.
  - ○ If the submittal is complete, stamp the first page of each item. If it is shop drawings, all sheets must be stamped.

Trade Scope Superintendent:_____ Date:_____

Trade Scope PM:_____ Date_____

CQC Manager:_____ Date:_____

Safety Manager:_____ Date:_____

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4.3.3 TRANSMITTALS

To ensure controlled contract documents leaving this office have a record.

Use and receipt of Transmittals is governed by the information herein.
All controlled contract document exchange with Ownership, Design Team, Subcontractor community and Agencies with Jurisdiction/Authority on the project requires a transmittal. All transmittals are created in CMiC with the reference documents listed and uploaded as attachments in CMiC. All transmittals with incoming documents are date stamped, scanned and uploaded with the documents to the pertinent folder and CMiC.

Below is a listing of all contract documents that require a transmittal to capture the exchange/submission:

- Billing
- Submittals
- Design Review reports
- Schedules & Reports
- Cost Estimates
- Drawings
- Close-out documents
- Attic Stock

Transmittal tracking numbers are auto populated in CMiC.

Subject (RE): The subject should be the same description used on other documents (ex. PCI's, Letters, e-mail, etc.) Subject should be descriptive and should include appropriate sub-job, TG Package # and description.

Remarks: ***In the section,*** the first sentence should read

RE: Transbay Transit Center [Preconstruction/TCB/Utilities/Bus Ramps select one] – 30100.[##}

4.3.4 DISTRIBUTION MATRIX

To establish guidelines for who receives what documents and in what form.

All documents received by Document Control will be distributed according to the matrices.

Distribution Matrices have been established for:

1. Internal Distribution
2. External Distribution

Internal Distribution Matrix

WO-CQC0001 - Contractor Quality Control Plan
Webcor/Obayashi Joint Venture

P = Primary
cc = copy

Group	Name	General							Construction				
									Transit Center Bldg				
		Contract Issues	Amendment/CR/CCO	Progress Billings	Schedule	Quality	Safety	Pre Construction	TG03-BSE	TG05-Logistics	TG06-Below Grade	TG07.1 Superstructure	Utility Relocation - 30100.03
		All Correspondence							Field Orders Submittals Inspections RFI's PCO's				
MANAGEMENT	Jes Pedersen	cc											
	Hidetake Taniguchi	cc	cc	cc	cc	cc	cc	cc	cc				
	Steven Humphreys	P	P		cc	cc	cc		cc	cc	cc	cc	cc
	Todd Mercer	cc	cc	cc		cc	cc	cc					
	Kurt Ricci	cc	cc	cc	cc	cc	cc	cc	cc	cc	cc	cc	cc
PROJECT ACCT	Jasmin Lautt		cc	P									
PROJECT ASSISTANT / ADMIN	Anne Merics			cc									
	Sarah Boyd			cc					cc	cc	cc	cc	cc
	Julie O'Brien		cc										
CONTROLS/SBE	Ted Williams	cc	cc	cc					cc	cc	cc	cc	cc
SAFETY	Jack Storace						P						
QUALITY CTRL	Adib Sassine					P		cc	cc	cc	cc	cc	cc
	Duncan Sinclair					cc		cc	cc	cc	cc	cc	cc
	Lynn Kowallis					cc		cc	cc	cc	cc	cc	cc
SCHEDULING	Ryan Burke	cc	cc		P	cc	cc	cc	cc	cc	cc	cc	cc
	Jose Ramirez				cc								
VIRTUAL BLDG	Mike Brown							cc					
TRANSIT CENTER BLDG 30100.01	Joanne Verrips		cc		cc	cc	cc		P		cc		
	Spencer Sayles		cc		cc	cc	cc		cc		P		
	Ryan Burke		cc		cc	cc	cc		cc		cc		
	RJ Kjome		cc		cc	cc	cc		cc		cc	cc	
	Mike Spillane		cc		cc	cc	cc		cc		cc		
	Jose Verduzco		cc		cc	cc	cc		cc		cc		
	Mario Saldana		cc		cc	cc	cc		cc	cc	cc		cc
	Jordan Smith		cc		cc	cc	cc		cc		cc	cc	
	Jeff Galoyan		cc		cc	cc	cc				cc	P	
UTILITY RELOCATION 30100.03	Jackson Tukuafu								cc	P	cc	cc	P
BUS RAMPS 30100.05	Precon												
PRECONSTRUCTION 30100P	Jeff Heath				cc			P					
	Tomoya Imai							cc					
	Sihaya Roselle							cc					
	Dennis Blatchford							cc					
	Forrest McLain							cc					
	Tim Maxwell							cc					
	Masashi Kojima							cc					
	Lewis Hampton							cc					
	JD Flaming							cc					

TRANSBAY TRANSIT CENTER

DISTRIBUTION MATRIX

WEBCOR/OBAYASHI

External

P = Primary
CC = Copy

		General Correspondence										Trade Specific Correspondence						Precon		Engineering
												Transit Center Bldg 30100.01								
Group	**Name**	**Contract Issues**	**Amendments/CO**	**Progress Billings**	**Schedule Updates**	**NOPD/NOPC**	**Quality**	**Safety**	**Cost Estimating/Constructability**	**LEED**	**Field Orders/PCO**	**TG03 - BSE**	**TG05 - Logistics**	**TG08 - Glazing**	**TG19 - Mission Wall**	**Utility Relocation - 30100.03**	**Bus Ramps - 30100.05**	**Bid Packages and Coorespondence**	**QBDs**	**RFI's and Submittals**
Turner	Steve Rule	P	cc	cc	P	P	cc	cc	cc		cc	cc	P	P	P	P	P	P		
	Jack Adams				cc	cc	P	P				cc	cc	cc	cc	cc	cc			
	Jeremy Lau		cc	cc							cc									
	Gary Krutsch	cc	P	P	cc	cc			cc		P	cc	cc	cc	cc	cc	cc	cc	P	P
	Judy Long															cc			cc	cc
	Jeff Thiel																			
	Stacy Wilson											cc							cc	cc
	Steve Cunningham				cc	cc		cc				cc				cc				
	Turner Doccontrol	cc	cc	cc	cc	cc	cc	cc	cc		cc	cc	cc	cc	cc	cc	cc	cc	cc	cc
PMPC	Kathleen Lassle	cc	cc		cc	cc			P		cc									
	Jim Coughlin	cc	cc		cc	cc			P		cc									
	Joyce Oishi									P										
	Mark O'Dell	cc	cc		cc				cc		cc	cc	cc	cc			cc	cc	cc	
	Dan Alvarado				cc				cc		cc	cc		cc			cc	cc	cc	cc
	Guy Hollins															cc	cc			
	Phil Sandri														cc		cc			
	Bill Seaver																			
	Prasad Nimmigadda								cc											
	Roger Rothenburger	cc	cc						cc		cc	cc								
	Doug Jacobson											cc								
	Larry Zarembinski																			
	Jason Partin				cc															
	PMPC DocControl	cc	cc	cc	cc	cc	cc	cc	cc		cc	cc	cc	cc	cc	cc	cc	cc	cc	cc
	Brian Dykes					cc						P								
	Eddie Phillips	cc	cc	cc					cc		cc							cc		
TJPA	Dennis Turchon																			
	Sara Gigliotti	cc	cc	cc					cc		cc							cc		
	*TJPA DocControl	cc	cc	cc	cc	cc	cc	cc	cc		cc	cc	cc	cc	cc	cc	cc	cc	cc	cc

*All correspondence for TJPA will be sent to Doc. Control and will direct correspondence for action, information, etc.

4.3.5 MASTER PROJECT DOCUMENT LOG AND LIBRARY EXHIBIT

To track and document all drawings and specifications issued throughout the life of the project and where these documents live.

The master project document log will be updated by Document Control as new drawings and specifications are issued.

1. Review master drawing log against drawing log issued with new drawings.
2. Update master drawing log when new documents are received with date, revision number and location of where documents are saved.

NOTE – Master Drawing Log has not been established; PMPC to issue master log.

4.3.6 CQC FILE STRUCTURE

The CQC File Structure is outlined below and will be utilized on this project to store, organize and manage Webcor/Obayashi's CQC Plan, Daily CQC Reports and DFOWs. ***This File Structure will mirror that of Constructware***.

Webcor/Obayashi will organize and store CQC documents such as the CQC Plan, Daily CQC Reports and DFOWs on the F:\ drive in a shared folder***. All required quality records*** will be uploaded into Constructware as the system of record.

CQC documents on the F:\ drive may be found at the following location.
F:\Transbay\WEBCOR\Quality Control
CQC Plans
- CQC Plan Webcor-Obayashi JV:

Daily CQC Reports
- Transbay
    - WEBCOR
        - Quality Control
            - Daily CQC Reports
                - Year
                    - Month
                        - Day
                            - Year/Month/Day – Contractor

DFOW
- Transbay
    - WEBCOR
        - Quality Control
            - DFOW (By Contractor)

- DFOW Number's
  - Preparatory Phase
  - Initial Phase
  - Follow up
  - DFOW Record Documents

CQC Daily Reports in Constructware may be found at the following location.

Constructware CQC Daily Reports
140 - Transit Center Building
- File Director
  - 10 Quality
    - 12 CQC Reports
      - Year
        - Month
          - Day
            - Month/Day/Year – contractor

CQC DFOW Reports in Constructware may be found at the following location.

Constructware CQC DFOW
140 - Transit Center Building
- File Director
  - 10 Quality
    - Definable Features of Work (DFOW)
      - Contractor's DFOW (Ex. BSE-TG03 – BBI)
        - DFOW Log
        - DFOW (By Number and Title)
          - Preparatory Phase
          - Initial Phase
          - Follow up Phase
          - DFOW Record Documents

DFOW – Any Reference to a DFOW requires filing a copy of each Sub's QC ***checklists*** to retrieve follow up documents in F/drive and Constructware.

5.0 ELEMENT 5 ***PURCHASING***

5.1 INTRODUCTION

5.2 CONTROL OF PURCHASED MATERIALS, PARTS AND COMPONENTS

5.0 PURCHASING

5.1 INTRODUCTION

The contract requirements will clearly specify the expectations of WOJV, including relevant standards, drawings, specifications, process requirements, inspection instructions, and approval criteria for materials, processes, and product. The purchasing documents will be reviewed and approved by WOJV and TJPA for adequacy of specified requirements prior to release. WOJV will ensure that the supplier fully understands the contract, agrees with the contract, and has the capacity to perform the work as required.

Where construction or equipment procurement is involved, the contract between WOJV and the supplier will specify the right of WOJV or TJPA authorized representatives to carry out as required inspection and testing at the source and upon receipt to verify that the work or product meets specifications.

Where equipment procurement is involved, WOJV will define, as appropriate, the means and methods for handling, storage, packaging, and delivery of product and as required per contract documents. WOJV will establish procedures to receive, inspect, store, and maintain equipment procured. Any equipment that is damaged or is otherwise unsuited for use will be documented and reported to the supplier or Trade Subcontractor.

Purchasing requirements apply to all subcontractors and suppliers, including construction contractors, and manufacturers. The purpose of this element is to ensure that purchasing requirements are clear and complete, that the supplier or trade subcontractor understands them, and that appropriate quality elements are made part of the contract. Additional requirements, such as on-site required inspection and handling and receiving procedures, may be required for construction or equipment procurement contracts.

Specification Section 01-16-00 Material and equipment referenced in this section.

Immediately upon delivery, Contractor shall inspect shipments to assure compliance with the Contract Documents and reviewed submittals, and to verify that products are undamaged and properly protected from potential damage. Undamaged products shall be delivered to the job site in manufacturers' sealed containers or wrappings with legends and labels intact. Contractor shall maintain packaged materials with seals unbroken and labels intact until time of use. "

5.2 CONTROL OF PURCHASED MATERIALS, PARTS AND COMPONENTS

- As part of bid package development Webcor/Obayashi JV will prepare trade package specific subcontractor prequalification requirements. These prequalification's are submitted to, and reviewed by the TJPA.

The pre-qualification requirements are then included in the project bidding manual.

- Prior to contract award Webcor/Obayashi JV verifies that all trade subcontractors and suppliers meet the project requirements as outlined in the project bidding manual and contract documents.
- Schedule work to be tested or inspected to allow test to be performed within reasonable time.

6.0 ELEMENT 6 ***PRODUCT IDENTIFICATION & TRACEABILITY OF MATERIAL, PARTS & COMPONENTS***

6.1 OVERVIEW

6.2 MATERIAL IDENTIFICATION

6.3 PRODUCT IDENTIFICATION AND TRACEABILITY

6.0 PRODUCT IDENTIFICATION AND TRACEBILITY

6.1 OVERVIEW

W/OJV and Trade Subcontractors will identify and document material and products delivered to the site using the material checklist. Material and products will be reviewed for deficiencies. Once a deficiency is identified by using the material checklist, there is a systematic method to control the item, correct it, and ensure that project quality is not adversely impacted.

When the material or product is identified as deficient it will immediately be segregated. Segregation may occur by physical isolation and cordoning off of work/materials, or conspicuously identified by tags/markings when physical isolation is not possible. BIM 360 will be used to identify deficient materials on equipment and track resolution and closure.

6.2 MATERIAL IDENTIFICATION

Measures shall be established and maintained for identifying and controlling items of production (batch, materials, parts, and components) to prevent the use of incorrect or defective items and to ensure that only correct and acceptable items are used or installed.

Physical identification and control shall be used to the extent possible. Where physical identification is impractical, physical separation, procedural control, or other appropriate means may be employed. Items that fail to possess identification, or items for which record traceability has been lost, or items that do not conform to requirements shall be segregated to prevent use or installation. An item shall be able to be identified by how it is marked or where it is located.

Specification Section 01-16-00 Material and equipment; 1.6 D & E
Immediately upon delivery, Contractor shall inspect shipments to assure compliance with the Contract Documents and reviewed submittals, and to verify that products are undamaged and properly protected from potential damage.

1. Undamaged products shall be delivered to the job site in manufacturers' sealed containers or wrappings with legends and labels intact. Contractor shall maintain packaged materials with seals unbroken and labels intact until time of use.

2. Contractor shall promptly remove damaged material and unsuitable items from the job site, and promptly replace with material meeting the specified requirements at no increase in Contract Sum without impact to construction schedule.

3. Unsuitable materials and products not removed promptly from the job site by Contractor may be removed by the TJPA. Removal costs shall be paid by Contractor.

4. Contractor shall identify materials and equipment delivered to the Site to permit checking against submittals and shop drawings.

The TJPA may reject as non-complying such material and products that do not bear identification satisfactory to the TJPA as to manufacturer, grade, quality, and other pertinent information.

6.3 PRODUCT IDENTIFICATION & TRACEABILITY

Product identification and traceability shall take place during all the various production phases – from receipt of raw materials, components, or subassemblies through the manufacturing process, to delivery of final products or systems. Traceability shall mean traceable to Transbay Terminal Center project, specific warranty, test report, supplier, point in time, purchase order, or through production. Raw materials shall be traceable back to a particular batch number, shipment number, packing slip, or invoice and shall be accompanied by applicable test data sheets and material certifications. Store room or inventory tracking procedures shall allow for items to be traceable back to a particular order number, batch number, date received, test lot, or other pertinent source. Assemblies in production shall be traceable to Transbay Terminal Project through the use of some form of routing documentation. Routing documentation should contain sufficient manufacturing information, including work instructions, manufacturing standards, tooling, etc. Final assemblies should be clearly marked with project numbers, model numbers, serial numbers, bar codes, etc., so that all pertinent information regarding that assembly may be retrieved.

7.0 ELEMENT 7 ***PROCESS CONTROL***

7.0 PROCESS CONTROL

The contractor quality control process is the means by which W/OJV, Trade Subcontractors and Suppliers shall identify and plan the production and installation processes.

Suppliers and Trade Subcontractors process control shall identify and plan the production and installation processes that directly affect quality and shall ensure these processes are performed under controlled conditions. Special processes, the results of which cannot be verified by subsequent inspection and testing of the product, shall be continuously monitored. To achieve accuracy and consistency in production and installation processes, the quality program shall provide for:

- Documented work instructions where such are needed to ensure quality, use of suitable production and installation equipment, a suitable working environment, personnel qualifications, and conformance with referenced standards/codes and Quality Plans

- Monitoring and controlling of processes and product characteristics during production and installation.

Continuous monitoring and/or conformance with documented procedures is required during special processes, such as welding, nondestructive testing, and heat treatment, where the results will impact quality of the final product, but where inspection after the fact will not reveal the deficiencies.

Ensure that work is performed in the proper sequence. For example, welds should be inspected before they are painted. Earth should be compacted before concrete is poured. Documented work instructions can help with sequence control where there is complex work or when there are multi-disciplined interfaces.

Procedures or guidance to be in conformance with contract and FTA Guidelines for Control of special processes by the Trade Contractors.

Sequence of work must be identified by subcontractor prior to final fabrication on installation. Documented work inspections are required per DFOW Preparatory meeting and will be the basis for process control.

8.0 ELEMENT 8 INSPECTION AND TESTING

8.1 QUALITY INSPECTIONS

8.2 INSPECTION AND TESTING LABORATORY SERVICES

8.3 COORDINATION MEETING

8.4 TESTS

8.5 INDEPENDENT TESTING FIRM REPORTING REQUIREMENTS

8.6 TJPA CODE AND AGENCY TESTING AND INSPECTION

8.7 TJPA SPECIAL INSPECTION AND TESTING

8.8 INSPECTION REQUEST PROCEDURE

8.9 TEST AND INSPECTION PROCEDURES BY TRADE SUBCONTRACTORS

8.10 CONTROL VERIFICATION AND ACCEPTANCE TESTING PROCEDURE

8.11 PUNCH-OUT INSPECTION

8.12 PRE-FINAL INSPECTION

8.13 FINAL ACCEPTANCE INSPECTION

8.14 EXAMPLES OF DFOW CHECKLISTS

8.0 INSPECTION AND TESTING

8.1 QUALITY INSPECTIONS

The Webcor/Obayashi JV Quality Control Manager or CQC Manager's alternate will verify that Trade Subcontractors are meeting the requirements outlined in the TJPA Quality Management System Manual, sections 8.5.1 Inspection and Test Planning and 8.5.2 Contractor Inspection Requirements, to provide documented evidence of inspections, lab reports and test results as required per contract. The Trade Subcontractors will also perform required inspections of all purchased items, perform source inspections, perform first article inspections and perform end process inspections and testing. Webcor &Trade Subcontractors personnel will receive training on methods to physically inspect and document critical structural DFOW components prior to ISI inspection as TJPA's 3rd Party Inspector.

Inspection and Testing- Inspection and testing procedures should be planned and executed as necessary to verify quality. Procedures should be specified, implemented, and the results documented for receiving incoming products, and for final inspection and testing.

When products are delivered to W/OJV, it is the responsibility of W/OJV and trade subcontractor QC Manager to verify they are in conformance with requirements. Verification should be in accordance with the Quality Plan or documented procedures. The extent of receiving inspection can vary with the amount of inspection at the source, the safety criticality of the product, and the confidence in the quality procedures of the supplier.

In process testing and inspection of the work to verify conformance of an item or work activity to specified requirements, should be in a conformance with the Quality Plan on documented procedure process and balance to quality. Both inspection and process monitoring methods shall be performed, as necessary, to ensure that the specified requirements for the control of work processes and the quality of the item are being achieved throughout the duration of the work.

Final inspection and testing should ensure that all specified inspections and tests, including those specified for receipt of product or in-process work, have been carried out and the resulting data meet specifications. Final inspection and testing should be carried out and properly documented to ensure conformance of the finished product to the specifications.

Records should be maintained of the various inspections and tests to provide evidence that the product has passed inspection and/or test with defined acceptance criteria.

8.2 INSPECTION AND TESTING LABORATORY SERVICES (SPEC. SECTION 01 14 00)

Where specified, the TJPA Representative will appoint, employ, and pay for services of an independent firm to perform inspections, testing, and other services specified in individual specification sections and as required by the TJPA Representative.

Where specified, trade subcontractors will appoint, employ, and pay for services of an independent firm to perform inspections, testing, and other services specified in individual specification sections.

Control, verification, and acceptance testing procedures for each specific test to include the test name, specification paragraph requiring test, feature of work to be tested, test frequency, and person responsible for each test. (Laboratory facilities approved by the TJPA Representative must be used.)

8.3 COORDINATION MEETING (SPEC. SECTION 01 14 00 - 1.7)

After the pre-construction conference for each Trade Work Package, before start of construction, Contractor and Trade subcontractor shall meet with the TJPA Representative and TJPA QA Manager and discuss the Contractor's quality control system as it relates to the work of the trade package. Submit the CQC Plan a minimum of 15 days prior to the coordination meeting. During the meeting, a mutual understanding of the system details must be developed, including the forms for recording the CQC operations, control activities, testing, administration of the system for both onsite and offsite work, and the interrelationship of Contractor's management and control with the TJPA Representative's quality assurance. Minutes of the meeting will be prepared by the TJPA Representative, signed by both the Contractor and the TJPA Representative and will become a part of the Contract file. There may be occasions when subsequent conferences will be called by either party to confirm mutual understandings and/or address deficiencies in the CQC system or procedures that may require corrective action by the Contractor.

8.4 TESTS (SPEC. SECTION 01 14 00 1.10)

Trade subontractor shall perform specified or required tests to verify that control measures are adequate to provide a product that conforms to Contract requirements. Upon request, Contractor shall furnish to the TJPA duplicate samples of test specimens for possible testing by the TJPA. Testing includes operation and/or acceptance tests when specified. Procure the services of a certified testing laboratory. Perform the following activities and record and provide the following data.

- Verify that testing procedures comply with contract requirements.

- Verify that facilities and testing equipment are available and comply with testing standards.
- Check test instrument calibration data against certified standards.
- Verify that recording forms and test identification control number system, including all of the test documentation requirements, have been prepared.
- Record results of all tests taken, both passing and failing on the CQC report for the date taken. Specify paragraph reference, location where tests were taken, and the sequential control number identifying the test. If approved by the TJPA Representative, actual test reports may be submitted later with a reference to the test number and date taken. Provide an information copy of tests performed by an offsite or commercial test facility directly to the TJPA Representative. Failure to submit timely test reports as stated may result in nonpayment for related work performed and disapproval of the test facility for this Contract.

1.2. B Trade Subcontractor's QC service responsibilities:

- "Cooperate with testing agency personnel.
- Provide access to the Work.
- Obtain and handle samples of materials and equipment as defined in Section 01 13 00, Submittals.
- Furnish storage and assistance as requested.
- Facilitate inspections and tests.
- Notify the TJPA Representative in writing a minimum of 48 hours, excluding weekends and holidays, but not more than 72 hours prior to expected time for operations requiring as needed testing or inspection services.
- Schedule work to be tested or inspected to allow tests to be performed within reasonable time period.
- Where required, deliver samples to testing agency.
- When a specified test or inspection is not performed due to Contractor's failure to notify the TJPA Representative as specified or when material, or workmanship is not ready at the time specified, the TJPA Representative will establish remedial work, and Contractor shall bear the cost of remedy.
- Take steps necessary to ensure no portion of the work requiring testing or inspection is covered prior to acceptance by authorized parties.

- Ensure that no testing or inspection is scheduled until all approvals for the work have been received. This includes welder's certifications, submittals, design/build engineering stamp, and certification".

1.3. A

"Contractor shall verify all dimensions in the field and shall check all field conditions continuously during construction. Contractor shall inspect related and appurtenant work and report in writing to the TJPA Representative any conditions that will prevent proper completion of the Work in accordance with the requirements of the Contract, Trade Subcontractor's QC service responsibilities."

1.3. B

"Contractor shall be responsible for any Work that is non-conforming. Any required removal, repair, or replacement caused by non-conforming work shall be done by Contractor at no cost to the TJPA. Such nonconforming work will be considered as defective and payments will be withheld in accordance with Section 00 07 00, General Conditions, paragraphs 9.05 and 9.08."

1.3. C

"Contractor shall be responsible for recording all changes and modifications to the Contract work as required by site conditions and inspections in accordance with the requirements of Section 01 17 20, Project As-Built Drawings."

8.5 INDEPENDENT TESTING FIRM REPORTING REQUIREMENTS

1.5. A

"Where specified, the TJPA Representative will appoint, employ, and pay for services of an independent firm to perform inspections, testing, and other services specified in individual specification sections and as required by the TJPA Representative, or the TJPA Representative will perform the inspection and testing services."

"Inspection reports will be submitted promptly by the independent firm in triplicate and distributed, one copy each, to the TJPA Representative, Webcor/Obayashi JV QC Manager, and the code authority having jurisdiction over the Project and will indicate observations and results of tests and compliance or noncompliance with the requirements as defined in the technical specifications."

8.6 TJPA CODE AND AGENCY TESTING AND INSPECTIONS

Work shall be subject to testing and inspection by representatives of the TJPA and other agencies having jurisdiction (Code and Agency Inspections) to assure compliance with all requirements of Section 00 07 00, General Conditions, and Paragraph 8.02 and as per code requirements.

8.7 TJPA Special Inspection and Testing

Where specified, the TJPA Representative will appoint, employ, and pay for services of independent firms to perform inspections, testing, and other services specified in individual specification sections and as required by the TJPA Representative or the TJPA Quality Assurance Representative will perform the inspection and testing services.

8.8 Inspection Request procedure

- The Trade Subcontractors CQC Manager will verify that all prerequisites as defined by the contract specifications are completed prior to Code, Agency or Special Inspections. Inspection Request will be submitted to the Webcor/Obayashi JV CQC Manager or CQC Alternate and the TJPA Construction Management Oversight Manager 48 hours and not more than 72 hours prior to the inspection date. Inspection Requests for Code, Agency and Special Inspections require an “Inspection Request Form” to be completed in BIM 360 Systems by Webcor/Obayashi JV or the Trade Subcontractors CQC Manager. The Trade Subcontractor’s CQC Manager will facilitate onsite inspections, sampling procedures, test reports, and provide notification to the Webcor/Obayashi JV CQC Manager and TJPA representative when inspections fail or test results fall below specified values. Notify Turner if 48 hour notice cannot be met. Inspections will be submitted 48 hours (by 3:00pm) prior to the inspection date.
    - Day 1 3:00pm is cut off time for any inspection on Day 3
    - Thursday 3:00pm is cut off time for any inspection on the weekend or following Monday:
    - Friday 3:00pm is cut off time for any inspection on the following Tuesday or later.

8.9 Test and inspection procedures by Trade Subcontractors

When specified, the Trade Subcontractors shall include as part of their scope all tests to verify that the Work conforms to the Contract Documents and to the Quality Control specification section 01 14 00 Rev 0 paragraph 1.10A Tests. Contractor shall perform specified or required tests to verify that control measures are adequate to provide a product that conforms to Contract requirements. Upon request, Contractor shall furnish to the TJPA Representative duplicate samples of

test specimens for possible testing by the TJPA. Testing includes operation and/or acceptance tests when specified. Procure the services of a certified testing laboratory. Perform the following activities and record and provide the following data:

1. Verify that testing procedures comply with the contract documents-Per Code and Contract Requirements.
2. Verify that all inspection prerequisites are met prior to conducting inspections.
3. Submit a testing and inspection matrix with the design submittals showing all required inspections and the entity responsible for performing the tests or inspections, *per DFOW requirements*.
4. Track inspection and test status.
5. Verify that the facilities and testing equipment are available and comply with the testing standards. As per approved submittals.
6. Trade Contractors and Suppliers shall have documented procedures to ensure test equipment is in calibration and keep updated lists of all equipment requiring calibration. Trade Contractor shall make calibration records available for review.
7. Record results of tests taken, both passing and failing on the trade subcontractor's daily CQC report for the date taken. Specify paragraph reference, location where tests were taken. Maintain a current test results spreadsheet per each different component.
8. When the services of an independent firm are utilized, reports will be submitted promptly by the independent firm in triplicate and distributed, one copy each, for the TJPA Representative, Webcor/Obayashi JV, and the code authority having jurisdiction over the Project and will indicate observations and results of tests and compliance or noncompliance with the Contract.
9. When specified, the Trade Subcontractors shall produce test and inspection plans in accordance with the Program Quality Management System requirements. All testing and measurements specified to be performed by the Trade Subcontractors shall be performed with equipment whose calibration
10. Meets national standards and to documented standards when no national standard exists.
11. Maintain and submit a log indicating the status of the Trade Subcontractors inspections and tests.
12. Verify that facilities and testing equipment are available and comply with testing standards.
13. Check test instrument calibration data against certified standards.

14. Verify that recording forms and the test identification control number system, including all of the test documentation requirements, have been prepared. Upload test records to BIM 360.
15. Record results of all tests taken, both passing and failing, on the CQC report for the date taken. Specify paragraph reference, location where tests were taken, and the sequential control number identifying the test. If approved by the TJPA Representative, actual test reports may be submitted later with a reference to the test number and date taken. Provide directly to the TJPA Representative an information copy of tests performed by an offsite or commercial test facility. Failure to submit timely test reports as stated may result in nonpayment for related work performed and disapproval of the test facility for this Contract.
16. WOJV and Subcontractors must confirm activates are ready for inspection prior to ISI start.
17. Verify to the Webcor/Obayashi JV CQC Manager of Trade Subcontractors task completion prior to the work being inspected.
18. Verify to the Webcor/Obayashi JV CQC Manager of Trade Subcontractors task completion prior to requesting final inspections.
19. Facilitate inspections and tests.
20. Cooperate with testing agency personnel.
21. Provide access to the Work.
22. Obtain and handle samples and equipment as defined in section 01 13 00 Submittals. Furnish storage and assistance as requested.
23. Trade Subcontractor shall include within their quality control plan per Specification Section 01 16 00 Material and Equipment, article 1.3 Quality Assurance, procedures for full protection of Work and materials.
24. Where required, deliver samples to testing agency.
25. Take steps to ensure no portion of the work requiring testing or inspection is covered prior to the acceptance by authorized parties.
26. Ensure that no testing or inspection is scheduled until all approvals for the work have been received. This includes welder's certifications, submittals, design/build engineering stamp and certification.
27. Notify the TJPA Representative in writing a minimum of 48 hours. Excluding weekends and holidays, but not more than 72 hours prior to expect time for operations requiring as needed testing and inspections.
28. DFOW task checklist will be implemented to assist with inspections and comply with the required codes and contract requirements.
    A. The frequency of checklist reviews and style of checklist will vary for each DFOW task. The DFOW initial phase process will identify which entity (TJPA, W/O, Subcontractor) is performing what type of checklist review, the

frequency for check list reviews during the initial installation and follow up phases, and the style of checklist reviews.. The base understanding is that, each entity shall maintain records.

i. Subcontractor's:
    1. Procedural Review Checklist.
        a. Confirm that submittals are approved before starting work, confirm that inspections have been scheduled, confirm that inspections as-builds are being maintained, confirm that protection of material is in place.
    2. Material Controls Checklist,
        a. Each sub, for each key sequence, need to identify how they maintain records such that a deficiency in the field can be tracked back to the delivery/fabrication process. A material control checklist is the sub's QC representative review and confirmation that those procedures are being followed.
    3. Completed Installation Technical Verification Checklist,
        a. This is the detailed list of installation requirements that the sub confirms prior to calling for an inspection.

ii. W/O QC:
    1. Procedural Review Checklist
        a. Has the sub completed their technical check list, are they protecting their materials, have they complete a material controls checklist, etc.
    2. Select Installation Technical Verification Checklist
        a. Selected items within a particular W/OJV DFOW task checklist are checked by W/OJV and used to spot check/confirm that the sub's detailed checklist is accurate. Why will these vary? Because with some scopes, i.e. Welding we don't have the accreditation to make any technical evaluations – it will be a procedural review for us. On the other hand, Rebar – it's Quantity, spacing, type of bar – things that can be visually confirmed and therefore we will do some technical reviews.

iii. TJPA:

1. Procedural Review Checklist

8.10 CONTROL VERIFICATION AND ACCEPTANCE TESTING PROCEDURES

When specified, The Trade Subcontractors CQC Managers will provide control, verification, and acceptance testing procedures for each specific test to include the test name, specification paragraph requiring test, feature of work to be tested, test frequency, and person responsible for each test. (Laboratory facilities approved by the TJPA Representative must be used.).

When specified, specific control verification and acceptance testing procedures will be provided by the Trade Subcontractors as part of the Trade Subcontractors CQC plans, and will be completed as the specification sections are defined and the Trade Subcontractors are added to the project

8.11 PUNCH-OUT INSPECTION

An inspection of the Work will be conducted by the Trade Subcontractor QC Manager and verified by the Webcor/Obayashi JV CQC Manager, near the end of Trade Subcontractor's work. The punch list, entered into BIM 360 Systems, will include items that do not conform to the approved Drawings and Specifications and the estimated date by which the deficiencies will be corrected. A second inspection by the Trade Subcontractor CQC Manager will ascertain that all deficiencies have been corrected. Once this is accomplished the TJPA Representative will be notified that the facility is ready for the TJPA pre-final inspection.

8.12 PRE-FINAL INSPECTION

The TJPA Representative will perform the pre-final inspection to verify that the facility is complete and ready to be occupied. A TJPA Representative pre-final punch list may be developed as a result of this inspection. Webcor/Obayashi JV will ensure that all items on this list have been corrected before notifying the TJPA Representative, so that a final inspection can be scheduled. Items noted on the pre-final inspection will be corrected in a timely manner. These inspections and any deficiency corrections required by this paragraph must be accomplished within the time slated for completion of the entire work or any particular increment of the Work if the Project is divided into increments by separate completion dates.

8.13 FINAL ACCEPTANCE INSPECTION

The CQC System Manager, plus the Contractor's authorized representative and the TJPA Representative must be in attendance at the final acceptance inspection. Additional personnel from affected third parties may also be in attendance. The final acceptance inspection will be formally scheduled by the TJPA Representative based upon results of the pre-final inspection. The TJPA Representative will be notified at least 72 hours prior to the final acceptance inspection and include the Contractor's assurance that all punch list and nonconforming work will be complete and acceptable by the date scheduled for the final acceptance inspection.

Summary

Name	Mud Slab Checklist Details
Description	• Printable version of your QA/QC, Safety, and Commissioning Checklists with responses and comments • Optionally include checklist attachments and details of issues generated from the checklist
Report run on	30 Aug 2013 11:59 AM
Number of pages	2 including this summary page

Parameters

Show attachments: Checklist Details

Include comments: Yes

Include custom fields: Yes

Include issue details: Yes

Include n/a and blank responses: Yes

Include signatures: Yes

Show cover page: Yes

Report name: Mud Slab Checklist Details

Output format: Checklist Details

Show related equipment as: Checklist Details, Equipment Name

Details

ID	000358	**Company**	<not set>
Name	WO - Mud Slab Concrete Pre-Placement Form	**Priority**	Medium
Description		**Status**	Open
Author	lkowallis@webcor.com	**Location**	<Top level>
Created On	30 Aug 2013 11:59 AM		
Tags			

Checklist Items

Item #	Item Text	Response	Comments	# Issues
Mud slab Concrete Pre-Placement Checklist				
MUDS-1	Enter Review Area			0
MUDS-2	Subgrade elevation for 4" slab checked by BBII (+/- 1/2")	Yes		0
MUDS-3	Location and count of pits per latest Drawings	Yes		0
MUDS-4	Location of pits verified and survyed	Yes		0
MUDS-5	Backfill compaction acceptance testing (BY ISI)			0
MUDS-6	Subgrade ready to inspect	Yes		0
MUDS-7	Subgrade acceptance by Arup			0
MUDS-8	Grounding installed and accepted			0
MUDS-9	Geothermal piping installed, tested, backfilled, accepted			0
MUDS-10	Subgrade elevation restored and checked	Yes		0
MUDS-11	Waterproofing/Butyl tape on all penetrations accepted	Yes		0
MUDS-12	Micropiles installed	Yes		0
MUDS-13	Micripiles tested (and/or blocked out)	Yes		0
MUDS-14	Rebar installed and accepted	Yes		0
MUDS-15	Elevation benchmarks established for concrete finishing	Yes		0
MUDS-16	Concrete placement area clearly delineated	Yes		0
MUDS-17	Concrete placement area cleared of all debris	Yes		0
MUDS-18	All micropiles grout tubes filled with grout	Yes		0
MUDS-19	All micropile grout exposed and free of soil and ridges	Yes		0
MUDS-20	Waterproofing protection installed	Yes		0
MUDS-21	Subgrade screed bars, ridges and forms installed	Yes		0

WO0000-011400W01.10 - Contractor Quality Control Plan

WO-CQC0001 - Contractor Quality Control Plan

Summary

Name	Waterproofing Checklist Details
Description	• Printable version of your QA/QC, Safety, and Commissioning Checklists with responses and comments • Optionally include checklist attachments and details of issues generated from the checklist
Report run on	30 Aug 2013 12:43 PM
Number of pages	3 including this summary page

Parameters

Show attachments: Checklist Details

Include comments: Yes

Include custom fields: Yes

Include issue details: Yes

Include n/a and blank responses: Yes

Include signatures: Yes

Show cover page: Yes

Report name: Waterproofing Checklist Details

Output format: Checklist Details

Show related equipment as: Checklist Details, Equipment Name

Details

ID	000359	**Company**	<not set>
Name	QC - Grace Subgrade Waterproofing	**Priority**	Medium
Description		**Status**	Open
Author	lkowallis@webcor.com	**Location**	<Top level>
Created On	30 Aug 2013 12:06 PM		
Tags			

Checklist Items

Item #	Item Text	Response	Comments	# Issues
	Substrate Sign-Off checklist			
	Enter Review Area			0
C01	Are there any voids greater than .5 inches?	No		0
C02	Is there missing grout around any penetrations?	No		0
C03	Is there loose aggregate?	No		0
C04	Are there sharp protrusions?	No		0
C05	Is there any standing water?	No		0
CO6	Is there substrate more than .5" out of alignment for vertical surfaces?	No		0
	Membrane Installation:			
F01	Is the temperature below 25 F (-4 C) during installation?	No		0
F02	Did installer fail to use Tape LT during installation when temperature is less than 55 F (13 C)?	No		0
	Tape LT Installation on Membrane:			
G01	Was the surface dirty or have debris on it during installation?	No		0
G02	Was the surface wet during installation?	No		0
G03	Is the release liner still in place after installation?	No		0
	Membrane Horizontal Applications:			
H01	Is the HDPE film side faced away from substrate?	No		0
H02	Are the end laps missing the stagger?	No		0
	Membrane Horizontal Overlap Requirements			
I01	Is the overlap less than 3" along marked selvedge?	No		0
I02	Is/was the underside of succeeding sheet dirty or wet?	No		0
I03	Is the release liner remaining in the overlap?	No		0
I04	Did the overlap fail to achieve a continuous bond?	No		0

WO0000-011400W01.10 - Contractor Quality Control Plan
WO-CQC0001 - Contractor Quality Control Plan

Item #	Item Text	Response	Comments	# Issues
Membrance Vertical Applications:				
J01	Is the HDPE film side faced away from substrate?	No		0
J02	Is/was the underside of succeeding sheet dirty or wet?	No		0
J03	Is the plastic release liner still in place?	No		0
J04	Are the fasteners different than the submittal?	No		0
J05	Are fasteners in selvedge large or high profile?	No		0
Vertical Roll Edges & Cut Edges				
K01	Is the overlap less than 3"?	No		0
K02	Are their contaminants present?	No		0
K03	Is the Tape LT application off center?	No		0
K04	Is the release liner still in place on the LT tape?	No		0
Membrane Repair (Small .5" or less)				
L01	Is the damaged area dirty or otherwise not prep'd for repair?	No		0
L02	Is the damaged area missing Preprufe Tape?	No		0
L03	Is Preprufe Tape installed off center from the damaged area?	No		0
L04	Was the LT Tape release liner left in place?	No		0
Membrane Repair (Large > .5")				
M01	Is the damaged area dirty or otherwise not prep'd for repair?	No		0
M02	Is the damaged area missing a Preprufe membrane?	No		0
M03	Is edge of the repair membrane less than 6" beyond damaged area?	No		0
M04	Are the patched edges missing Preprufe tape?	No		0
M05	Is the Prepruf tape off center from the edge?	No		0
M06	Was the release liner left on the T Tape?	No		0
M07	Did the edges fail to achieve adhesion?	No		0

WO0000-011400W01.10 - Contractor Quality Control Plan

WO-CQC0001 - Contractor Quality Control Plan

Summary

Name	Protection slab Pre-placement Checklist Details
Description	• Printable version of your QA/QC, Safety, and Commissioning Checklists with responses and comments • Optionally include checklist attachments and details of issues generated from the checklist
Report run on	30 Aug 2013 12:09 PM
Number of pages	4 including this summary page

Parameters

Show attachments: Checklist Details

Include comments: Yes

Include custom fields: Yes

Include issue details: Yes

Include n/a and blank responses: Yes

Include signatures: Yes

Show cover page: Yes

Report name: Protection slab Pre-placement Checklist Details

Output format: Checklist Details

Show related equipment as: Checklist Details, Equipment Name

Protection slab Pre-placement Checklist Details

Details

ID	000360	**Company**	<not set>
Name	WO - Protection Slab Concrete Pre-Placement Form	**Priority**	Medium
Description		**Status**	Open
Author	lkowallis@webcor.com	**Location**	<Top level>
Created On	30 Aug 2013 12:08 PM		
Tags			

Checklist Items

Item #	Item Text	Response	Comments	# Issues
Protection Slab Concrete Pre-Placement Checklist				
	Enter Review Area			0
PS-1	Horizontal Waterproofing Inst.			0
PS-2	Vertical Waterproofing Inst.			0
PS-3	Survey CJ's/Pour Area Est.			0
PS-4	Horizontal pre-prufe tape @ CJ's			0
PS-5	Vertical pre-prufe tape @ CJ's			0
PS-6	Protection of piles/penetration sleeves installed			0
PS-7	Protection of vertical waterproofing installed			0
PS-8	Protection of Horizontal waterproofing installed			0
PS-9	Pit corners surveyed and vertical line established			0
PS-10	Screeds set to elevation -40.67			0
PS-11	Edge form installed			0
PS-12	Access path for concrete placing crew installed			0
PS-13	Slick-line hose clamp protection discs installed			0
PS-14	Area clear of debris			0
PS-15	Clean soiled membrane			0
PS-16	Obtain as-build survey of mud slab elevations			0
PS-17	Sealed protection slab with foam against spill and bleeding concrete thru joint			0
PS-18	Reference Best check off list for completed items			0
PS-19	Cast Concrete within 56 days from WP membrane installation			0
PS-20	Concrete mix design approved			0
PS-21	SGH inspected WP prior to pour			0
PS-22	Sharp objects are not used in consolidating concrete			0

WO0000-011400W01.10 - Contractor Quality Control Plan

WO-CQC0001 - Contractor Quality Control Plan

Item #	Item Text	Response	Comments	# Issues
PS-23	Formwork remains till concrete is 1500 psi			0
Best Waterproofing Installation Checklist				
	Enter Review Area			0
PS-24	CDSM Substrate sign off			0
PS-25	Protection Board - Fastened with Hilti pins at 12" on center			0
PS-26	Protection Board - 4" shingle at end laps and tightly buttted at side laps			0
PS-27	Drainage Composite - Adhesive applied to Protection Board and time allowed to flash off			0
PS-28	Drainage Composite - Extends 3" into gravel bed			0
PS-29	EPS insulation - Adhesive applied to Drainage Composite and time allowed to flash off			0
PS-30	EPS Insulation - No less then 1/4" gap in but joints			0
PS-31	ESP Substrate Sign off			0
PS-32	10 mil Visqueen - Fastened with temporaty Terminatin bar above line of concrete pour			0
PS-33	Grace Preprufe 300R - Fastened with temporatry terminatin bar above line of concrete pour			0
PS-34	Grace Preprufe 300R - 6" Bituthene 3000 back-seal at all laps			0
PS-35	Grace Preprufe 300R - Remove release sheet			0
PS-36	Grace Preprufe Tape - No Fishmouths			0
PS-37	Grace Preprufe Tape - Minimum 6" Liquid Membrane at all end laps before tape installation			0
PS-38	Grace Preprufe Tape - 8" CJ tape centered over all cold joints			0
PS-39	Final Inspection for damage prior to rebar installation			0
PS-40	Final Inspection for damage form installation and concrete pour			0
Pre-Pour Concrete Requirements:				
PS-41	Is release liner remaining on any surface	No		0
PS-42	Did placement crew fail to get training on protection of waterproofing prior placement	No		0
Waterstop - ADCOR ES (General)				
PS-43	Are there 90 degree, or more, bends missing ADCOR ES	No		0
PS-44	Are there damaged sections present	No		0
PS-45	Did ADCOR get wet prior to pouring concrete	No		0
PS-46	Is ADCOR ES encapsulated w/ less than 3" of concrete cover	No		0

WO0000-011400W01.10 - Contractor Quality Control Plan

WO-CQC0001 - Contractor Quality Control Plan

Item #	Item Text	Response	Comments	# Issues
PS-47	Is ADCOR ES being stored in opened packaging	No		0
PS-48	Did the disposal of ADCOR ES fail to meet environmental requirements	No		0
PS-49	Is ADCOR ES being used in a movement joint	No		0
Waterstop - ADCOR ES (Control Joints)				
PS-50	Is the concrete surface dirty or have contaminates	No		0
PS-51	Is there debris or loose concrete at the control joint	No		0
PS-52	Are the irregular or unformed surfaces missing a bead of ADCOR ES adhesive	No		0
PS-53	Is the bead of ADCOR ES adhesive at irregular or unformed surfaces less than 1/2"	No		0
PS-54	Is the Adcor ES missing masonry nails	No		0
PS-55	Are the masonry nails less than 1-1/2" long	No		0
PS-56	Are the masonry nails less than 3/4" in diameter	No		0
PS-57	Are the washers at the masonry nails less than 3/4"	No		0
PS-58	Are 3/4 washers missing from the nails	No		0
PS-59	Are the fasteners spaced greater than 12"	No		0
Waterstop - ADCOR ES (Pipe Penetrations)				
PS-60	Was/Is the substrate wet at time of application	No		0
PS-61	Is the penetration missing a bead of ADCOR ES adhesive	No		0
PS-62	Is the bead of ADCOR ES adhesive less than 1/2"	No		0
PS-63	Is the bead un-tooled w/ brush / trowel	No		0
PS-64	Was the Adcor ES applied while adhesive was wet to touch	No		0
Waterstop - ADCOR ES (ES Joints)				
PS-65	Is the ADCOR ES joint missing an overlap	No		0
PS-66	Is the ADCOR ES joint overlap less than 4"	No		0
PS-67	Does overlap fail to adchieve full contact between pieces	No		0

9.0 ELEMENT 9 INSPECTION, MEASURING AND TEST EQUIPMENT

9.1 INTRODUCTION

9.2 INSPECTION, MEASURING AND TEST EQUIPMENT (M&TE)

9.3 CONTROL OF MEASURING AND TEST EQUIPMENT

9.4 RESOLUTION OF TESTS RESULTS FROM UN-CALIBRATED EQUIPMENT

9.5 TEST REPORTING

9.0 INSPECTION, MEASURING AND TEST EQUIPEMENT

9.1 INTRODUCTION

Trade Subcontractor and supplier shall comply with this Element as required per contract documents.

9.2 INSPECTION, MEASURING AND TEST EQUIPMENT (M&TE)

- Inspection, measuring, and testing equipment required to carry out inspection and testing shall be identified, controlled, calibrated, and maintained in order to demonstrate the conformance of work to the specified requirements. Provisions shall be made for recalibration of such equipment in a timely manner and documented.

- Inspection, measuring, and test equipment used will meet the standards of accuracy for the measurements which are required. The equipment shall be calibrated according to national standards where available, and to documented standards where no national standards exist. The equipment will be recalibrated at regular intervals, and the recalibration properly documented. A record of the equipment calibration status shall be maintained by the Contractor.

- A schedule of testing equipment that needs periodic and regulatory scheduled calibration shall be required of the contractor(s) and be checked by TJPA QA Representative.

- The equipment shall be properly maintained to ensure its fitness for use. When the equipment is in use, the user shall ensure that the environmental conditions are suitable for the use of the equipment. When inspection, measuring, or test equipment is found to be out of calibration, the validity of previous inspection and test results shall be assessed and documented.

- All calibrated gauges and calibrated testing equipment must be calibrated prior to its use on the project. Periodic calibrations must be performed in accordance with certifying agency requirements and industry practice. The equipment will be properly maintained to ensure its fitness for use. When in use, the user shall ensure that the environmental conditions are suitable for the use of the equipment. When inspection, measuring, or test equipment is found to be out of calibration, the validity of previous inspection and test results shall be assessed and documented.

9.3 CONTROL OF MEASURING AND TEST EQUIPMENT

Inspection, measuring, and test equipment used shall be identified, controlled, calibrated. M&TE shall be properly calibrated and currently certified.

Calibration records and procedures shall meet the following requirements:

- Measuring and test equipment will be positively identified as to its name, calibration lab, date of last calibration and calibration expiration.
- Measuring and test equipment shall be calibrated against standards that have a known, valid relationship to national standards prior to use, and periodically thereafter, if required, to provide for the accurate reporting of quality testing and inspection results. In case no national standard exists, the basis for calibration will be identified and documented.
- The tolerances used in calibration shall be in accordance with the manufacturer's recommendation or as otherwise specified.
- An independent calibration laboratory shall perform all calibration.
- Environmental conditions for calibration shall be consistent with the location where inspection and testing is performed.
- Each subcontractor must maintain a spreadsheet for all calibrated instruments and their re-calibration dates with reminders on when the next calibration is required.
- Calibration shall be performed in accordance with approved calibration procedures. These procedures shall specify the following:
    - Details of equipment type
    - Identification number
    - Location (as required)
    - Calibration method and frequency
    - Acceptance criteria
    - Action to be taken if results are unsatisfactory

9.4 RESOLUTION OF TESTS RESULTS FROM UN-CALIBRATED EQUIPMENT

Results from tests requiring calibrated equipment performed with equipment not currently in calibration shall be suspect. The test equipment used shall be tested and recalibrated. If the equipment is found to be within calibration limits, the test

results shall be accepted. If the equipment is not found to be within calibration limits, the tests results must be verified by other means, or the material in question replaced.

9.5 TEST REPORTING

Inspection and test status are documented in BIM 360 and includes the Trade Subcontractors Daily Quality Control reports.

10.0 ELEMENT 10 INSPECTION, TEST AND OPERATING STATUS

10.1 OVERVIEW

10.2 PROCEDURE

10.0 INSPECTION, TEST AND OPERATING STATUS

10.1 OVERVIEW

Where required by the contract documents, Trade Subcontractors shall provide means for identifying the inspection and test status of work during production and installation. The purpose of this Element is to ensure that only work that has passed the required inspections and tests are accepted.

10.2 PROCEDURE

The test and inspection status shall be identified by means of markings, stamps, tags, labels, routing cards, inspections records, test software, physical location, or other suitable means.

The status identification indicates the conformance or nonconformance with regard to inspections and tests performed.

The inspection of test status of planning and design documents shall be identified by suitable means that indicate the conformance on nonconformance of product with regard to checking and review performed.

While some operations may be easily tagged in the field, in the testing lab or shop as to their inspection status, most will be recorded in the construction management BIM 360 program through status reports.

11.0 ELEMENT 11 ***NONCONFORMANCES***

11.1 OVERVIEW

11.2 NON-CONFORMANCE OBSERVATIONS AND REPORTING

11.3 NON-CONFORMANCE REPORT (NCR)

11.4 FIELD CONDITION REPORT (FCR)

11.5 NON-CONFORMANCE AND FIELD CONDITION REPORTS LOG

11.6 CONTROL THE CONTINUATION OF WORK

11.0 NONCONFORMANCE

11.1 OVERVIEW

W/OJV and Trade Subcontractors are responsible to identify and document nonconformance issues with W/OJV expected to use BIM 360 to document QA/QC issues, FCR's and Nonconforming construction. Once a nonconformance is identified by an inspection, there is a systematic method to control the item, correct it, and ensure that project quality is not adversely impacted by the event.

11.2 NONCONFORMANCE QA ISSUES, OBSERVATIONS, REPORTING AND FIELD CONDITION REPORTS (FCR)

A Nonconformance is an item that does not meet the requirements of the project Contract Documents. Nonconforming work will be immediately segregated. Segregation may occur by physical isolation and cordoning off of work/materials, or conspicuously identified by tags/markings when physical isolation is not possible. When Nonconforming work is discovered it is determined by the QA/QC and engineer of Record to be a Nonconformance. The Webcor/Obayashi JV CQC Manager or Trade Subcontractor QC Manager will complete a Non-Conformance Report (NCR) and enter the non-conformance issue into BIM 360 for status reporting and resolution/closure tracking.

Procedures will be established and maintained to control nonconforming work, in order to ensure that such work is not inadvertently used or installed. Nonconforming work will be identified, documented, and evaluated to determine appropriate disposition. Where practicable, nonconforming items will be segregated. Those activities affected by the nonconforming work will be notified. The responsibility for review and authority for the disposition of nonconforming work will be defined in documented procedures. Disposition of nonconforming work can include reworking it to meet requirements, accepting it with or without repair, using it for alternative applications, or scrapping it. A determination to accept nonconforming work, as is or with repair, shall have the concurrence of the engineer of record. It may be advantageous to the owner to negotiate some form of compensation for accepting nonconforming work (e.g., additional spare parts).

The TJPA Representative will notify the Contractor of any detected noncompliance. Take immediate corrective action after receipt of such notice. If the Contractor fails or refuses to comply promptly, the TJPA Representative may issue an order stopping all or part of the work until satisfactory corrective action

has been taken. No part of the time lost due to such stop orders will be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

Contractor shall be responsible for any Work that is non-conforming. Any required removal, repair, or replacement caused by non-conforming work shall be done by Contractor at no cost to the TJPA. Such non-conforming work will be considered as defective and payments will be withheld in accordance with Section 00 07 00, General Conditions, paragraphs 9.05 and 9.08.

Retesting required because of non-conformance to specified requirements shall be performed by the same independent firm on instructions by the TJPA representative. Contractor shall bear all costs for such retesting at no additional cost to the TJPA.

Procedures in BIM 360 will be used for tracking construction deficiencies from identification through acceptable corrective action and there the closure of the issue. Established verification procedures that identified deficiencies have been corrected.

Follow-up Phase: CQC System Manager and Trade Subcontractor QC Managers shall perform daily checks to assure control activities, including control testing, are providing continued compliance with contract requirements, until completion of the particular feature of work. Record the checks in the CQC documentation. Conduct final follow-up checks and correct all deficiencies prior to the start of additional features of work that may be affected by the deficient work. Do not build upon or conceal non-conforming work.

11.3 NON-CONFORMANCE REPORT (NCR)

When completing the Nonconformance Report, the W/OJV CQC Manager or Trade Subcontractor QC Manager shall describe the work in detail, its location, a description of the deficiency and the proposed resolution and actions taken to prevent the recurrence of the non-conformance on BIM 360. Supporting documentation shall be attached to clearly describe the issue. The report will be uploaded into BIM 360. Nonconformance Report contents are summarized as follows:

Section 1: Nonconformance identification info: Contractor, location date, etc.
Section 2: Description of Non-conformance
Section 3: Cause

Section 4: Recommended Field Engineer Disposition (Trade Subcontractor CQC Manager)
Section 5: Project Engineering Disposition (TJPA)
Section 6: Disposition Results
Section 7: Corrective action and steps taken to prevent recurrence

Process steps when responding to the receipt of an NCR's

Step 1: QC Manager/QC Specialist notifies subcontractor, in writing (email), of NCR:

Step 1a: sub to provide in response:

- Is the NCR accurate?
- No, then what is the actual field condition (w/ supporting documentation)?
- Yes, then
  - What appears to be the root cause?
  - What remedial steps can the sub perform without the engineer's approval?

Step 1b: Project Manager/QC Manager to:

- Determine if a formal RFI or CAP (corrective action plan) needs to be submitted for prior approval?
- Trade subcontractor generates the RFI to seeking direction for remedial action.

Step 2: Webcor superintendent / QC Field Specialist – review condition in comparison w/NCR

A. Determine if the NCR is accurate,
B. Determine if there are any field indications for cause of the NCR,
C. Review sub's field QC procedures and documentation of DFOW task checklist associated with the subject NCR.

Step 3: Webcor pm, qc Manager, & superintendent meet w/ sub's pm, qc Manager, & foreman to review DFOW preparatory meeting and initial install notes to determine:

A. What step was missed to allow for the NCR?
B. What lesson's learned need to be applied to avoid future NCR?
C. Determine if changes need to be made to the frequency and type of qc reviews are done for the subject scope.

Step 4: submit the cap for the NCR based on information gathered from steps 1 - 3

Step 5: to avoid future NCR of the same type:

A. Schedule an initial phase review of DFOW CHECKLIST. Each DFOW process shall identify WHAT REVIEW is done by who and when. The frequency and type of reviews for the initial installation should be more intense than the follow up phases. An NCR shall reset the clock and increase the review documentation and confirm the corrective actions have been taken.
B. Implement additional actions as determined by the cap review process.

Step 6: trade subcontractor completes the required tasks and generates an inspection request.

Step 7: populate all the pertinent blanks on the NCR form and obtain signatures for compliance...

11.4 FIELD CONDITION REPORTS (FCR)

Field Condition Report (FCR) are conditions that deviate from the approved submittals, installed incorrectly or damaged work, but may be resolved without damage to permanent installation. When completing the Field Condition Report, the Trade Subcontractor CQC Manager will describe the work in detail, its location, Specification, a description of the deficiency, and the proposed resolution and actions taken to prevent the recurrence. The Subcontractor can also provide the disposition, and proposes to close the FCR. W/O JV CQC Manager will review proposed resolution on BIM 360 and either request for TJPA to close it or request for additional information from Sub QC Manager till the issue is resolved in a timely Manner.

Process Steps for writing and closing an FCR issue and the process for completing a NCR

Step 1: A FCR is identified and written by:

a) Observation - Webcor CQC Manager, superintendent/QC Field Specialist or TJPA representative monitoring the work observes a quality issue and create a QC/QA issue in BIM 360.

b) Task checklist - Webcor superintendent/QC Field Specialist is completing a DFOW checklist and observes an issue and creates FCR issue in BIM 360
c) Inspection request (Tasks) – When an inspector rejects an inspection request, a FCR is generated in BIM 360 and linked to the Inspection Request.

Step 1a: When FCR escalates to an NCR:

a. FCR's point to a systemic issue
b. Ignored FCR's (30, 60, 90 days)
c. Latent Issue
d. Corrective Action Plan (CAP) or RFI is required

Step 2: A QC/QA and FCR issue is closed by:

a) Stating the cause of the issue and proposes a corrective action plan (CAP) and submits the CAP in BIM 360.
b) Documents the corrective action taken in BIM 360.
c) Documents the cause and actions taken to prevent recurrence in BIM 360.

Step 2a: A NCR is closed by:

a. Submit the Corrective Action Plan (CAP) for the NCR,

Step 3: To avoid future NCR of the same type:

a) Schedule an Initial Phase Review of DFOW checklist. Each DFOW process shall identify what review is done by who and when. The frequency and type of reviews for the initial installation should be more intense than the follow up phases. An NCR shall reset the clock and increase the scrutiny to review documentation and confirm the corrective actions have been taken.
b) Implement additional action as determined by the CAP review process.

Step 4: Trade Subcontractor completes the required tasks and generates an Inspection Request.

Step 5: QC Manager populate all the pertinent blanks on the NCR Form and obtain signatures for compliance.

11.5 NONCONFORMANCE AND FIELD CONDITION REPORT LOG

The project-wide Non-Conformance Tracking Log in Autodesk BIM 360 is maintained by the TJPA Construction Management Oversight. Webcor/Obayashi JV and the Trade Subcontractors will maintain Non-Conformance logs appropriate for their scope of work.

11.6 CONTROL THE CONTINUATION OF WORK

After the item of work is identified and segregated from all other active work, the W/O JV CQC Manager or Trade Subcontractor QC Manager will determine if work can continue in the affected area. When continuing work can adversely affect quality or hide the defect, work must stop in the affected area until the disposition of the item is resolved. The W/OJV CQC Manager identifies and clearly labels the limits of the affected stop work areas. Non-conforming work may be reworked to meet requirements, accepted as is, repaired, or rejected. If accepted as is or repaired, the Engineer of Record needs to approve the deviation from original specifications. Nonconforming work may require an approved Corrective Action Plan.

12.0 ELEMENT 12 CORRECTIVE ACTION

12.1 INTRODUCTION

12.1 CORRECTIVE ACTION AND CORRECTIVE ACTION PLANS

12.0 CORRECTIVE ACTION PLAN

12.1 INTRODUCTION

The following CAP procedure shall cover all construction operations, both onsite and offsite, including work by Trade Subcontractors and Suppliers. Procedures for tracking construction deficiencies from identification through acceptable corrective action. Establish verification procedures that identified deficiencies have been corrected."

12.2 CORRECTIVE ACTION AND CORRECTIVE ACTION PLANS (CAP)

Corrective action procedures should be established, documented, and maintained. These include procedures for investigation of the cause of nonconforming work and the corrective action needed to prevent recurrence, and procedures for analysis to detect and eliminate potential causes of nonconforming work. This element also includes implementing and recording changes in procedures resulting from corrective action.

Once a NCR cause has been determined, a written Corrective Action Plan (CAP) will be submitted by W/OJV in order to resolve and close the NCR. The CAP will be written by the Trade Subcontractor QC Manager and submitted to W/OJV's CQC Manager who will review and post to Constructware after sign-off. W/OJV QC Manager or Trade Subcontractor QC Manager will attach the submitted CAP to the NCR in BIM 360 Systems for tracking. Once CAP is approved, the CAP will be implemented by the Trade Subcontractor.

Corrective action procedures shall be established for:

- Investigating the cause of the nonconforming work and taking the corrective actions needed to prevent recurrence
- Analyzing the CAP processes to detect and eliminate potential causes of nonconforming products.
- Initiating preventative actions to deal with problems to a level corresponding to the risks encountered
- Ensuring that corrective actions are taken and that they are effective

- Implementing and recording changes in procedures resulting from corrective action

13.0 ELEMENT13 ***QUALITY RECORDS***

13.1 INTRODUCTION

13.2 DOCUMENTATION

13.3 REPORTING

DAILY REPORTS

MONTHLY REPORTS

PERIODIC FORMS, REPORTS AND LISTS

13.4 DFOW QC REPORTING FOLDER FILES STRUCTURE FOR CONSTRUCTWARE

W/OJV DAILY CQC REPORT FORM

NONCONFORMANCE REPORT FORM

13.0 QUALITY RECORDS

13.1 Introduction

Procedures are established and will be maintained for quality records. These procedures will identify which records shall be kept, responsibility for production and collection, and responsibility for indexing, filing, storage, maintenance, and disposition of quality records..

Quality records shall be maintained to show achievement of quality objectives and appropriate functioning of the Quality Management System. Supplier, contractor, and subcontractor quality records shall be included when pertinent, as defined by requirements agreed upon during DFOW Preparatory Meeting, based Specifications and Codes. Quality records shall be legible and specify the work involved. They shall be kept in an environment to minimize deterioration and damage. Retention times and final disposition shall be established and recorded.

The following types of Quality records requiring control:

- Inspection reports – (Code required inspection reports are uploaded by TJPA's QA team to BIM 360 and Constructware.) Trade subcontractors Reports are attached to Daily QC reports.
- Test Data – Code test uploaded by TJAP to BIM 360. Non-code tests are required per specs are included as part of Daily QC reports.
- Qualification records (BIM 360)
- Calibration Records (BIM360)
- Nonconformance (BIM 360)
- Corrective Actions (BIM 360)
- Daily QC reports with back up data and Documentation
- Material identification / batch tickets

13.2 Documentation

Each Subcontractor is required to produce a QC Daily Report within 3-4 days must include all sub tier documentation (Delivery tags, material traceability and heat number tags). W/O JV shall generate CQC Daily Reports that indicates inter-action with Subcontractor's process in establishing Quality installation, inspection,

and documentation. DFOW checklists are used to identify items that require special attention and document any daily occurrences in QC Daily Reports

Maintain current and complete QC reports providing evidence that required quality control activities and tests have been performed. Include in these records the work of Trade Subcontractors and Suppliers on an acceptable form.

Address deficient features and include a statement that equipment and materials incorporated in the Work and workmanship comply with the Contract. Furnish these reports to the TJPA Representative daily within 5 working days after the date covered by the report. Reports must be signed and dated by the CQC System Manager. Include copies of reports prepared by all subordinate quality control personnel within the CQC System Manager's report
.
The W/OJV CQC will review for completeness, clarity and accuracy of W/O CQC staff or Trade Subcontractor reports.

Weekly meeting with key Trade subcontractors QC Manager will go over key QC issues to ensure timely QC reports are submitted on regular bases.

13.3 REPORTING

Daily Reports

- Webcor/Obayashi JV Daily CQC reports (see attached)
- Trade Subcontractors Daily CQC reports

Monthly Reports

- Webcor/Obayashi JV Construction Monthly Report
- Webcor/Obayashi JV CQC Managers Monthly Status Report (included in the Construction Monthly Report

Periodic forms, reports and lists

- Definable Features of Work (DFOW) list per Trade Subcontractor (in W/OJV F: drive, Constructware and hard copies in section: Tab/Element 7).
- Non-Conformance Report (see attached)

13.4 DFOW QC Reporting Folder Files Structure for Constructware

The CQC File Structure is outlined below and will be utilized on this project to store, organize and manage W/OJV Daily CQC Reports and DFOWs. In Constructware

DFOW folder and file structure:

Each trade package has a folder and each DFOW has a subfolder with subsequent subfolders. The folders and files are managed by CM/GC Quality Control Manager and CM/GC Document Control. Files are located in File Management/File Director by Project. This arrangement puts all the records for each DFOW in one folder. It becomes the quality record for that DFOW.

- 10 Quality
  - 13 Definable Feature of Work (DFOW)
    - BSE- TG03- BBI
    - DFOW log
    - DFOW (By Number and Title)
      - Preparatory Phase
        Preparatory Phase documents are filed in this folder.
      - Initial Phase
        Initial Phase documents are filed in this folder.
      - Follow-up Phase
        Follow-up documentation is appended to Daily QC Reports and filed in this folder by number and date.
      - DFOW Record Documents
        As the work is completed but no later than after completion of the DFOW all quality records would be assembled and filed in this folder. In the event of an audit or record search this folder would contain all the records. Subfolders may be added as needed.
        - Material Records
        - Installation Records

CQC Daily Reports folder and file structure:

Daily CQC Reports are prepared and filed in folders by date. Each folder contains the CM/GC QC Manager's Daily Report and all the Trade Contractors' QC Managers' Daily Reports. The folders and files are managed by CM/GC Quality Control Manager and CM/GC Document Control. Files are located in File Management/File Director by Project. This arrangement puts all the Daily QC reports for each day in one folder. It becomes the quality record for that day.

- 10 Quality
- 12 CQC Reports
- Year
  - Month
    - Day (By Contractor- year/month/day (i.e. BBI-13/08/29 OR 20130829)
    - CM/GC QC Daily Report
      This report is prepared by the CM/GC QC Manager
    - TCQM Daily Report (Identified by Trade Package)
      This report is prepared by each Trade Contractor QC Manager and submitted to the CM/GC Quality Control Manager for review and filing.

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CONTRACTOR QUALITY CONTROL REPORT

(ATTACH ADDITIONAL SHEETS IF NECESSARY)

DATE

PHASE | TRANSBAY TRANSIT CENTER BUILDING | PROJECT NUMBER: 3100

PREPARATORY

WAS A PREPARATORY MEETING HELD TODAY? YES ☐ NO ☐

IF YES, FILL OUT AND ATTACH SUPPLEMENTAL PREPARATORY PHASE CHECKLIST.

Schedule Activity No.	Definable Feature of Work	

INITIAL

WAS AN INITIAL PHASE MEETING HELD TODAY? YES ☐ NO ☐

IF YES, FILL OUT AND ATTACH SUPPLEMENTAL INITIAL PHASE CHECKLIST.

Schedule Activity No.		

FOLLOW-UP

WORK COMPLIES WITH CONTRACT AS APPROVED DURING INITIAL PHASE? YES ☐ NO ☐

Schedule Activity No.	Description of Work, Testing Performed & By Whom, Definable Feature of Work, Specification Section, Location and List of Personnel Present,

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS, ASSIGN REWORK ITEM TRACKING NUMBER)

Issue No.	Description

REWORK ITEMS CORRECTED IN PROGRESS TODAY (FROM REWORK ITEMS LIST, IF COMPLETE RECORD CORRECTION ON TRACKING LOG)

Issue No.	Description

REMARKS (Also Explain Any Follow-Up Phase Checklist Item From Above That Was Answered "NO"), Manuf. Rep On-Site, etc.

Schedule Activity No.	Description

On behalf of Webcor/Obayashi, I certify that this report is complete and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.

WEBCOR QC REPRESENTATIVE DATE

WEBCOR/OBAYASHI QUALITY CONTROL MANAGERS REMARKS AND/OR EXCEPTIONS TO THE REPORT

Schedule Activity No.	Description

WEBCOR/OBAYASHI JV CQC MANAGER DATE

CONTRACTOR QUALITY CONTROL REPORT

(CONTINUATION SHEET)
(ATTACH ADDITIONAL SHEETS IF NECESSARY)

DATE

PHASE | TRANSBAY TRANSIT CENTER BUILDING | PROJECT NUMBER: 3100

WORK COMPLIES WITH CONTRACT AS APPROVED DURING INITIAL PHASE? YES ☐ NO ☐

FOLLOW-UP

Schedule Activity No.	Description of Work, Testing Performed & By Whom, Definable Feature of Work, Specification Section, Location and List of Personnel Present

W/O # _____ Assigned by CMO QA Manager **NCR #**_____

Contract # _____ **Contractor/Sub(s)**_____

Code/Spec/Dwg _____ **Location**_____

Reference #s _____

Part/Lot_____**Quantity**____**Supplier**_____**P.O.**_____

Initiated by/Co_____**Date Issued** _____

Description of Non-Conformance **Code**_____
See QMS QA-08-3, over

Cause **Code**_____
See QMS QA-08-3, over

Recommended Disposition ☐ **Reject** *Remove, replace, meet spec* ☐ **Accept-As-Is** *Not to spec*
Contractor Field Engineering ☐ **Rework** *Fix to meet specifications* ☐ **Repair*** *Fix, but not to spec*
—Requires FE Disposition/CQC Acceptance— —Requires EOR Approval/PM OK—

Resolve as Follows ☐ Proposed resolution, repair or rework plan attached (*required)

Field Engineer *Print Name, Org; Initial* _____ Date _____

Engineer of Record Disposition ☐ **Accept-As-Is** *Not to spec*
Resolve as Follows ☐ **Repair** *Fix, but not to spec*

Engineer of Record *Print Name, Org; Initial*_____ **Date** _____
PM Concurrance *Print Name, Org; Initial*_____ **Date** _____

Quality Review
TJPA QA _____
CQC _____

Disposition Results

Contractor QC Acceptance *Print Name, Org; Initial*_____ **Date** _____
PM Verification *Print Name, Org; Initial*_____ **Date** _____

Corrective and Preventive Action (CAPA)
If required

CAPA Verification *Print Name, Org; Initial*_____ **Date** _____

Non-Conformance Codes

ASSEMBLY

001 Interference/Improper Fit
002 Dis-bonding/Adhesive Defect
003 Incorrect Part Used
004 Assembly Error
005 Soldering Failure
006
007
008
009
010 Other Assembly Related Defect

CERTIFICATION / DOCUMENTATION

011 Information Missing
012 Information Incorrect
013 Information Illegible
014 Material Incorrect
015 Inspection/Test Incorrect
016 Data Out-Of-Spec.
017
018
019
020 Other Cert./Documentation Error

DIMENSIONAL

021 Thickness—Over/Under Size
022 Diameter – Over/Under Size
023 Length/Width—Over/Under Size
024 Depth Incorrect
025 Slope Incorrect
026 Angle Incorrect
027 Feature/Item Missing
028 Position/Location Incorrect
029 Radius Over/Under Size or Missing
030 Other Dimensional Defect

INSTALLATION

031 Missing Hardware
032 Missing Equipment
033 Non-Standard Installation
034 Incomplete Installation
035 Non-Conforming Materials Used
036 Equipment Damaged
037 Incorrect Location
038 Incorrect Orientation
039
040 Other Installation Defect

INSTALLATION / TEST FAILURE

041 Inspection/Test Equipment Failure
042 Equipment Not Calibrated
043 Procedural
044 Under-Test Condition
045 Electrical Test Failure
046 Leak Test Failure
047 Environmental Test Failure
048 Functional Test Failure
049 Mechanical Test Failure
050 Other Inspection/Test Failure

MATERIAL / SOILS

051 Incorrect Material Used
052 Material Contaminated
053 Gradation Test Failure
054 Moisture Test Failure
055 Density (Compaction) Test
056 Sand Equivalent Test Failure
057 Organic Content of Soils
058 Durability Index
059 Resistance (R-value)
060 Other Material Defect

MATERIALS / CONCRETE & STEEL

061 Incorrect Materials Used
062 Concrete Slump Test Failure
063 Concrete Air Content
064 Concrete Compressive Strength Test Failure
065 Drying Shrinkage of Concrete
066 Concrete Honeycombing
067 Concrete Rock-Pocket/Voids
068 Mis-fabricated Reinforcing Steel Assemblies
069 Missing or Incorrect Reinforcing Steel
070 Other Material Defects

NON-DESTRUCTIVE EXAMINATION (NDE)

071 Cracked Welds
072 Foreign Material
073 Component Gap/Fit-up Defect
074 Undercut
075 Porosity/Slag
076 Lack of Penetration/Fusion
077 Discontinuities
078 Voids
079 Delamination
080 Other NDE Indications

SURFACE DEFECTS

081 Discoloration
082 Blisters
083 Sparing
084 Burrs/Chips/Nicks
085 Damaged/Bent/Torn/Twisted
086 Contaminated
087 Foreign Material
088 Plating/Coating Defects
089 Cracks
090 Surface Irregular/Finish

VISUAL & OTHER DEFICIENCIES

091
092
093
094
095
096
097
098
099
100 Other Visual Anomaly

14.0 ELEMENT14. ***QUALITY AUDITS***

14.0 QUALITY AUDITS

14.1 QUALITY AUDITS

The Trade Subcontractor QC Manager reports to the Webcor /Obayashi JV CQC Manager and oversees the trade specific implementation of the quality control program and whose primary responsibility will be to implement the Trade Subcontractor's quality control plan. The Trade Subcontractor QC manager will certify that the Trade Subcontractor's work is in compliance with the Contract Documents and complies with the Webcor/Obayashi Joint Venture Quality Control Plan and all quality control requirements contained in the Contract Documents, including specification section 01 14 00 Quality Control. The Trade Subcontractor QC Manager shall:

- Support and facilitate QMS Audit process by TJPA, FTA, and Agency Audits.

15.0 ELEMENT 15 ***TRAINING***

15.1 TRAINING

15.0 TRAINING

15.1 TRAINING

Webcor/Obayashi JV will ensure that only knowledgeable capable employees carry out the planning and execution of the work.

- ***The W/OJV CQC Manager will provide and document training.*** Under the Direction of the W/OJV CQC manager the Trade Subcontractor QC Managers will provide training on the elements of the W/O JV and Trade Subcontractors site specific Contractor's Quality Control Plans to all trade subcontractor staff having CQC responsibilities.
- When specified in the Contract Documents, Trade Subcontractor CQC Managers will submit proof of tradespersons qualifications including licensing requirements, certifications or other required training qualifications for the specified task to Webcor /Obayashi JV and the TJPA.
- When specified in the Contract Documents, project or task specific training will be documented by the Trade Subcontractor. The Trade Subcontractor will provide Webcor/Obayashi JV with a copy of the training syllabus and list of attendees.
- Webcor/Obayashi JV Quality Control personnel will complete the U.S. Army Corps of Engineers/U.S. Navy Facilities Engineering Command, Construction Quality Management for Contractors
- The Trade Subcontractor QC Managers will maintain records of quality training for their personnel. The Webcor/Obayashi JV CQC Manager will maintain records of quality training for Webcor/Obayashi JV personnel.
- W/OJV continues to revise Superintendents and QC field staff procedures to improve on records and reports for field issues such as Material, installation, FCR's, and NCR's.
- As part of each DFOW's meeting process a DFOW checklist will be established and will determine the requirements for each DFOW checklists.
- W/OJV shall conduct training for Superintendent and QC staff to clarify DFOW requirements as well as what issues should be tracked and raised to the status of Field Condition Reports.
- W/OJV will conduct work sessions with TJPA QC representative and W/O Superintendents to clarify, when and who shall issue FCR's and/or NCR's.

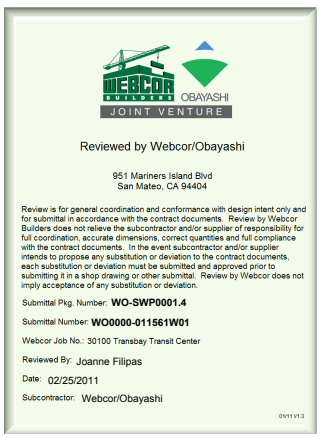
- Training of personal on the proper procedures to complete a DQC report.

WO0000-011400WO1.10

Exhibit K

Construction Stormwater Pollution Control/Compliance Plan

Transbay Transit Center Project
San Francisco, California



Prepared for:
Webcor /Obayashi

2011 FEB 24 PM 1 49
WASTEWATER ENTERPRISE
COLLECTION SYSTEM DIVISION
APPROVED AS "NOTED"

Prepared by:
WRECO

February 2011

Transbay Transit Center
San Francisco, California

Construction Stormwater Pollution Control/Compliance Plan

Submitted to:
Webcor /Obayashi

This report has been prepared by or under the supervision of the following Qualified Storm Water Pollution Prevention Developer and Construction General Permit Trainer of Record.

Debra Carey

Debra Carey, QSD, ToR, CEG

Feb 22, 2011

Date

February 2011

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Appendix B Construction Stormwater Controls Monitoring Checklist
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1 REGULATORY SETTING

The Transbay Transit Center Project (Project) meets federal Clean Water Act (CWA) and State Porter – Cologne Water Quality Control requirements via connection to the combined wastewater and stormwater sewer system operated by the San Francisco Public Utilities Commission (SFPUC) under a State Water Resources Control Board-issued National Pollutant Discharge Elimination System (NPDES) permit (Order No. R2-2002-0073, NPDES Permit No CA0037664). The Project is therefore not subject to coverage under the California Construction General Stormwater Permit (Order 2009-0009-DWG), that became effective on July 1, 2010; however, the construction site must implement Best Management Practices (BMPs) to prevent pollutant discharge into the combined sewer to comply with the San Francisco municipal ordinances and codes described below. This Construction Stormwater Pollution Control/Compliance Plan provides a delegation strategy along with best management practice (BMP) categories for compliance with stormwater regulations covering construction activities at the Project.

San Francisco Ordinance

San Francisco has a Stormwater Discharge Controls Ordinance requiring Pollution Prevention Procedures during any construction conducted in the City of San Francisco. In general the ordinance discusses long term BMPs such as rain gardens and green roofs particularly applicable to redevelopment areas and sections of the City serviced by small municipal separate storm sewer systems (MS4); however aspects of the ordinance apply to construction activities. For example, although coverage under the NPDES General Construction Permit (Water Board Order No. 99-08-DWQ) is not required for projects in those areas of the city that drain to the combined sewer system; all construction sites must implement BMPs to prevent illicit discharge into the combined sewer. Generally, City requirements include the development of a Storm Water Pollution Prevention Plan (SWPPP), SWPPP plan review by SFPUC, stormwater treatment measures, runoff monitoring, and frequent site inspections. The regulations also require the use of construction period (and operational period) BMPs on construction sites to keep pollutants (sediment and construction site debris), out of water conveyance systems, the treatment plants, and discharge points.

San Francisco Public Works Code

The federal CWA requires that publicly-owned treatment works (POTW) regulate the discharge of industrial wastes into a sewer system subject to NPDES permit requirements, and since construction activity is regulated under the industrial category, San Francisco's department of public works (DPW) has adopted requirements for construction discharges to the combined sewer system. Under DPW regulations, discharges of construction storm water as well as any wastewater (such as dewatering from construction sites) is subject to the requirements of Article 4.1 of the San Francisco Public Works Code, which regulates the quantity and quality of discharges to the combined sewer system. Projects that conduct any dewatering activity are required to apply for a Wastewater Batch Discharge Permit from the SF PUC WWE_CSD. Information on the Batch Discharge Permit and pre-treatment can be found online at: **http://sfwater.org/msc_main.cfm/MC_ID/14/MSC_ID/445.**

Order No. 158170 of the San Francisco DPW provides additional pre-treatment industrial waste discharge limits to augment those listed in Article 4.1. The San Francisco Municipal Code requires contractors to have a Sediment and Erosion Control Plan for projects that discharge to the Combined Sewer System.

RESPONSIBLE PARTIES

The legally Responsible Party for the Project is the Transbay Joint Powers Authority (TJPA). The TJPA consists of a collaboration of Bay Area government and transportation agencies, and is managed by TJPA staff and overseen by a Board of Directors. For site-specific concerns that can be addressed by TJPA, please call **415.409.TJPA (8572)**.

Webcor /Obayashi is a joint venture contracting group hired by TJPA as general contractor for the Transbay Terminal Center Phase of the Project. Webcor /Obayashi will be subcontracting construction to Trade Subcontractors who will be responsible for preparing SWPPPs specific to their construction activity, schedule, discharge points, types of pollutants and construction boundaries. The Trade Subcontractors will be responsible for preparing and submitting for approval a SWPPP including furnishing, installing, maintaining and removing BMPs such as silt fence, filter boxes, construction entrances, sediment traps, dust control, dewatering and other erosion and sediment control measures during construction to prevent contamination of storm water from construction activities and to maintain compliance with the SF storm water ordinance and codes. For site-specific NPDES concerns that can be addressed by Webcor/Obayashi, please call **415.978.5726**.

2 PROJECT INFORMATION

2.2 Project Description

The Project is located generally between Second Street in the west, Beale Street in the east, Natoma Street in the south and Minna Street in the north (Figure 1). The Project is part of a larger $4 billion transportation and housing expansion/redevelopment effort that will replace an old Transbay Terminal at First and Mission streets with a modern regional transit hub connecting eight Bay Area counties and the State of California through 11 transit systems: AC Transit, BART, Caltrain, Golden Gate Transit, Greyhound, Muni, SamTrans, WestCAT Lynx, Amtrak, Paratransit and future High Speed Rail from San Francisco to Los Angeles/Anaheim.

The entire Project consists of three broad activities as noted below. Webcor /Obayashi are the general contractors and have prepared this Construction Stormwater Pollution Control/Compliance Plan to provide for compliance with stormwater regulations covering construction activities.

- **Utility Relocation**
- **Train Box and Transit Center Building Construction**
- **Bus Ramp Construction**

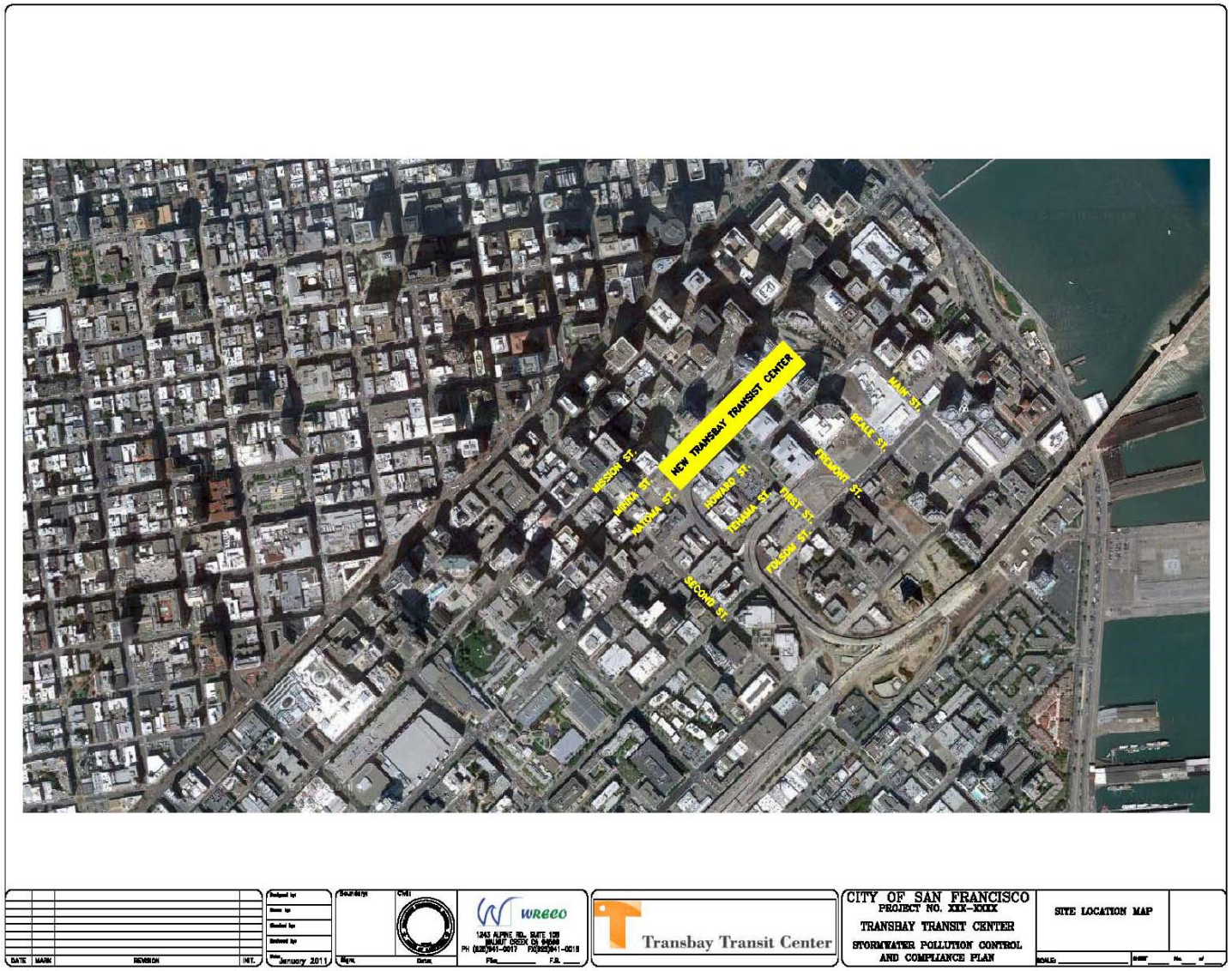


Figure 1. Project Location Map

2.3 Project Size and Total Disturbed Area

The estimated total disturbed soil area (DSA) for the Project is approximately 12.3 acres and includes the areas where the soil might be potentially disturbed by construction activities, as follows:

Table 1. Total Land Disturbance

Area Name	Approximate Area Disturbed (Acres)
Zone 1	2
Zone 2	1.8
Zone 3	1.5
Zone 4	4
Linear Utility Relocation	2.5
Additional Staging/Disturbance	3
Total	12.3

Figures 2 and 3 show general locations for the DSA construction zones and linear utility relocation trade packages. Several staging areas are anticipated during the life of the Project as shown in Figure 4.

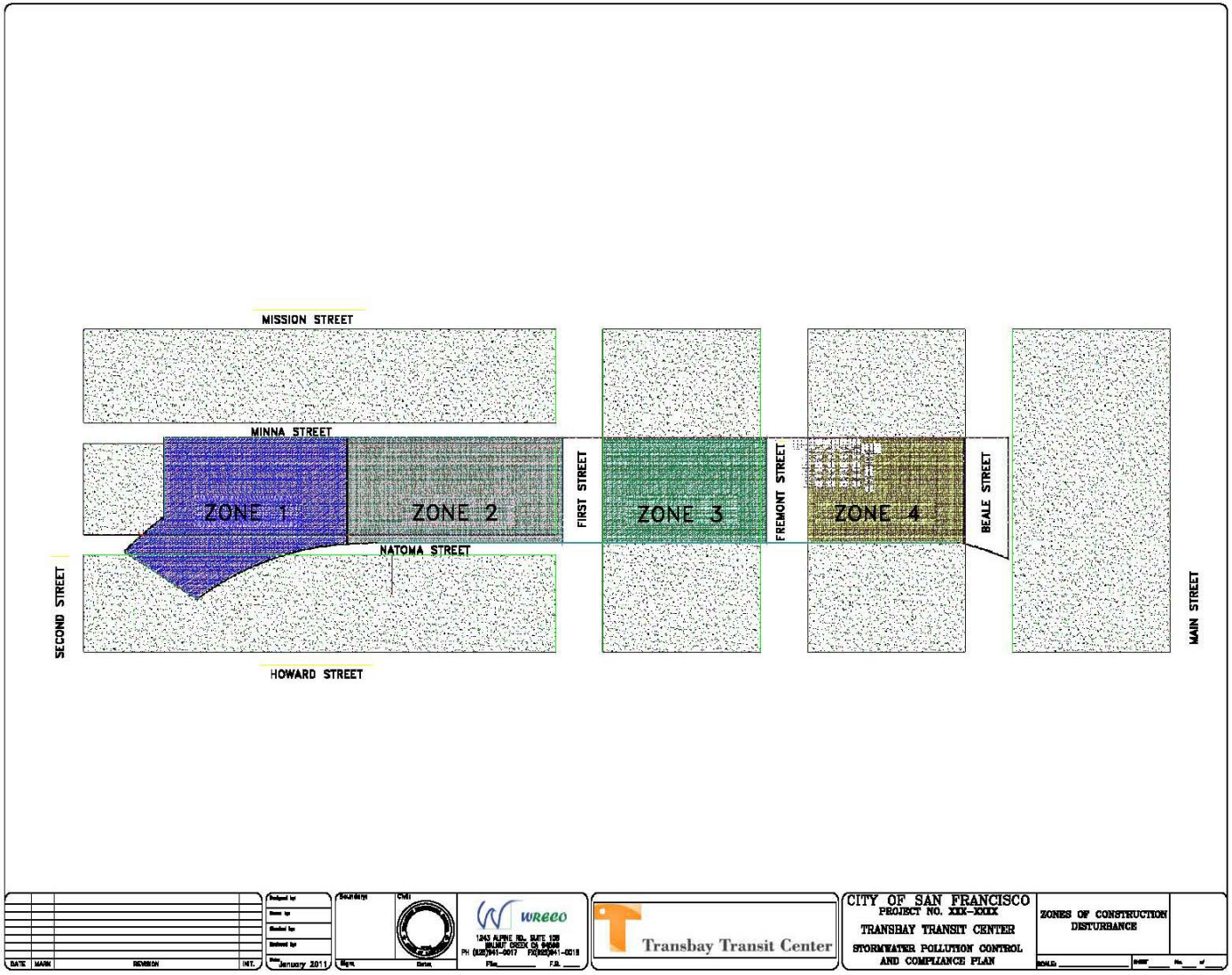


Figure 2. Construction Zone Locations

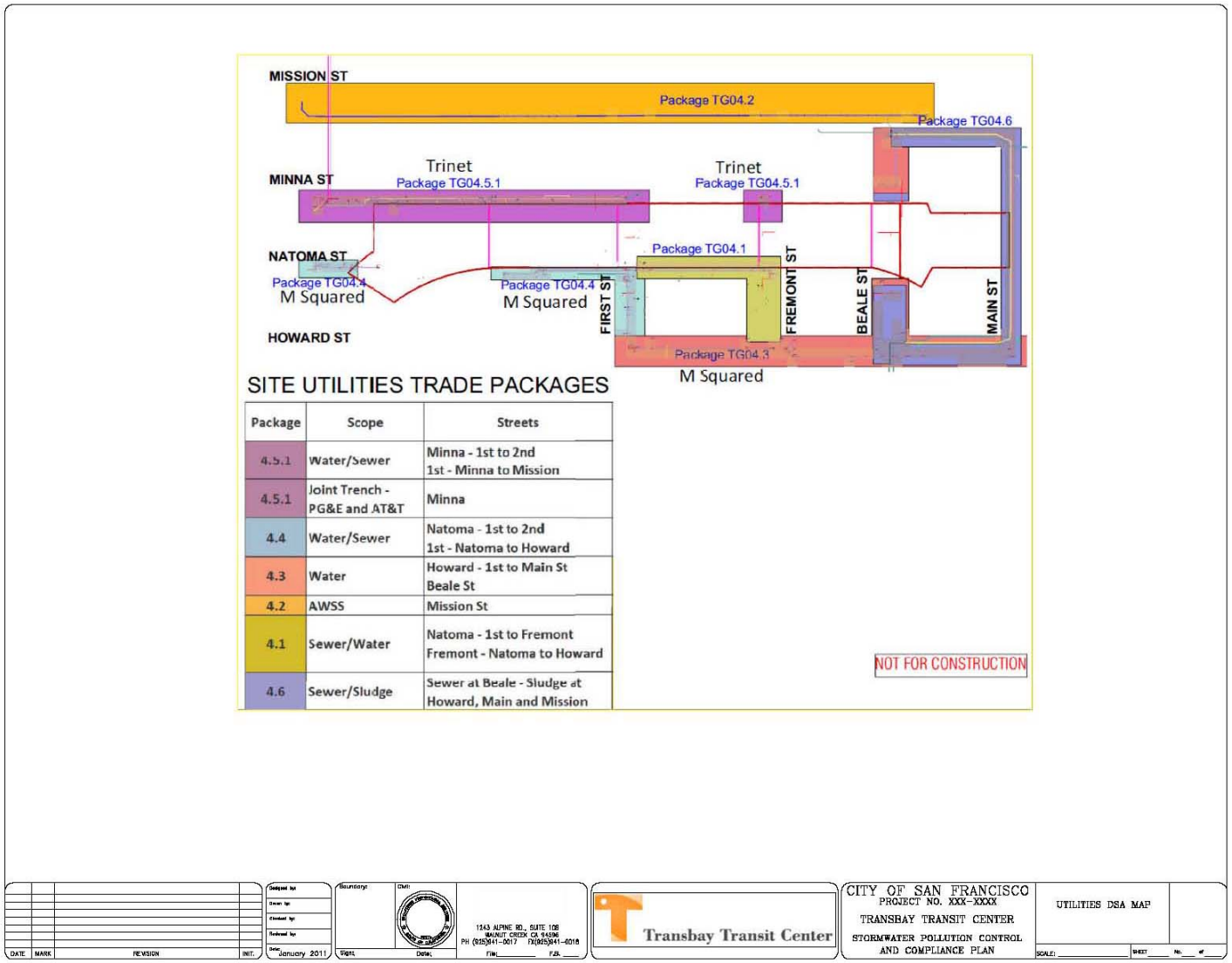


Figure 3. Utilities DSA Map

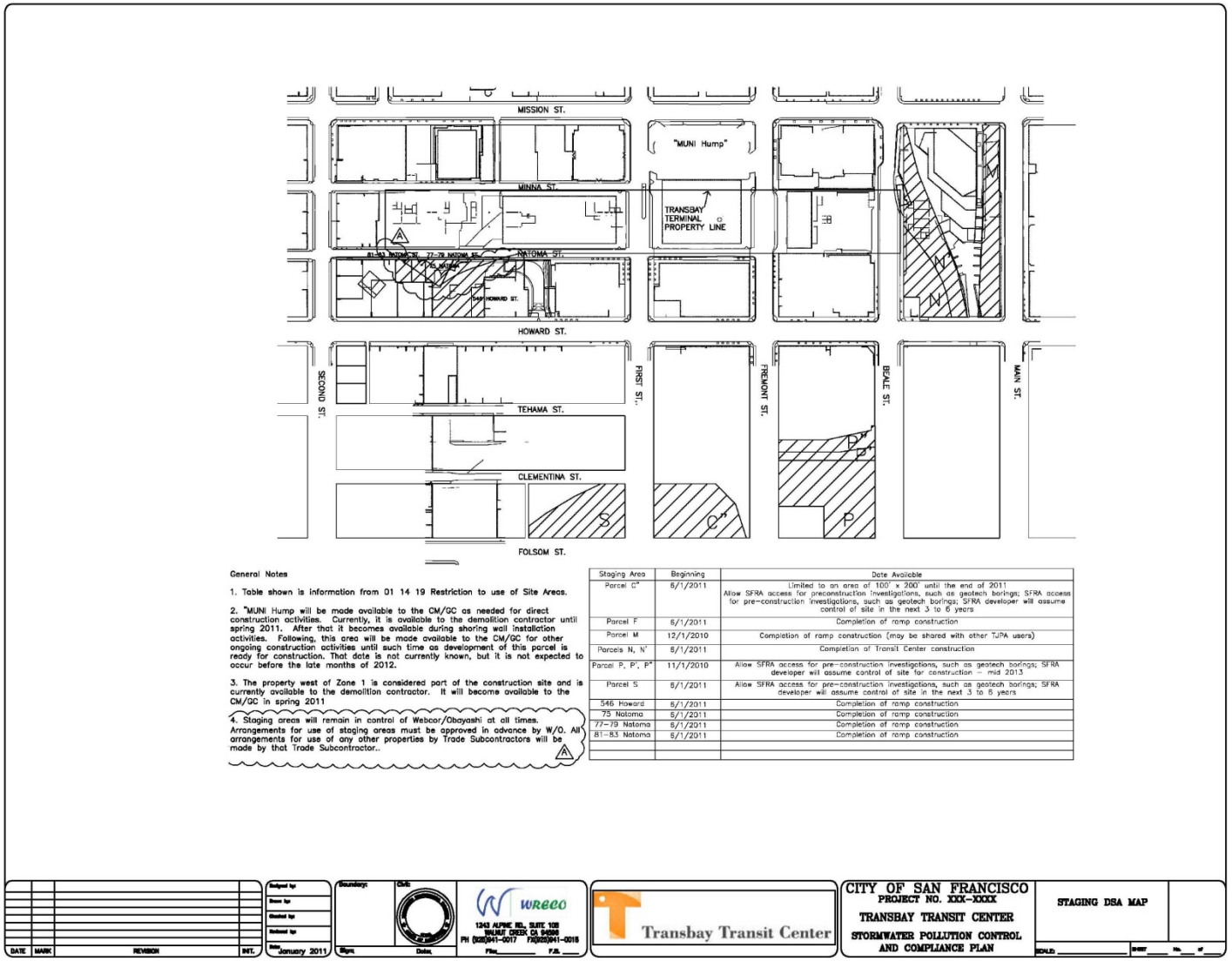


Figure 4. Staging DSA Map

2.4 Receiving Waters and Environmentally Sensitive Areas

The Project is located within the northeastern section of the City of San Francisco. The Project does not discharge directly to jurisdictional "receiving water." The San Francisco combined sanitary/storm water sewer system collects all storm and waste water discharging in the Project vicinity and pipes the water to the Southeast Water Pollution Control Plant for processing and discharging under NPDES Permit No CA0037664. The SE plant currently treats runoff to secondary treatment standards established by the USEPA, meeting or exceeding water quality objectives in San Francisco Bay.

The San Francisco Bay Area has a climate characterized by wet winters and dry summers. Average annual rainfall in the area is approximately 20 inches. The majority of this rainfall generally occurs from November through April with little rainfall during the remaining months of the year. Construction for the Project will span a period of several years including both wet and dry seasons. The project does not impact any known environmentally or culturally sensitive areas. For information regarding any environmentally sensitive habitat concerns, please refer to the Biological Resource Assessment. For information on cultural or other CEQA or NEPA requirements, please refer to the appropriate State or Federal Agency.

2.5 Construction Activities and Schedule

The Project activities include but are not limited to clearing, excavation and backfill, construction and finishing work within a busy city environment with established infrastructure. Several staging areas are anticipated during the life of the Project. Construction equipment and materials will be stored both onsite and at staging areas. As a result, fueling and maintenance, as well as welding and fabrication, may take place onsite. A discussion of the pollutants with potential to contact storm water as a result of these activities is included below. Since demolition of the existing ramps and terminal is currently underway by another contractor (Evans Bros Inc), the first phase of the Webcor-Obayashi Project includes utility relocation, followed by subexcavation in preparation for construction of the Transit Center Building/Train Box. Construction overseen by Webcor-Obayashi will create a new five-story Transit Center with one above-grade bus level, ground-floor, concourse, and two below-grade rail levels serving Caltrain and future California High Speed Rail, and includes new bus ramps to connect the Transit Center to a new off-site bus storage facility and the SF-Oakland Bay Bridge. Construction of the Project should be completed within or near the year 2017.

The following list generally outlines the expected Project construction schedule:

1. Utility relocation November 2010-September 2011.
2. Protection of perimeter: March 2011.
3. Trade Subcontractors awarded contracts: April 2011.
4. Activity specific SWPPPs submitted by Trade Subcontractors: April 2011.
5. Sediment control products ordered and stored on site by Trade Subcontractors: May 2011.
6. Stabilized construction entrance, equipment parking, covered storage and any concrete wash areas constructed by Trade Subcontractors: May 2011.
7. Excavation and Dewatering by Trade Subcontractors: May 2011-April 2014.

8. Transit Center Building Construction: May 2013-August 2017.
9. Bus Ramps: 4th quarter 2012-4th quarter 2014.
10. Construction of the concrete form box and train box by Trade Subcontractors: TBD.
11. Vertical Construction by Trade Subcontractors: 2013-2017.
12. Monitoring and Maintenance of BMPs: Entire construction timeline by Trade Subcontractors.
13. All BMPs functional: Entire construction timeline.

2.6 Potential Construction Site Pollutant Sources

Potential materials expected from the project include, but are not limited to, excavated soil, oil products (gasoline, diesel, hydraulic oil, and kerosene), solvents, concrete and curing compounds, and other construction materials. Construction on the project site will require temporary disturbance of surface soils and removal of existing on-site pavements and subsurface structures. During the construction period, excavation and grading activities will result in exposure of soil to water runoff, and the use of haul trucks that could track material away from the construction site. Much of the excavated material will be typical of coarser sandy soil particles that do not mobilize easily. However, some of the material may consist of relatively mobile fine sediments (silt and clay). Most excavation will occur in a below-grade pit which will drain internally and contain storm water; however construction activities will impact areas outside of the excavation areas that drain toward the San Francisco combined sewer drain inlets. Water in excavation pits from rainfall and groundwater seepage would contain sediment. Removal of the pit water will probably require sediment removal before it can be discharged into the storm drains (see SF PW Code paragraph above).

Soil and debris on the haul truck tires exiting the site could be deposited on local streets and Transport in storm water into the storm drain. The majority of construction debris and materials would be loaded onto trucks within the interior of the construction boundaries, rather than from public sidewalks or streets bordering the project site. The construction debris and materials would then be hauled off site. Therefore, soil stockpiles would be minimized on site.

In addition to sediment, Table 2 lists expected construction materials that could generate pollutants, describes their chemical and physical properties, and identifies potential pollutants associated with them. This list should be updated as the project proceeds and additional phases begin.

Table 2. Potential Stormwater Pollutants

Source	Chemical/Physical Description	Storm Water Pollutants*
Diesel Fuel	Clear, blue-green to yellow liquid	TPH-diesel, benzene, toluene, ethylbenzene, xylenes, naphthalene
Concrete Work	Cement, fly ash, aggregate	pH
Oil and Grease	Brown oily petroleum	TPH-motor oil, oil and grease
Used Oil (oil only)	Brown oily petroleum	TPH-motor oil, oil and grease, LUFT 5 metals (cadmium, chromium, lead, nickel, and zinc)
Excavated and Stockpiled Soil	Solid particles	Soil, sediment
Gasoline	Colorless, pale brown or pink petroleum hydrocarbon	TPH-gasoline, benzene, toluene, ethylbenzene, xylenes. For "old" releases, include DIPE; ETBE; MTBE; TAME; TBA; 1,2-dibromoethane (1,2-DBA); and 1,2-dichloroethane (1,2-DCA)
Hydraulic Oil/Fluids	Brown oily petroleum hydrocarbon	TPH-hydraulic oil, benzene, toluene, ethylbenzene, xylenes, LUFT 5 metals (cadmium, chromium, lead, nickel, and zinc)
Sanitary/Septic Waste	Sewage products	Coliform, *E. coli*, viruses, solvents (i.e. volatile organic compounds such as trihalomethanes and the dichlorobenzene isomers), nitrate
Trash; Windblown and Other	Paper, pipe, electrical wires etc.	Paper, pipe, electrical wires etc.

Notes: *****TPH-gasoline = total petroleum hydrocarbons quantified as gasoline (the same pattern for TPH-diesel, TPH-motor oil, TPH-hydraulic oil)
BTEX = benzene, toluene, ethylbenzene, and xylenes
DIPE = di-isopropyl ether
ETBE = ethyl tertiary butyl ether
MTBE = methyl tertiary butyl ether
TAME = tertiary amyl methyl ether
TBA = tertiary butyl alcohol
LUFT = leaking underground fuel tank
PCBs = polychlorinated biphenyls

Pollutants of concern in the San Francisco Bay include, but are not limited to, mercury, diazinon and Polychlorinated Biphenyls (PCBs). These chemicals are not easily broken down and they tend to adhere to particles of sediment, so can be removed from stormwater in BMPs that trap sediment. For this reason, sediment trapping BMPs are highlighted in the treatment controls listed for the project. Additional pollutant categories that can be anticipated in stormwater leaving the project include oil and grease, trash, sediment, organic compounds, pesticides, nutrients and metals.

2.7 Identification of Non-Storm Water Discharges

Non-storm water discharges include a wide variety of sources and may contribute pollutant loads if not controlled. They can include, but are not limited to:

- discharges of process water
- saw cutting slurry
- air conditioner condensate
- non-contact cooling water
- vehicle wash water
- sanitary wastes concrete washout water
- paint wash water
- irrigation water
- pipe testing water
- natural groundwater seepage

Measures to control spills, leakage, and dumping, and to prevent illicit connections during construction must be addressed through structural as well as non-structural BMPs. Certain non-storm water discharges may be necessary for the completion of construction projects. Authorized non-storm water discharges may include those from de-chlorinated potable water sources such as: fire hydrant flushing, irrigation of vegetative erosion control measures, pipe flushing and testing, water to control dust, uncontaminated ground water dewatering, and other discharges not subject to a separate general NPDES permit adopted by a region. Authorized non-storm water dewatering discharges require a permit. Information can be found online at: **http://sfwater.org/msc_main.cfm/MC_ID/14/MSC_ID/445.**

Each Trade Subcontractor is responsible for procuring the necessary dewatering permits for construction activities undertaken. The SFPUC prohibits the discharge of storm water that causes or threatens to cause pollution, contamination, or nuisance.

Additionally, all SWPPPs prepared by Trade Subcontractors must include procedures and practices designed to minimize or eliminate the discharge offsite of pollutants from vehicle and equipment cleaning, fueling, maintenance operations and other non-storm water. Project monitoring by trade Subcontractors will include a visual check for non-storm water discharges and non-storm water discharge potential.

3 BEST MANAGEMENT PRACTICES (BMPS)

BMPs shall be implemented as listed in this Plan and additionally as necessary to adequately minimize erosion on site and limit sediment transport off site to an acceptable level in accordance with the SFPUC regulations and all City Codes and Ordinances.

Erosion and sediment control measures are needed throughout the year on the Project. In particular, stormwater catch basins must be protected year round. During dry season development, BMPs will be primarily designed to mitigate the movement of sediment and pollutants off site by tracking from grading equipment and from wind. Wet season BMPs are designed to prevent soil from washing off graded areas during rainy periods, tracking of soil and pollutants off site by vehicles and any other movement of pollutants from the Project.

3.2 BMP Objectives

This Construction Stormwater Pollution Control/Compliance Plan provides the following BMP objectives:

- Provide overall guidance to Trade Subcontractors in preparing SWPPPs and dewatering plans specific to their construction activities, construction timelines and drainage areas for submittal to the SFPUC.
- Delineate typical construction pollutants and their sources, including sources of sediment associated with construction, construction site erosion and other activities associated with anticipated construction activity. Trade Subcontractors are expected to expand and amend the information provided here within to tailor their SWPPPs to their activities.
- Outline best management practice (BMP) categories that need to be included in the SWPPPs prepared, submitted and maintained by the Trade Subcontractors to a level that results in the reduction or elimination of pollutants in storm water discharges and authorized non-storm water discharges from construction activity to the standard required by the SFPUC.

BMPs categories listed in this Construction Stormwater Pollution Control/Compliance Plan should be reviewed by the Trade Subcontractors, added to their SWPPPs as applicable and additionally installed, maintained, monitored and reported as practicable to adequately minimize erosion on site and limit sediment transport off site to an acceptable level. Adjustments and modifications to the BMPs identified in this Plan need to be implemented by the Trade Subcontractors as necessary to maintain the construction site in accordance with the provisions of the SFPUC regulations and all City Codes and Ordinances.

The SFPUC identifies the following list of BMPs and pollution prevention measures that must be implemented at all construction sites:

- Identify all storm drains and catch basins near the construction site and ensure all workers are aware of their locations to prevent pollutants from entering them.
- Protect all storm drain and catch basin inlets.
- Develop an erosion control and sediment control plan for wind and rain.
- Develop spill response and containment procedures.
- Inspect site regularly to ensure that BMPs are intact.

- Conduct daily site cleanings as needed.
- Educate employees and subcontractors about BMPs.
- Regularly maintain all BMPs at project site.

3.2.1 Erosion Control BMPs

Erosion control practices consist of source control measures designed to prevent soil particles from becoming dislodged and transported in storm water runoff, while sediment control measures filter and otherwise recover soil particles from runoff. Erosion control BMPs protect the soil surface by covering and/or binding soil particles and in many cases, are more effective, less expensive, and require less maintenance and repair. Although they typically function by protecting the surface of exposed soil, erosion control measures cannot be effectively applied until grading activities are complete or idle.

At the Project, erosion is expected to occur primarily as a result of pavement removal, soil disturbance and subsequent wind or rain. For this reason, BMPs to limit the timing of soil disturbance and provide timely stabilization for the disturbed soil surface should be the focus of erosion control efforts for the site. Erosion control BMPs such as scheduling and non-vegetative soil stabilization (soil binders) should be considered by each Trade Subcontractor (TS) and added to their SWPPPS to control soil erosion on the construction site. Modifications to the BMPs may be necessary should construction activities or the construction schedule be altered. If modifications are needed to the BMPs, the Trade Subcontractor should work with the SFPUC to amend the SWPPP and Erosion Control BMPs to satisfactorily meet City storm water regulations.

Scheduling should be implemented throughout the project as a means of ensuring that significant earth-disturbing activities are avoided if rain is forecasted. If there are exposed areas that are not being actively worked the trade Subcontractors should consider stabilizing all areas as practical. If additional information or instructions are needed for BMP installations, the CASQA website and cutsheets can be found at: **www.casqa.org.**

3.2.2 Sediment Control BMPs

Sediment control is any practice that traps soil particles after they have been detached and moved by rain, flowing water, or wind. Sediment control measures are usually passive systems that rely on filtering or settling the particles. Sediment control, or capturing the sediment once it is mobilized, is considered back up or secondary to good erosion control.
Table 3 indicates the BMPs for sediment control that should be considered and included in SWPPPs by trade Subcontractors as applicable on the construction site.

Table 3. Construction Sediment Control BMPs

BMP Name
Silt Fence
Fiber Rolls
Gravel Bag Berm
Sand Bag Barrier
Storm Drain Inlet Protection
Stockpile Management

If additional information or instructions are needed for BMP installations, the CASQA website and Cutsheets can be found at: **www.casqa.org.**

3.2.3 Tracking Control BMPs

Tracking control consists of preventing or reducing the tracking of sediment off site by vehicles. Daily inspections will be conducted at the construction entrances and if track-out is observed, the area will be swept by the Trade Subcontractors. If additional information or instructions are needed for BMP installations, the CASQA website and cutsheets can be found at: **www.casqa.org.**

3.2.4 Wind Erosion Control BMPs

Wind Erosion Control is a very important BMP for the Project. All Trade Subcontractors are required to comply with the regulations specified by the local Air Quality Control District. Construction will be halted if required to do so due to high wind conditions as specified by the local Air Quality Control District, and/or common sense. Alternative forms of wind erosion control such as tackifiers and covers will be utilized as necessary to avoid and minimize windblown dust from leaving the project site. If additional information or instructions are needed for BMP installations, the CASQA website and cutsheets can be found at: **www.casqa.org.**

3.2.5 Non-Storm Water Control BMPs

Non-storm water management BMPs are source control BMPs that prevent pollution by limiting or reducing potential non-storm water pollutants at their source or eliminating offsite discharge. These practices involve day-to-day operations of the construction site and are also referred to as “good housekeeping practices” which involve keeping a clean, orderly construction site.

Non-storm water management BMPs includes procedures and practices designed to minimize or eliminate the discharge of pollutants from vehicle and equipment cleaning, saw cutting, pipe testing and other activities that generate liquid slurry or water based effluent. All storm/sanitary drain inlets should be located and protected during construction such that non-storm water carrying pollutants does not enter the inlets. Paving and concrete work should be undertaken during dry weather and drain inlets covered

during these activities. During wet weather construction, the drain inlets should be protected with a BMP that filters water such as sediment traps, silt bags and straw wattle.

3.2.6 Waste Management/Materials Control BMPs

Waste management and materials pollution control BMPs, like non-storm water management BMPs, are source control BMPs that prevent pollution by limiting or reducing potential pollutants at their source before they come in contact with storm water.

These BMPs also involve day-to-day operations of the construction site, are under the control of the Trade Subcontractors, and are additional "good housekeeping practices" which involve keeping a clean, orderly construction site. Waste management consists of implementing procedural and structural BMPs for handling, storing, and disposing of wastes generated by a construction project. The objective is to prevent the release of waste materials into storm water runoff or discharges through proper management of the following types of wastes:

- Solid
- Sanitary
- Concrete
- Hazardous
- Equipment – related wastes

Materials pollution control (also called materials handling) consists of implementing procedural and structural BMPs in the handling, storing, and the use of construction materials. The BMPs are intended to prevent the release of pollutants during storm water and non-storm water discharges. The objective is to prevent or reduce the opportunity for contamination of storm water runoff from construction materials by covering and/or providing secondary containment of storage areas, and by taking adequate precautions when handling materials. Material Safety Data Sheets, covered and secondary containment and employee training are important examples of materials pollution control. These controls must be implemented for all applicable activities, material usage, and site conditions by each Trade Subcontractor working on the Project.

The following BMP Table 4 indicates the BMPs for Trade Subcontractors to utilize to control construction site wastes and materials for the project.

Table 4. Waste Management and Material Handling Control BMPs

BMP Name
Material Delivery & Storage
Material Use
Spill Control
Solid Waste Management
Hazardous Materials/ Waste Management
Concrete Waste Management
Sanitary/Septic Waste Management
Liquid Waste Management

Fuel (gasoline/diesel), hydraulic oil, motor oil, and other liquid or hazardous waste materials used for vehicle and equipment maintenance may be used on the construction site and at the lay down areas if applicable permits are obtained and spill/response measures are adhered to. Minor amounts of lubricants and hydraulic fluid may be stored in vehicles. Spill response equipment will also be located onsite and near active construction.

Waste management BMPs includes procedures and practices designed to minimize or eliminate the discharge of pollutants from vehicle and equipment use, as well as fueling and maintenance operations to storm water drainage systems or to watercourses. Drip pans, diapers or alternative containment will be placed under equipment and vehicles (as applicable during maintenance or if leaking is suspected) while not in use, to catch and/or contain drips and leaks and prevent soil contamination. Construction crews will be educated to check parking areas visually for signs of leaking liquids; any vehicles found to be leaking onto the soil surface will be provided with temporary drip pans while at the project site. Fueling may be conducted on the job site and at the lay down area if fueling BMPs are implemented, appropriate permits are obtained and proper spill control policies and procedures are followed.

It is important that Trade Subcontractors minimize or abate the exposure of materials stored or spilled at the site. Spill Response Procedures for smaller spills are presented in BMPs. If a larger spill or discharge offsite occurs, or if the project receives a written notice or order from any regulatory agency, Trade Subcontractors will follow their Health & Safety Plan and Spill Prevention Countermeasure and Control Plan (SPCC) as well as comply with all Federal, State and local spill reporting regulations.

4 BMP INSPECTION, MAINTENANCE AND RECORD KEEPING

Inspection and maintenance of BMPs are an integral part of the Project and will be followed by the Trade Subcontractors. During visual inspections, if any BMP deficiencies or any storm water compliance issues are observed, the Trade Subcontractor's Construction Supervisor will be notified immediately and the deficiencies will corrected as soon as possible. The Trade Subcontractors are responsible for maintaining and/or submitting any required monitoring records as required by regulatory agencies in accordance with current regulatory guidelines.

Table 5. Trade Subcontractor Maintenance, Monitoring and Repair Procedures

PRACTICE	MONITORING, MAINTENANCE AND REPAIR PROCEDURES
Erosion Control	Check all soil protection including fabric, plastic, rock, hydroseed, mulch and velocity dissipation before, during and after rain events. Repair or replace as necessary to maintain proper function.
Street Cleaning	Streets must be periodically cleaned. Large quantities of soil tracked onto the street will be picked up by a loader bucket and/or hand shoveled back onto the pad. Streets must also be swept on an as-needed basis to maintain continuous sediment and litter control. Street washing shall not be done.
Sediment Control	Check integrity and functioning of berms, straw bales, check dams, and silt fences. Repair any eroded areas and remove accumulated debris.
Inlet Protection	Monitor installation and maintenance of sediment barriers and inlet protection devices. Check periodically during storms and repair or remove sediment as necessary to maintain appropriate functioning.
Temporary Basins	Remove accumulated sediment when sediment accumulates to within one foot of the outlet elevation and restore original dimensions of the basin. Obtain dewatering discharge permit from SFPUC prior to any dewatering of stored surface or groundwater.
Materials/ Equipment Storage	• Petroleum products shall be stored out of the rain and waste materials shall be stored in secured containers. Paints, solvents, enamels, sealers, bonding agents, and other chemicals shall be stored inside a covered, secure area. • Keep designated storage areas clean and well organized. Conduct weekly monitoring to check for damaged containers, leaks, etc. • Keep chemicals in original containers and keep them labeled. • Train employees and subcontractors on the use of the storage area.
Fueling Practices	• If refueling of equipment is conducted on site, make sure that

PRACTICE	MONITORING, MAINTENANCE AND REPAIR PROCEDURES
	fueling is occurring in designated areas and that secondary containment items such as drain pan or drop cloth are nearby to catch fuels/leaks. • Inspect and maintain vehicles and equipment regularly to minimize leaks and drips. • Comply with Federal, State and local requirements for fuel storage tanks.
Herbicide/ Pesticide Application	Provide the landscape contractor with knowledge about proper procedures for application of designated chemicals.
Waste Disposal	Provide proper disposal procedures for specific materials
Litter Control	Place trash bins in appropriate locations and are being used properly. Pets will not be allowed on the Project during construction.
Equipment Cleaning	If equipment cleaning is done on site, make sure contractors are using designated, bermed wash areas to prevent wash water from entering storm drain system.

5 LIST OF CONTRACTORS/SUBCONTRACTORS

The following is a partial list of Trade Subcontractors, suppliers and consultants that may be employed on the Project. Names and contact numbers for each activity on the list can be obtained from Webcor /Obayashi upon request. This list is to be updated as necessary. This plan can be utilized as part of a subcontractor notification letter to document Subcontractors notification of their obligation to uphold applicable storm water pollution control regulations.

TRADE	NAME	Signature Indicating Willingness To Provide, Maintain, and Implement SWPPP in compliance with all applicable City Ordinances and Codes
Architect		
Bricklayers		
Cabinet Makers		
Carpenters (finish)		
Carpenters (rough)		
Ceramic Tile Installers		
Civil Engineer		
Cleaning Crews		
Concrete Subcontractors Testers		
Demolition Contractors		
Door Installers		
Drywall Installers		
Electricians		
Environmental Consultants		
Fence Builders		
Fireplace Installer		
Flooring Installers		
Garage Door Installers		
Glass Workers		
Grading Contractors		
Hardware Installers		
HVAC Contractors		
Insulation Contractors		
Marble Contractors		
Masonry Contractors		

TRADE	NAME	Signature Indicating Willingness To Provide, Maintain, and Implement SWPPP in compliance with all applicable City Ordinances and Codes
Millwork Suppliers		
Landscaping Contractors		
Landscape Maintenance Crews		
Lumber and Truss Suppliers		
Mirror and Shower Door Installers		
Painting Contractors		
Paving Contractors		
Pipeline Contractors		
Plaster Contractors		
Plumbing Contractors		
Roofing Contractors		
Shelving Installers		
Striping and Signage Contractors		
Stucco Contractors		
Termite Contractors		
Underground Utility Crews	Trinet	
Waterproofing Subcontractors		
Window Installers		

6 INSTRUCTIONS TO FIELD PERSONNEL

Webcor /Obayashi will be responsible for mandating that SWPPP documents be prepared by Trade Subcontractors and also for observing the site on a regular basis in keeping with the standard of care for a General Contractor. Webcor /Obayashi will coordinate day to day oversight of the Project as a whole, track compliance with their contract obligations as well as Trade Subcontractor costs, direct Trade Subcontractors to maintain the Project site in accordance with all applicable regulations, and attend to discussions with the City regarding compliance concerns. Contracts with Trade Subcontractors and Sub tier Subcontractors shall include a requirement to comply with the provisions of this Plan and to maintain compliance with all applicable City Ordinances and Codes. The Trade Subcontractors, Sub tier Subcontractors and their Project Superintendents for this project are hereby authorized to uphold, certify, and maintain their own SWPPPs and to distribute it to all field personnel responsible for monitoring the site and maintaining compliance with storm water regulations. All subcontractors, field personnel and their assigns that work at the site must conform to the requirements described in this Plan and the SWPPP developed for Trade Subcontractor activities and any alterations thereof made at the time and in the manner herein specified, and in all respects according to its intent and meaning, and shall indemnify and hold harmless Webcor /Obayashi, its officers and agents, if failure to conform results in legal action or any other action by the Regional Water Quality Control Board or City. Duties of the Trade Subcontractors include but are not limited to:

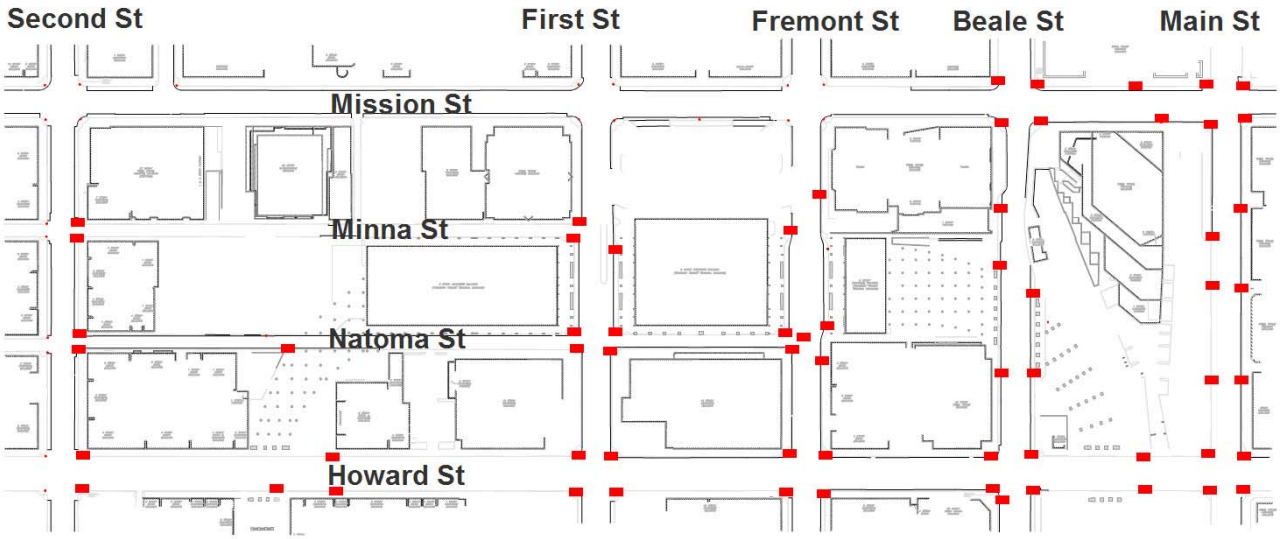
- Maintaining full compliance with their SWPPP and all City Codes and Ordinances.
- To this effect, the Trade Subcontractors shall have authority to mobilize their own crews for:
    - BMP Installation, monitoring and maintenance.
    - Obtaining dewatering and other applicable permits necessary for the satisfactory completion of their contract.
    - Providing for elimination of all unauthorized discharges.
    - Coordinating with the City such that all updates, amendments, corrections and/or repairs are made in a timely fashion.
    - Stopping any construction activity that is in violation of municipal ordinances or codes or that is inconsistent with the provisions of the Trade Subcontractors SWPPP.

7 CLOSING

The Project will comply with the storm water discharge regulatory framework in the site vicinity through implementation of this Construction Stormwater Pollution Control/Compliance Plan. This Plan indicates that each Trade Subcontractor is responsible for preparing, submitting for approval, installing and maintaining a SWPPP with BMPs for protecting inlets to the SF combined sewer system from construction activities. BMPs included in the SWPPPs prepared by each Trade Subcontractor should include practices from the BMP categories outlined in this Plan. The SWPPP shall be implemented concurrently with the commencement of Trade Subcontractor construction activities and maintained by the Trade Subcontractor in a form that provides the Project with full compliance throughout the construction schedule for activities undertaken by the Trade Subcontractor. Though projects such as the subject Project that are serviced by the combined sewer system in San Francisco are not subject to the terms of the State Construction General Permit, Section A of the Construction General Permit describes in detail the requirements for a SWPPP, and the City and County San Francisco specifies that it should be used as a design guide. All construction sites must prevent illicit discharge into the SF combined sewer system.

Appendix A Inlet Location Map

TRANSBAY TRANSIT CENTER
Existing Catch Basin



Appendix B Construction Stormwater Controls Monitoring Checklist

CONSTRUCTION STORMWATER CONTROLS MONITORING CHECKLIST

WEBCOR/OBAYASHI TRANSBAY TERMINAL PROJECT

Date: _____

Inspector Name:_____**Description of Inspected Area**:_____

24hr Rainfall Amount: _____Weather Conditions:_____

Name of Trade Subcontractor Representative:_____ **Contact (Cell Phone #)**: _____

Erosion/Sediment Controls	Repairs Needed	OK	Owner of Repair Task	Comments/Date Corrected
Check Dams/Sediment Traps	☐	___	_____	_____
Drainage Swales/Lined Ditches	☐	___	_____	_____
Entrance/Outlet/ Tire Wash	☐	___	_____	_____
Barrier (Sandbag/Gravel Bag)	☐	___	_____	_____
Fiber Rolls/Wattles/ Silt Fence	☐	___	_____	_____
Covers (Geotextile/Fabric/Plastic)	☐	___	_____	_____
Inlet Protection	☐	___	_____	_____
Soil Tackifiers/Dust Control Emulsions	☐	___	_____	_____
Street Sweeping/Vacuuming	☐	___	_____	_____
Other:	☐	___	_____	_____

Good Housekeeping Controls	Repairs Needed	OK	Owner of Repair Task	Comments/Date Corrected
Concrete Washout	☐	___	_____	_____
Dewatering System/Operation	☐	___	_____	_____
Illicit Connection Detection	☐	___	_____	_____
Material Delivery/Storage/Use)	☐	___	_____	_____
Paving and Grinding Operations	☐	___	_____	_____
Pile Driving Operations	☐	___	_____	_____
Sanitary/Septic Waste Management	☐	___	_____	_____
Spill Prevention and Control	☐	___	_____	_____
Equipment Servicing	☐	___	_____	_____
Waste Management	☐	___	_____	_____

Visual Observation of Runoff	Repairs Needed	OK	Owner of Repair Task	Comments/Date Corrected
Sediment Laden/Turbid	☐	___	_____	_____
Oily Sheen	☐	___	_____	_____
Odor	☐	___	_____	_____

Documentation	Repairs Needed	OK	Owner of Repair Task	Comments/Date Corrected
SWPPP on Site	☐	___	_____	_____
BMP materials Stockpiled	☐	___	_____	_____
Spill Control in Compliance	☐	___	_____	_____
Discharge Permit Posted	☐	___	_____	_____
Training Logs Available	☐	___	_____	_____
Inspection Logs Filled Out	☐	___	_____	_____
Other:	☐	___	_____	_____

Comments:_____

_____

_____

Appendix C SFPUC Construction Pollution Prevention Guide

Don't Be Caught Unaware

New Pollution Prevention Requirements for the Construction Industry

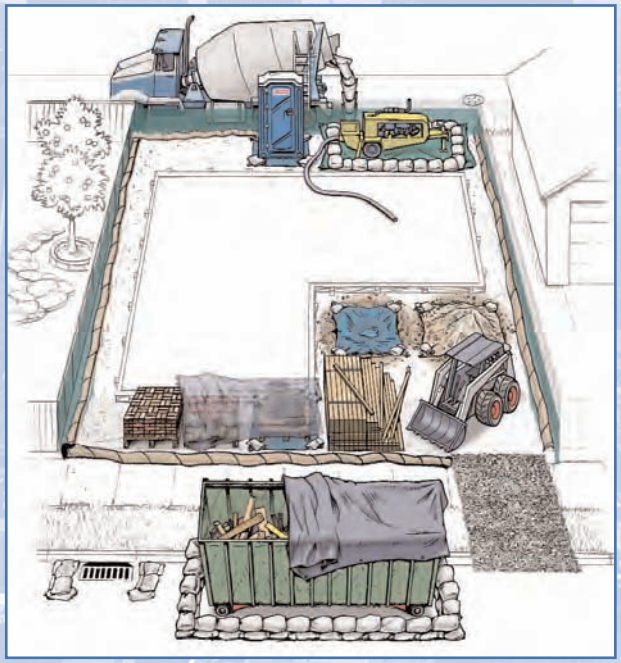
Water Pollution Prevention Program
San Francisco Public Utilities Commission
City and County of San Francisco
3801 3rd Street, Suite 600
San Francisco CA, 94124

Keep it on Site

Pollution Prevention Guide

for the

Construction Industry



Keep it on Site

The San Francisco Public Utilities Commission (SFPUC) is pleased to announce **Keep it on Site**, as part is its new program to prevent water pollution at construction sites.

Runoff from construction sites is a major source of water pollution, and is subject to requirements such as the development of a stormwater pollution prevention plan, a plan review, stormwater treatment measures, runoff monitoring and increased site inspections.

As part of our Construction Site Water Pollution Prevention Program, this brochure will assist construction professionals understand and comply with the new State and Federal laws. Here, you will find valuable information on methods used on construction sites to keep pollution, such as dirt and construction site debris out of our sewage treatment system and sensitive local water bodies.

We hope to make your job easier while keeping our city clean by providing you with the information to create an efficient and environmentally safe construction site.

Together, we have the ability to preserve the quality of life in San Francisco.

Water Pollution Prevention Program
San Francisco Public Utilities Commission
City and County of San Francisco
3801 3rd Street, Suite 600
San Francisco CA, 94124

Constuction Site Runoff: (415) 695-7310
http://pollutionprevention.sfwater.org

Water Pollution Prevention Program

The goal of the Water Pollution Program is to control pollution at its source in order to protect the Bay, ocean, creeks and lakes.

Useful links about other pollution prevention programs throughout San Francisco:

San Francisco Water Pollution Prevention Program
http://pollutionprevention.sfwater.org

State Water Board
www.waterboards.ca.gov/sanfranciscobay

International BMP Database
www.bmpdatabase.org

California Stormwater Quality Association
www.cabmphandbooks.com

Emergency Phone Numbers

To report illegal dumping of hazardous materials or wastes to the storm drain or sewer system, call San Francisco Water Pollution Prevention Program hotline: (415) 695-2020

Hazardous Spills: 911

Inspection and Enforcement Program

The Construction Site Inspection and Enforcement Program was established to ensure that all businesses operate in compliance with all appropriate stormwater laws and other City requirements. Contractors, site supervisors and property owners can be held responsible for violations, which may lead to a civil penalty of up to $25,000 per day and reimbursing the City for all expenses associated with clean up[1].

Construction materials such as paint, dirt, and trash often find their way into our storm drains,

[1] *San Francisco Sewer Use Ordinance Article 4.1, Public Works Codes*

Best Management Practices

jeopardizing San Francisco's sewer system, and polluting surrounding local water bodies.

Contractors are now required to implement what are known as Best Management Practices (BMPs) on all construction sites. BMPs are methods used to keep pollution out of our storm drains and catch basins and off of City property such as sidewalks, streets, and alleys. Installing and maintaining these BMPs on the construction site is critical to protecting our sensitive water bodies.

If your project is greater than 1 acre, you are required to prepare a formal Stormwater Pollution Prevention Plan (SWPPP). Please contact SFPUC's Environmental Regulation and Management for more information at (415) 695-7310.

The following is a list of BMPs and pollution prevention measures that must be implemented at all construction sites.

- Identify all storm drains and catch basins near the construction site and ensure all workers are aware of their locations to prevent pollutants from entering them.
- Protect all storm drain and catch basin inlets.
- Develop an erosion control and sediment control plan for wind and rain.
- Develop spill response and containment procedures.
- Inspect site regularly to ensure that BMPs are intact.
- Conduct daily site cleanings as needed.
- Educate employees and subcontractors about BMPs.
- Regularly maintain all BMPs at project site.

Best Management Practices

Site Overview

This drawing illustrates Best Management Practices (BMPs) that must be followed at all construction sites in San Francisco.

Preserve existing vegetation

Preserving existing trees and vegetation where possible will prevent erosion.

Paint and Stucco

All paint and stucco materials stored on the site must be contained and covered. It is illegal for contractors to wash out paintbrushes in the street or dump any residues in the sewer or the storm drain. Paintbrushes and spray guns shall be washed/cleaned out into a hazardous materials barrel or put back into its original container and disposed of properly. Latex paint should be dried in its container and placed in the garbage. Oil paint and thinners need to be recycled as hazardous wastes.

Perimeter Controls

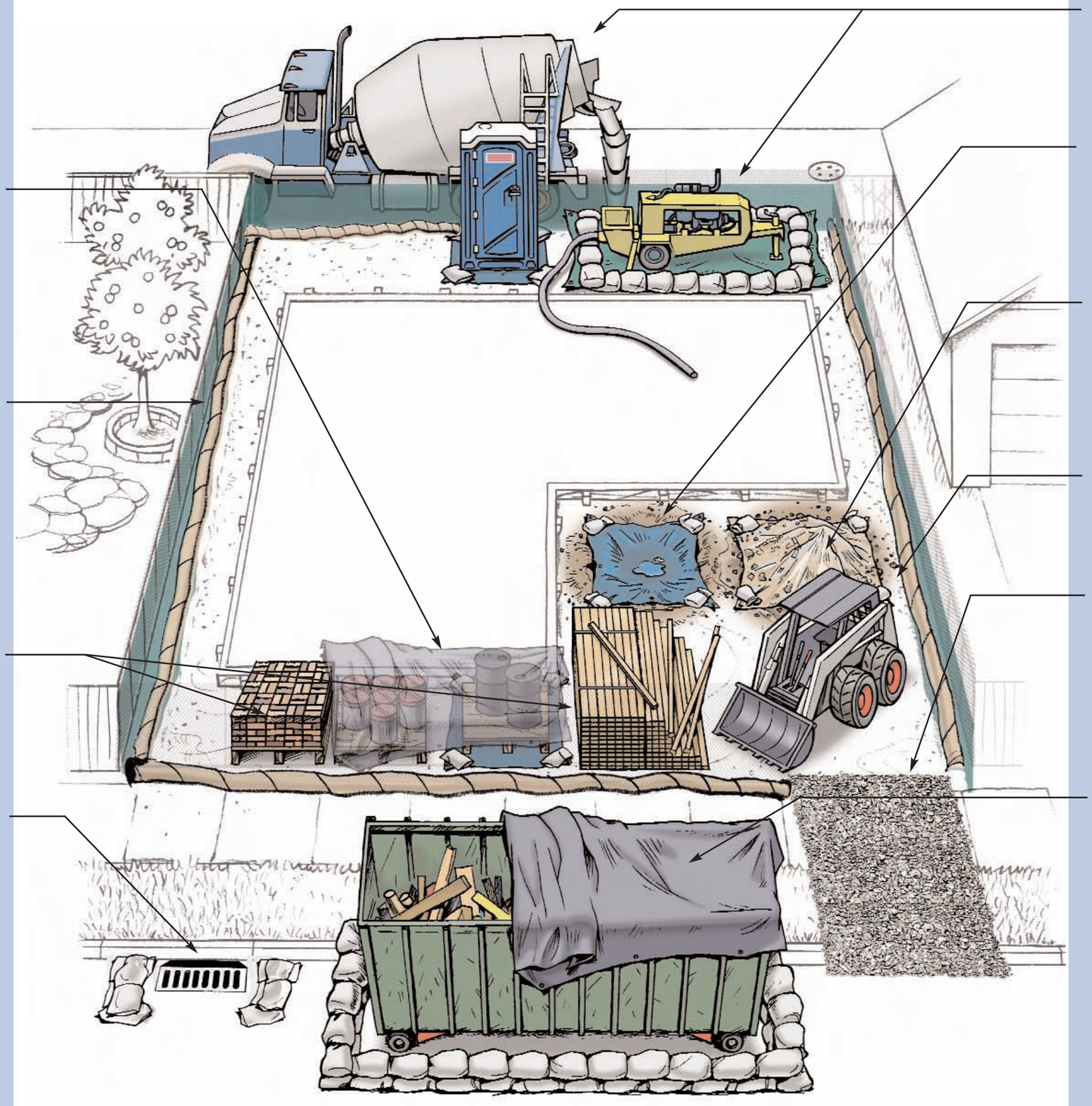
Gravel bags, silt fences, and fiber roles are acceptable perimeter controls, and shall be used to surround the entire site. Upstream perimeter controls prevent water from running into your site and down-stream controls prevent sediment from leaving your site. Avoid running over perimeter controls with vehicles or heavy equipment, as they can damage the materials. Replace any damaged perimeter controls immediately. Keep extra absorbent materials and/or a wet/dry vacuum on site to quickly pick up unintended spills. Sites must also be checked and maintained daily.

Building Materials / Staging areas

Construction materials must be stored onsite at all times. The only exception is if you have a right-way-permit. Building materials should always be covered when not in use to prevent runoff caused by wind or rain. To apply for a right-of-way permit, contact the Bureau of Streets Use and Mapping at (415) 554-5810.

Storm Drains and Catch Basins

Storm drains must be protected at all times with perimeter controls, such as fiber rolls or gravel bags.



Concrete Trucks / Pumpers

Any concrete pumpers parked in public streets or alleys must be surrounded by perimeter controls, such as berms, gravel bags or fiber rolls. Tarps also must be placed beneath concrete pumpers at all times. Residual materials must be cleaned up as well.

Washout Area

The disposal of "wet" construction materials should be handled in the washout area. This includes paint, stucco, and concrete. Use a gravel bag or fiber roll and tarp to collect evaporation and prevent run-off in nearby areas. The washout area must be checked and maintained daily to ensure compliance.

Dirt and Grading

Mounds of dirt or gravel should be stored on site and covered each day with a tarp. When in use, all exposed dirt piles should be sprayed with water to prevent excessive dust. Tarps must be available and onsite to cover 125% of exposed areas during the rainy season (October-April).

Earthmoving Equipment

All earthmoving equipment should be stored onsite. Maintenance and repair should never be conducted on the site. All tracks and trails left by equipment leading to and from the site should be cleaned up immediately.

Construction site stone or rock access drives

Stone or rock access drives at any construction site should be made of 3-4 inch fractured stone aggregate with a geo-textile liner below the grade of the road. This is to be used by all vehicles to limit tracks of mud onto the streets.

Dewatering Activities

A batch discharge permit is required before releasing any construction site wastewater. Call 415-695-7310 for more information.

Dumpsters

Keep dumpsters covered. Areas around dumpsters should be swept daily.

Water Pollution Prevention Program
San Francisco Public Utilities Commission
City and County of San Francisco
3801 3rd Street, Suite 600
San Francisco CA, 94124
(415) 695-7310

siterunoff@sfwater.org
http://pollutionprevention.sfwater.org

Original artwork and concepts developed by the City of Coronado, CA revised by SFPUC Graphics staff personnel.

Exhibit L

TRANSBAY TRANSIT CENTER

Hazardous Materials Management Plan

Revision 1

March 11, 2011

WEBCOR/OBAYASHI JOINT VENTURE
SAN FRANCISCO, CA

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REFERENCES

Hazardous Materials Management Plan
TRANSBAY TRANSIT CENTER
San Francisco, California

Webcor/Obayashi Joint Venture will be responsible for mandating that Hazardous Materials Procedures documents shall be prepared by Trade Subcontractors and also for observing the Trans Bay Transit Center site on a regular basis in keeping with the standard of care for a General Contractor. Webcor/Obayashi Joint Venture will also coordinate the day to day oversight of the Project as a whole, compliance with their contract obligations, the tracking of Trade Subcontractor costs, directing Trade Subcontractors to maintain the Project site in accordance with all applicable regulations, and for discussions with the City regarding compliance concerns. Contracts with Trade Subcontractors and Sub tier Subcontractors shall include a requirement to comply with the provisions of this Plan and to maintain compliance with all applicable City Ordinances and Codes. The Trade Subcontractors, Sub tier Subcontractors and their Project Superintendents for this project are hereby authorized to uphold, certify, and maintain their own Hazardous Materials Procedures Plans and to distribute it to all field personnel responsible for monitoring the site and maintaining compliance with Federal State and local regulations. All subcontractors, field personnel and their assigns that work at the site must conform to the requirements described in this Hazardous Materials Procedures developed for Trade Subcontractor activities and any alterations thereof made at the time and in the manner herein specified, and in all respects according to its intent and meaning, and shall indemnify and hold harmless Webcor Builders-Obayashi, its officers and agents, if failure to conform results in legal action or any other action. Duties of the Trade Subcontractors include but are not limited to:

- Maintaining full compliance with their Hazardous Materials Procedures plan and all City Codes and Ordinances.
- To this effect, the Trade Subcontractors shall have authority to mobilize their own crews for: monitoring and maintenance.
- Obtaining dewatering and other applicable permits necessary for the satisfactory completion of their contract.
- Stopping any construction activity that is in violation of municipal ordinances or codes or that is inconsistent with the provisions of the Trade Subcontractors Hazardous Materials Procedures plan.

The Transbay existing Terminal Building has been demolished and replaced with a multimodal Transit Center that includes an underground rail station. The depth of the excavation will be approximately 65 feet. A soil-cement shoring wall extending approximately 120 feet below ground surface (bgs) will form the perimeter of the Transit Center. A concrete buttress will be placed under the Transit Center adjacent to 301 Mission Street extending down to bedrock, approximately 240 feet.

This HMMP includes the requirement to mitigate potential health and safety (H&S) risks to the environment, workers, and site-user associated with the presence of certain constituents in the soil at the Site.

ENVIRONMENTAL REPORTS

Webcor /Obayashi Joint Venture have reviewed environmental reports prepared for the site. The following is a summary of the previous reports:

Phase I Environmental Site Assessment

The eastern portion of the Site is located in an area historically known as the Tar Flat which was a former industrial area developed during the Gold Rush Era of the 1850's. The Site has been occupied by numerous buildings involved in metal work facilities, foundries, and a coal yard. Also, the San Francisco Gas Light Company was located on the south central and south eastern edge Site. Coal tar waste is believed to have been discharged into the surrounding tidelands which include the eastern portion of the Site. The Transbay Terminal Building was constructed between the years of 1936 ad 1938 and was used as a passenger rail station. In 1958, the train tracks were removed and/or paved over and the Site has been used by buses since. In the 1950's, elevated concrete roadways were built on the Site as part of the Transbay Terminal and the Embarcadero Freeway. The Embarcadero Freeway was damaged during the 1989 Loma Prieta earthquake and was subsequently demolished. Since the 1990's, the Site has remained largely unchanged.

Significant findings included:

- The subsurface fill material at the Site may contain elevated concentrations of heavy metals and other residual petroleum hydrocarbons. These concentrations are likely associated with the presence of 1906 earthquake fill material located below the ground surface. Special soil handling and/or sampling will likely be required during any construction activities.

- Due to the proximity of the former San Francisco Gas and Light Plant (bounded by First, Fremont, Howard, and Natoma Streets) and the presence of manufactured gas by-product waste found on nearby properties, hazardous materials may exist in the subsurface beneath the Site. Special soil handling and/or sampling will likely be required during any construction activity.

- The soil and groundwater near the West section of the Transbay Terminal Building may contain petroleum hydrocarbons and VOCs associated with the former USTs release. Special soil and groundwater handling and/or sampling will likely be required during any construction activities.

Site Investigations

Limited soil and groundwater sampling has been performed beneath the ramps and near the Transbay Terminal building in 1999 and 2008 by Treadwell & Rollo. Also, they performed an Environmental Site Characterization (ESC) in 2009 at the Transbay Terminal which included collecting soil samples of the fill material and underlying sand from 23 exploratory borings, chemical testing of selected samples, and evaluating the results. Treadwell & Rollo collected groundwater grab samples from four of the exploratory borings for chemical analysis. The objective of the ESC was to assess the presence of petroleum hydrocarbon and metal contamination in the soil and groundwater beneath the Site that will be removed and disposed during the proposed construction activities. Concentrations of chemical compounds and metals detected in the soil and groundwater samples were compared to state and federal criteria for hazardous waste and disposal options.

The results of our environmental site characterization and other available subsurface information in the vicinity indicate the Site is generally underlain by approximately 5 to 16 feet of fill material, composed of loose to medium dense silty sand with varying amounts of brick, wood, tar, and glass fragments. The presence of fill material underlying the Site is likely associated with the 1906 earthquake and fire. A sand layer consisting of medium dense to very dense sand with variable amounts of silt approximately 15 to 18 feet thick underlies the fill material. Bay Mud is present beneath the sand layer.

Soil Results

TPHg was detected above the method reporting limit (0.1 mg/kg) in 3 of the 88 samples analyzed at concentrations ranging from 0.29 mg/kg to 26 mg/kg. TPHd was detected above the method reporting limit (2 mg/kg) in 9 of the 87 samples analyzed at concentrations ranging from 2.01 mg/kg to 54.8 mg/kg. TPHmo was detected above the method reporting limit (4 mg/kg) in 49 of the 88 samples

analyzed at concentrations ranging from 4.09 mg/kg to 137 mg/kg. Methylene chloride was detected in 3 of the 14 samples analyzed at concentrations ranging from 0.056 mg/kg to 0.24 mg/kg. No other VOCs were detected at or above methods reporting limits.

Total cyanide was not detected above the method reporting limit (1 mg/kg) in any of the 5 samples analyzed. No SVOCs, Pesticides, PCBs, Sulfide, or Cyanide were detected at or above method reporting limits in the samples analyzed. The pH measured in five samples ranged from 6.70 standard units (S.U.) to 8.66 S.U.

Total lead was detected in each of the samples analyzed at concentrations ranging from 1.2 mg/kg to 1,000 mg/kg (Table 2). Total lead was detected at concentrations at or above 50 mg/kg but below 1,000 mg/kg in 33 soil samples. Each of these soil samples was subsequently run for STLC and TCLP lead to determine soluble lead levels. One soil sample (TR-21-5) matched the State of California hazardous waste criteria of 1,000 mg/kg for total lead and subsequently run for TCLP lead to determine if this soil represents a federal RCRA hazardous waste. The TCLP result was 0.83 milligrams per liter (mg/L) so less than the federal RCRA hazardous waste criteria of 5 mg/L.

STLC lead was detected at or above the method reporting limits in 33 of the 34 samples analyzed at concentrations ranging from 0.13 mg/L to 52.1 mg/L. A total of 19 soil samples exceeded the State of California hazardous waste criteria of 5 mg/L. TCLP lead was detected at or above the method reporting limits in 22 of the 36 samples analyzed at concentrations ranging from 0.13 milligrams per liter (mg/L) to 14.5 mg/L. A total of one soil sample (TR-21-5) exceeded the Federal hazardous waste criteria of 5 mg/L.

The remaining metal concentrations were within normal[1] background ranges found in the western United States with the exception of zinc in sample TR-2-1.5 which was detected at a concentration of 5,600 mg/kg.

Groundwater Results

No oil and grease, TRPH, or SVOCs were detected above method reporting limits in any of the four samples. TSS was detected in all the samples with concentrations ranging from 110 mg/L to 160,000 mg/L. COD was detected in TR-19-GW, TR-20-GW, and TR-24-GW with concentrations of 24 mg/L, 20

[1] "U.S.G.S. Professional Paper 1270, Element Concentrations in Soils and Other Surficial Materials of the Conterminous United States," 1984.

mg/L, and 64 mg/L, respectively. Phenolics were detected in TR-24-GW at a concentration of 0.074 mg/L. TR-19-GW, TR-20-GW, and TR-24-GW were tested for pH with concentrations of 7.41 S.U., 7.07 S.U., and 7.45 S.U., respectively.

Trichloroethylene was detected in TR-8-GW at a concentration of 1.58 mg/L. 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, benzene, ethylbenzene, isopropyl benzene, n-propybenzene, styrene, toluene, and total xylenes were detected in TR-19-GW with concentrations of 0.0223 mg/L, 0.00568 mg/L, 0.0251 mg/L, 0.011 mg/L, 0.00561 mg/L, 0.00138 mg/L, 0.00143 mg/L, 0.0171 mg/L, and 0.0591 mg/L, respectively. Methyl tert-butyl ether (MTBE) was detected in TR-20-GW at a concentration of 0.00078 mg/L. Naphthalene was detected in TR-19-GW, TR-20-GW, and TR-24-GW at concentrations of 0.417 mg/L, 0.00371 mg/L, and 0.0548 mg/L, respectively. No other VOCs were detected in any of the samples.

Antimony was detected in TR-20-GW at a concentration of 0.012 mg/L. Arsenic was detected in TR-24-GW at a concentration of 0.024 mg/L. Barium was detected in TR-8-GW, TR-19-GW, TR-20-GW, and TR-24-GW at concentrations of 0.066 mg/L, 0.052 mg/L, 0.085 mg/L, and 0.022 mg/L, respectively. Chromium was detected in TR-8-GW and TR-20-GW at concentrations of 0.032 mg/L and 0.008 mg/L, respectively. Cobalt was detected in TR-8-GW and TR-20-GW at concentrations of 0.011 mg/L and 0.006 mg/L, respectively. Molybdenum was detected in TR-8-GW, TR-20-GW, and TR-24-GW at concentrations of 0.01 mg/L, 0.024 mg/L, and 0.009 mg/L, respectively. Nickel was detected in TR-8-GW, TR-20-GW, and TR-24-GW at concentrations of 0.054 mg/L, 0.052 mg/L, and 0.013 mg/L, respectively. Vanadium was detected in TR-8-GW, TR-19-GW, TR-20-GW, and TR-24-GW at concentrations of 0.032 mg/L, 0.012 mg/L, 0.012 mg/L, and 0.021 mg/L, respectively. Zinc was detected in TR-8-GW, TR-20-GW, and TR-24-GW at concentrations of 1.1 mg/L, 0.013 mg/L, and 0.011 mg/L, respectively. No other metals were detected in any of the samples.

SUBSURFACE CONDITIONS

The results of previous site investigations and other available subsurface information in the vicinity indicate the Site is generally underlain by approximately 5 to 16 feet of fill material, composed of loose to medium dense silty sand with varying amounts of brick, wood, tar, and glass fragments. The presence of fill material underlying the Site is likely associated with the 1906 earthquake and fire. A sand layer consisting of medium dense to very dense sand with variable amounts of silt approximately 15 to 18 feet thick underlies the fill material. Bay Mud is present beneath the sand layer.

Groundwater was encountered at the time of the investigation at depths ranging from 13 to 20 feet bgs. Groundwater levels may fluctuate depending on the season. The groundwater flow direction is likely to the northeast towards San Francisco Bay.

DISCUSSION

Based on the analytical results from the Site subsurface investigation and previous analytical results, some of the fill material contains elevated total and soluble lead levels at concentrations exceeding Federal and State of California hazardous waste criteria. The remaining fill material will most likely be accepted at a regulated Class II and/or Class III landfill. Based on previous environmental investigations at the Site and vicinity, the sand underlying the fill would likely be disposed of as unrestricted waste.

The area of fill material containing soluble lead concentrations exceeding the Federal hazardous waste criteria are near boring TR-21 at a depth of 5 feet bgs. The areas of fill material containing total and soluble lead concentrations exceeding the State of California waste criteria are located near borings TR-1 at depths of 1.5 and 5 feet bgs, TR-2 at depths of 1.5, 3 and 5 feet bgs, TR-4 at depths of 3 and 5 feet bgs, TR-8 at depths of 1.5 and 3 feet bgs, TR-14 at a depth of 3 feet bgs, TR-15 at a depth of 3 feet bgs, TR-16 at a depth of 5 feet bgs and 10 bgs, TR-17 at depths of 1.5, 3 and 5 feet bgs, TR-19 at a depth of 7.5 feet bgs, TR-20 at a depth of 7.5 feet bgs, and TR-21 at a depth of 3 feet bgs. The remaining fill material will be disposed as Class II non-hazardous waste.

Groundwater is encountered at depths ranging from approximately 13 to 20 feet bgs across the Site. The proposed construction activities most likely will encounter groundwater in quantities that will require its removal from the subsurface. Prior to discharge into the sanitary sewer system, the dewatering contractor will obtain a batch groundwater discharge permit from the San Francisco Public Utilities Commission (SFPUC).

Because hazardous materials were detected at the Site, a SMP and a HASP will be required prior to construction. The Subcontractor HASP will outline proper soil handling procedures and H&S requirements to minimize worker and public exposure to hazardous materials during construction.

RECOMMENDATIONS FOR MITIGATIVE ACTIONS

The results of previous environmental investigations at and near the Site indicate the fill material beneath the Site contains elevated concentrations of heavy metals and petroleum hydrocarbons. The presence of these compounds poses soil management and potential H&S issues to be addressed as part of the Site

development activities. The soil management objectives for the Site are to minimize exposure to construction workers at the Site, nearby residents and/or pedestrians, and future users of the Site to constituents in the soil.

Health and Safety Issues

There may be a potential H&S risks associated with the heavy metals and petroleum hydrocarbons detected at the Site. There also may be a potential for this soil to affect construction workers at the Site, nearby residents and/or pedestrians, and future users of the Site. The routes of potential exposure to the petroleum hydrocarbons and metals could be through three pathways: 1) dermal (skin) contact with the soil, 2) inhalation of dusts, and 3) ingestion of the soil.

The most likely potential for human exposure to the petroleum hydrocarbons and metals in the soil will be during soil excavation operations. Because on-site materials contain concentrations of petroleum hydrocarbons and lead in excess of the Proposition 65 guidelines, there is a requirement that appropriate health and safety procedures, as well as warning requirements, be implemented during construction. The trade sub contractor will be responsible for establishing and maintaining proper H&S procedures to minimize worker and public exposure to Site contaminants during construction. Webcor/Obayashi Joint Venture will oversee this process and require the development and implementation of a comprehensive HASP, which should be prepared by a certified industrial hygienist that represents each subcontractor or its sub tier contractor.

The H&S training requirements, i.e. trained in accordance with Section 1910.120 of 29 Code of Federal Regulations (HazWoper training), specific personal hygiene, and monitoring equipment that will be used during construction to protect and verify the H&S of the construction workers and the general public from exposure to constituents in the soil. Air monitoring to evaluate the amount of airborne particles during excavation will be required by the tub trade contractors. All reports will be kept in a central location managed by Webcor/Obayashi Joint Venture.

A representative of Webcor/Obayashi Joint Venture and the Site health and safety officer (HASO) representing the trade subcontractor will be on site at all times during excavation activities to ensure that all health and safety measures are maintained. The Webcor/Obayashi Joint Venture representative or HASO will have authority to direct and stop (if necessary) all construction activities in order to ensure compliance with the HASP.

The purpose of the HASP is to provide field personnel with an understanding of the potential chemical and physical hazards, protection of any off-site receptors, procedures for entering the project Site, H&S procedures, and emergency response to hazards should they occur. All project personnel shall read and adhere to the procedures established in this HASP. A copy of all plans will be kept on site during field activities and will be reviewed and updated as necessary.

The general public will be protected through the following measures maintained by trade subcontractors and monitored by Webcor/Obayashi Joint Venture:

- the Site will be fenced;
- exposed soil at the construction Site will be watered as necessary to prevent visible dust from migrating off-site;
- soil stockpiles will be covered;
- water will be misted or sprayed during the loading of soil onto trucks for off haul;
- trucks transporting contaminated soil will be covered with a tarpaulin or other cover;
- the wheels of the trucks exiting the Site will be cleaned prior to entering public streets;
- public streets will be swept daily if soil is visible; and
- Excavation and loading activities will be suspended if winds exceed 20 miles per hour.

Soil Management

The proposed construction activities will disturb soil during the excavation activities including: soil handling during archeological investigations, shoring wall installation, construction of a buttress for the adjoining 301 Mission Street property, timber pile removal and disposal, utility relocation and the mass excavation for the new Transbay Transit Center. During all excavation activities, dust control measures will be implemented to reduce potential exposure. These measures shall include moisture-conditioning the soil using dust suppressants and covering the exposed soil and stockpiles with weighed down plastic sheeting to prevent exposure of the soil.

Since all the contaminated fill material will be excavated and disposed of off-site, there will be no risk of direct contact with the underlying fill material by future Site users.

The Site's HASP (prepared by the trade sub contractor) will contain additional dust monitoring, action levels, dust control measures, and work stoppage provisions that will be followed during construction activities.

Soil Segregation and Disposal

Before any excavation activities begin at the Site, a TJPA representative shall be provided documentation from the excavation contractor that the accepting landfill facility for the soil from Transbay Terminal project has been provided with and has reviewed all analytical data collected from the Site. TJPA shall approve all off-site disposal facilities and soil transportation contractors, including, without limitation, available insurable coverage, and prior to the shipment of any soil or other waste materials. The TJPA representative will provide testing and schedule the intervals that testing shall occur.

The results of previous soil analytical testing indicate that some of the soil located at the Site will be disposed off-site at a Class I landfill, however additional chemical testing of the soil may be required by the landfill prior to disposal. The excavation contractor shall be responsible for tracking the disposition of soil removed from the Site. Any excavated soil characterized as a hazardous waste shall be tracked using the Uniform Hazardous Waste Manifest System (USEPA Form 8700-22), as applicable. Soil not characterized as a hazardous waste shall be tracked using non-hazardous bills of ladings. All documentation will be provided to TJPA during the excavation activities.

If soil stockpiling of suspected contaminated soil is to be performed, the excavation contractor shall establish appropriate soil stockpile locations on the Site to properly segregate, cover, control dust, profile, and manage the excavated soil. Stockpiled soils are to be placed on top of one layer of 10-mil polyethylene sheeting (or equivalent), such as Visqueen. When stockpiled soil is not actively being handled, top sheeting will be adequately secured so that all surface areas are covered.

Soil Disposition

The Trade Sub contractor will establish appropriate off-site soil disposal locations and direct truck loading scheduling and/or soil stockpile locations on the Site to properly segregate, cover, moisture control, and profile the excavated soil. Soil profiling criteria will ultimately depend on the acceptance criteria of the landfills receiving the soil. These procedures will be established by the excavation contractor and coordinated with the proposed landfills prior to initiating soil excavation. It is not anticipated that soil will be reused at the Site for construction-related activities.

The Webcor Obayashi JV will, on behalf of TJPA, will be responsible for tracking final soil dispositions and turn that information to the TJPA representative. Any excavated soil considered hazardous waste will be tracked using the Uniform Hazardous Waste Manifest System (USEPA Form 8700-22), as applicable. Soil not considered hazardous waste will be tracked using non-hazardous bills of lading. These two systems will be used to comply with appropriate state and local requirements.

The contractor will arrange for transportation of all wastes off-site. Hazardous and non-hazardous waste will be transported to the appropriate disposal facility using a permitted, licensed, and insured transportation company. Transporters of hazardous waste must meet the requirements of 40 CFR 263 and 22 CCR 66263. All trucks transporting bulk hazardous waste will be properly lined and covered with compatible materials. Trucks will be decontaminated prior to any use other than hauling contaminated materials unless the contaminated material was already double-contained. The contractor will be responsible for preparing and submitting traffic control plans for trucks entering and leaving the Site. A decontamination pad location plan and decontamination procedures will be prepared. A route plan will also be prepared showing the expected route each truck will use to reach each landfill.

For soil that is to be exported off-site that is characterized as a hazardous waste, an appropriate USEPA Generator Identification Number will be recorded on the hazardous waste manifests used to document transport of hazardous waste off-site. The hazardous waste transporter, disposal facility, and U.S. Department of Transportation (DOT) waste description required for each manifest will be determined on a case-by-case basis. A description of the number of containers being shipped, the type of container, and the total quantity of waste being shipped will also be included on each manifest.

Webcor/Obayashi Joint Venture representative will be responsible for overseeing the sub trade provides accurate completion of the hazardous waste manifests and nonhazardous bills of lading. Records of all wastes shipped off-site will be maintained by TJPA and will be made available for inspection on request. The final destination of wastes transported off-site will be documented in the Site Closure Report that will be prepared by others.

Soil Sampling

If needed, chemical testing of the stockpiled soil will be performed to profile the soil for disposal. Soil profiling criteria depends on the proposed landfill location or off-site receiving facility. These procedures shall be established by the excavation contractor and coordinated with the proposed landfills prior to initiating soil excavation. Typical soil profiling requirements are one four-point composite sample per 500 to 750 cubic yards to be disposed.

If soil samples are required for analysis, the samples shall be collected by the TJPA representative and tracked.

Timber Pile Removal and Disposal

Part of the foundation system for the Transbay Terminal building includes timber piles beneath the basement slab. During the excavation activities these timber piles will be removed and disposed of. The timber piles will be extracted from the subsurface and as much as possible removal of all the soil which is attached to the timber pile will need to be performed. The extracted timber piles will be segregated, tested by the TJPA representative and transported. If disposed of as a Treated Wood at a Class II non-hazardous waste with copies of the Bill of Ladings will be submitted to TJPA representative.

Underground Storage Tank Removal and Disposal

If a underground storage tank (UST) and/or and associated product lines are found, arrange for a licensed tank removal contractor to properly remove and dispose of the UST. Proper permits and notifications should be in place prior to removing the UST. If soil staining is observed, place the affected soil into a stockpile onto plastic sheets and cover with plastic sheets. The Environmental Consultant will complete soil sampling and analysis tasks for UST closure in accordance with San Francisco Fire Department (SFFD) and SFDPH.

Coal Gasification Residual Material

The former San Francisco Gas Light Company was located on the south central and south eastern edge of the Site. Coal tar waste is believed to have been discharged into the surrounding tidelands which include the eastern portion of the Site. Excavation in this area of the Site will most likely encounter residual coal tar waste. Some of the coal gasification residual material encountered may be former piping, coal tar, phenols, heavy metals, and polynuclear aromatic hydrocarbons. If any coal gasification residual material is encountered during the excavation, the material will be stockpiled onto plastic sheeting and covered with plastic sheeting. The TJPA representative will collect soil samples and analyzed the material to determine proper disposal of the material.

Groundwater Management

Groundwater is encountered at depths ranging from approximately 13 to 20 feet bgs across the Site. The proposed construction activities most likely will encounter groundwater in quantities that will require its removal from the subsurface. Prior to discharge into the sanitary sewer system, the dewatering Trade Subcontractors will obtain a batch groundwater discharge permit from the San Francisco Public Utilities

Commission (SFPUC). Based on analytical results of the groundwater samples analyzed during previous Site investigations, approval of the groundwater discharge from the dewatering system would be granted by SFPUC.

Dust Control

Prior to initiating construction activities, a dust control plan (prepared by Trade Subcontractor and specific to this project) will be implemented to reduce potential exposure during excavation and loading operations. This document will contain measures to protect construction workers and the public including: dust monitoring, action levels, dust control measures, and work stoppage provisions that will be followed during construction activities.

Dust control will be accomplished through implementation of engineering controls, including light water spraying or misting of stockpiled soil, truck loading areas and work areas. Misting or spraying will be performed to sufficiently reduce fugitive dust emissions, but limited to prevent water runoff. Efforts will also be made to minimize the soil drop height from an excavator's bucket onto soil piles or into transport trucks. The site-specific dust control plan will as needed, include some or all of the following procedures: site fencing; wetting soil; analysis of wind direction; dust monitors at the work zone and at the Site perimeter and appropriate record keeping, visible inspection; establishing a hotline for community response; limiting excavation area; soil storage regulations (e.g. covering stockpiles); windbreaks; paving; truck loading requirements (e.g. covering vehicles or excavator bucket drop heights); Site vehicle speed limits; wheel washing; street sweeping; termination of excavation if winds exceed 20 mph; and/or addition of soil stabilizers; or other responses as needed.

Contingency Procedures

Hazardous materials including; sumps and/or vaults, asbestos piping, former monitoring wells, and soil with petroleum hydrocarbon odors and/or stains may be encountered during excavation activities. If unanticipated hazardous materials are encountered, the following procedures will be maintained by trade subcontractors and monitored by Webcor/Obayashi Joint Venture:

- stop work in the area where the suspect material was encountered and cover it with plastic sheets;
- notify the Webcor/Obayashi Joint Venture representative, the TJPA Environmental Consultant for Site a inspection and appropriate action in the suspect area; and
- review the existing H&S plan and make revisions, if necessary; and

- Have appropriately trained personnel on Site to work with the affected materials, once directed by Webcor/Obayashi Joint Venture.

If a sump and/or vaults are encountered during excavation activities, contact the TJPA Environmental Consultant for inspection and appropriate action. If no liquid, obvious staining or odors are observed, sump and/or vaults will likely be destroyed and disposed of. If liquid is present within the sump and/or vault and/or obvious staining and odors are observed, the TJPA, Environmental Consultant will collect samples for analyses to determine how to properly disposal of the material.

If stained soil or odors are observed, plastic sheeting will be placed over the affected area and the TJPA Environmental Consultant will be contacted for inspection and appropriate action. If the material is to be excavated, the material will be stockpiled onto plastic sheeting and covered with plastic sheeting. Soil samples will be collected and analyzed to determine proper disposal of the material.

REFERENCES

Site Mitigation Plan Transbay Transit Center: Treadwell & Rollo, Inc. dated March 2010.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
0001	SCS - Transfer Girder Clarification	Void	05/15/2014	05/25/2014		Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please clarify the designer's intent:

Sheet Sl-2303 indicates that the south end of Transfer Girder TR9 extends beyond the B87 and B88 beams southern edge and partially into the intersecting MFBl beam which is angular to the B87 beam. Section 8/S 1-3701 indicates that there are welded rebar couplers at the top flange of the TR9 girder to match the B78 beam reinforcing, but the B78 beam ends at the B87/B88 intersection prior to the southern end of the TR9 girder.

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
0002	Wedge Barriers at Beale Street	Void	06/09/2014	06/19/2014		Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Reference: 28 16 44/APA 1.2.E

Shows only two wedge barriers at Beale Street (Bus Plaza). The drawings show four wedge barriers at Beale Street (Bus Plaza) at GL 33. Revise and coordinate documents accordingly.

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
0003	Coating for Metal Surfaces	Void	06/09/2014	06/19/2014		Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Per 05 15 21 Steel Castings (see attached), steel castings (most notably the cast nodes) are to be furnished as bare metal. This was confirmed in the construction issues meeting held on 04/17/14 (see attached), with the indication that coating of the bare metal is to be included in TG16.5 Painting. 09 97 16 High Performance Coatings ¿ Superstructure Package (see attached) identifies a coating system for exterior exposed factory-primed metal surfaces, and a coating system for galvanized steel, but not a coating system for exterior exposed unprimed/non-galvanized metal surfaces. Please provide the coating

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

system for all unprimed/non-galvanized metal surfaces.

0004 **Watertight Condition 07 14 13** **Void** **06/11/2014** **06/21/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Reference: 07 14 13, 1.8.B

See P1-0116. Same requirement for completely watertight building during new construction -waterproofing installation is not feasible.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

0005 **Seismic Joint Coordination Between A Drawings** **Void** **06/11/2014** **06/21/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Reference: A1-8880, A1-2302, A1-7001

Per A1-8880, WJC8 and RJC1 are located between Stair 201 and the adjacent existing building. Per A1-2302 and A1-7001, there does not appear to be a seismic joint at this location. Please revise so that drawings match each other.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

0006 **BGP - Bracing removal sequence on the East end of Zone 4** **Void** **07/25/2014** **08/04/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Bracing removal sequence on the East end of Zone 4
WOJV is proposing the following sequence for the bracing removal for the east side of Zone 4.
See sketch SK1, attached.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Sequence
1. Remove level D struts and walers from within the green clouded area up to GL- 32.2 once the mat slab beneath has reached adequate strength.
2. Remove level D struts within the Blue clouded area STD-65 to 74, 82 & 83 and all corresponding walers once the mat slab beneath has reached adequate strength, the sequence for de-stressing will be the diagonals struts should be all de-stressing prior to the 4 remaining cross lot struts (STD-65,66,67 & 68).

For the remaining levels A, B and C WOJV is proposing to follow a similar removal sequence as Level D

Please confirm if this sequence would be acceptable.

0007 **Void** **Void** **07/25/2014** **08/04/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:
Void

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

0007.1 **BRP - Contaminated Materials Location Meeting 6/20/14 - Action Items** **Closed** **06/23/2014** **07/03/2014** **06/25/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Turner Construction Comp Judith Long

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:
Per the Contaminated Materials Meeting held at 1:30PM in BRAVO conference room at the WOJV office on 6/20/2014 between SCCI, WOJV, Turner, TJPA, PMPC, and Treadwell & Rollo, please address the following post-meeting action items (meeting minutes to be distributed):

1) Provide site map characterizing locations of Class I and Class II contaminated materials on site and the depths of contamination at these locations (Map to be provided by Treadwell & Rollo to TJP A for distribution to SCCI). SCCI

SUGGESTION:

ANSWER:
See attached Site Plan from Langan Treadwell Rollo

Accept Suggestion: ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

will use this map to plan safe excavation and handling of excavated materials.

2) Confirm that Federal RCRA classified waste is not expected to be encountered on the site at this time per soil boring logs and testing. Further stockpile testing will be performed by Treadwell & Rollo at the direction of the TJPA as necessary to determine final soil classification for disposal.

0008 **SCS - Pendulum Bearing Test Results** **Void** **09/10/2014** **09/20/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Shimmick Construction Company, Inc Henry Chiang

REQUEST:

RFI T-1591 response noted two requirements to waive the testing requirements.

1. Provide specifications for the product that is intended to be used in the project that meets the design requirements outlined in the contract documents.
See attached preliminary Pendulum Bearing product information and drawing.

2. Provide test data for a bearing that is comparable in size and performance to those intended to be used in this project tested with conditions that are comparable to the design requirements.
Please see attached additional performance test results from other bearings of comparable size and performance. Also reference T-1591 for previously submitted test results.

Please confirm that the mentioned test reports could serve as evidence of the proper functioning of mageba pendulum bearings, as well as the fulfillment for the testing requirements in the specifications.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
1205.1	BGP - Lower Concourse Blockouts to Pour Train Level Partition Walls	Closed	03/22/2014	04/01/2014	04/09/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Transbay Joint Powers Authority Sylvia Wong

REQUEST:

Please see attached drawing for the general layout of Lower Concourse blockouts taking into account the response to RFI T-1205.
Due to limited site access to the Train Level once the Lower Concourse is poured, the partition walls will have to be poured in 2 lifts, except for the tank walls which will be poured monolithically. In the case where a blockout coincides with features above or below (ie beam below or future partition wall above) the blockout will be offset and the train level partition wall be poured using the "Bird's Mouth" method (see Detail 3 on attached drawings). To ensure consolidation in differing height wall pours, SCCI will install top bulkheads on walls with lower heights due to overhead beams. SCCI will maintain minimum separation gap between the top of partition wall and Lower Concourse elements as detailed. The blockouts will be installed with styrofoam per Detail 4 in the attached drawings, prior to the Lower
Concourse being poured. The blackouts will have a keyway on each side with top and bottom rebar disecting the blockouts per Details 1 and 2 in the attached drawings. Once the partition walls have been poured, the blockouts will be poured back with the same grout that will be used to pour back the trestle pile blockouts.
Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Where the RFI states that walls will be poured in "two lifts", this is interpreted to mean "two phases". Blockouts shall be poured back with concrete or product approved through the submittal process. Coordinate layouts and phasing plan with comments noted on Submittal TG0600-907.0 BGP - Construction Joint Layout - Partition Walls Area 3 and 4. RFI is confirmed in other regards.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
1503.1	BGP - Lower Concourse Grounding Grid Alternate Detail - North Electrical Room B	Closed	08/08/2014	08/18/2014	08/18/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

As a follow up to RFI T-1503, attached. Please confirm the below detail, similar to PUC approved detail shown in RFI T-1503 is acceptable and will be incorporated into lower concourse electrical room B1289, Grid Line 1.5/B. Please note all parameters and inspection requirements as confirmed in RFI T-1503 will remain consistent.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

WSP has no exceptions, subject to SFPUC acceptance.

Judy Long 8/20/14:
Please see the attached response for the ground grid. The ground grid was reviewed and approved for the first electrical switchboard service room. The ground grid for the second room is essentially the same.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

The ground grid for the second electrical service must be inspected by PUC andDBI prior to the concrete pour.

Walter Melville, PE

Electrical Engineer

SF PUC Power

dated 8/20/14 via email (see attached)

B-0001 **BRP - Project Alignment Coordinates** **Closed** **05/29/2014** **06/08/2014** **06/05/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Note 58 on Contract Drawing C-0005 gives a project start location of Alignment BBTT as 1722.28 feet at bearing S67°27'2 l "E from DPW Survey Control Point No. 54. Though the entire BBTT alignment could be calculated from this information, there would be no check tie at the end of the alignment and significant errors could result. Shimmick Construction Company Inc. (SCCI) requests that the coordinates of the begin curve (BC) and end curve (EC) be supplied to supplement the given curve data. Additionally, SCCI requests that the coordinates for the BC and EC locations for the curves of all alignments be supplied.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The distance and bearing from DPW Control Point No. 54 to Station 29+88.82 is 403.97 feet at N16°26'45"W. Contractor to verify.

B-0001.1 **BRP - Project Alignment Coordinates** **Closed** **06/16/2014** **06/26/2014** **06/20/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

SCCI has received the response to RFI #0001 which

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Coordinates of the begin and end of curves (BC and

provided a way to determine coordinates of the end of the "BBTT" alignment. However, no begin of curve (BC) or end of curve (EC) coordinates were given as requested. In order to properly lay out the alignments, SCCI will have to rely on CAD drawings provided in Transmittal No. 150-00268 from Jon Valencia (PMPC). SCCI would like to confirm that the CAD drawings provided in this transmittal are warranted to be used for construction.

Please confirm.

EC) can be calculated with the alignment data presented in the drawing. The distance and bearing to and from the survey control points can be used for checking the alignment layout.

B-0002 **BRP - Hazardous and Contaminated Materials Location** **Closed** **05/29/2014** **06/08/2014** **06/03/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Transbay PMPC Phil Sandri

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Bid Items 40,41, and 42 cover contaminated soils and debris off-haul and disposal. Contract drawings and specifications do not provide information regarding the specific expected locations of this material and the expected quantities at these locations. Please provide an explanation of how these bid item quantities were determined and a map indicating where contaminated materials should be encountered on the project.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Bid items were estimated based on data from "Transbay Transit Center Program Limited Phase II Soil and Groundwater Invetsigation Report Transbay Terminal West Loop Bus Ramps and Future Transit Center Site East of Beale St." (ERM-West, December 2008) as well as "Transbay Program Site Management Plan Addendum Transbay Transit Center Bus Ramps" (Treadwell & Rollo, February 2013).

B-0003 **BRP - Project Control Points** **Closed** **05/29/2014** **06/08/2014** **06/06/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Notes 53, 54 and 56 on Contract Drawing C-0005 reference control points utilized by Martin Ron Associates for the job topographic survey Shown on Contract Drawing Sheets 386-397. Only one Survey Control Point, DPW Survey Control Point No. 54, is shown on these drawings. SCCI requests that at least three additional job control

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Contractor shal refer to additional survey control points provided within the Reference Survey Drawings.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

point coordinates be supplied along with a description of those points.

B-0003.1 **BRP - Project Control Points** **Closed** **06/13/2014** **06/23/2014** **06/17/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

SCCI has received and reviewed the response to RFI #0003 which directed attention to the reference survey drawings. SCCI has reviewed these drawings and found control points far from the Bus Ramps project. SCCI would like to confirm that no additional control points have been established within a reasonable distance of the work area. If additional survey control points are available, please provide

Please see attached map for current control points given by the contract and reference survey drawings.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The survey control points for this project are provided in the survey reference document.

B-0004 **BRP - Bent 8 CIDH Pile Construction Joints** **Closed** **06/05/2014** **06/15/2014** **06/11/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

As shown in the CIDH elevation detail on Contract Drawing S1-3190, there is an optional construction joint at the elevation of the bottom of column rebar cage, 18 feet below the cut off line. However, the Bent8 CIDH Elevation detail does not allow for an optional construction joint at the elevation of the bottom of column rebar cage. In order to facilitate the proper installation of the column rebar cages in CIDH Piles B8-1 and B8-2, it is necessary to have an optional construction joint at this location (see attachment for illustration). Therefore, SCCI proposes to revise the drawings to include this joint.
Is this acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
B-0005	BRP - Fremont Off Ramp Bent Weakened Plane Joints	Closed	06/06/2014	06/16/2014	06/09/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

The elevation view of the bents on sheet S-3100 show 5 weakened plane joints at the base of the columns. These can be seen in further detail from sheet S-3102, details H and 1. SCCI proposes that these weakened joints be removed so that bents match the condition of the existing Fremont street offramp bents.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is not acceptable. The weakened plane joints are required.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
B-0006	BRP - Utility Demolition Plan - Tehama Street	Closed	06/11/2014	06/21/2014	06/23/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** AECOM Technical Servic Tsu Ling Peng

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Sheet U-1005 shows utility demolition work in the area surrounding Clementina Street, and Sheet U- 1006 shows utility demolition work in the area surrounding Howard Street. There is no sheet showing any utility demolition work (or lack thereof) in the area surrounding Tehama Street (between Clementina and Howard). Please provide plan sheet showing utility demolition work surrounding Tehama Street.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

There is no existing utility demolition work proposed surrounding Tehama St, hence no demo drawing for this area is included in the set. Note - The proposed Bus Ramp is overhead crossing the Tehama St. The proposed footing and foundation construction do not impact the existing utilities and Tehama St. curb & gutter.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
B-0006.1	BRP - Utility Demolition Plan - Tehama Street	Closed	06/25/2014	07/05/2014	07/18/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** AECOM Technical Servic Tsu Ling Peng

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

In response to "RFI B-0006 BRP-Response-Utility Demolition Plan - Tehama Street", Shimmick requests a utility demolition/relocation plan for Tehama Street be provided (between Sheets U-1005 and U-1006). There is an existing CCSF Street Light in the path of the proposed new bus ramp, as well as an overhead utility line (Comcast fiber optic) and associated poles (PG&E) which will interfere with the proposed bus ramp construction. Please confirm CCSF streetlight and Comcast fiber optic line and poles on Tehama to be moved by others.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractor shall coordinate and relocate the existing above-ground and underground utilities impacted by the proposed bus ramp construction through the TJPA Representative.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
B-0007	BRP - Hazardous and Contaminated Materials Location	Closed	06/12/2014	06/22/2014	06/13/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Transbay PMPC Phil Sandri

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Follow-Up To RFI B-0002 ERP-RESPONSE- Hazardous and Contaminated Materials Location:

RFI B-0002 ERP-RESPONSE- Hazardous and Contaminated Materials Location listed "Transbay Transit Center Program
Limited Phase II Soil and Groundwater Investigation Report Transbay Terminal West Loop Bus Ramps and Future Transit Center Site East of Beale St." (ERM-West, December 2008) and "Transbay Program Site Management Plan Addendum Transbay Transit Center Bus Ramps" (Treadwell & Rollo, February 2013) as the basis of bid item estimates for bid items 40, 41, and 42.

These documents do not provide for specific quantities and locations of Class I (Bid Item 40), Class II (Bid Item 41) and Federal RCRA (Bid Item 42) contaminated materials on site.

Please provide a detailed map and/or plan indicating the locations of Class I, Class II, and Federal RCRA contaminated materials similar to the site plan sheets titled "Site Plan With Boring Locations and Map Extents" (Figures 2-7, Treadwell & Rollo) and provided in Spec 0 I 13 50/ AP A - Site Mitigation Plan of the project documents (provided as an attachment to this RFI).

Please confirm that all contaminated soils identification, testing, and analytics shall be provided by the TJPA and/or the
prime contractor.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please see attached Treadwell & Rollo memo "Preliminary Estimate of Volume of Fill Material" dated 4.25.13. This document served as the basis for assumed material off-haul quantities included in the Bus Ramps bid form.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
B-0007.2	BRP - Hazardous Materials - Class I/II Locations	Closed	07/03/2014	07/13/2014	07/07/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Turner Construction Comp Judith Long

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

In Figure 1 of "Site Plan of Preliminary Limits of State of California Class I Non-RCRA and Class II Non-Hazardous Fill Material", provided by Treadwell Rollo, the locations of the Class I and Class II materials are labeled incorrectly.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached corrected site plan.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

The data provided in "Transbay Transit Center Program Limited Phase II Soil and Groundwater Investigation Report Transbay Terminal West Loop Bus Ramps and Future Transit Center Site East of Beale St." (ERM-West, December 2008), "Transbay Program Site Management Plan Addendum Transbay Transit Center Bus Ramps" (Treadwell & Rollo, February 2013) and per our meeting on 6/20/14, indicate that the Class I material was found in borings SB-04
through SB-09 as well as S-3 through S-5. These borings are identified as Class II material on the map provided. Borings SB-10 through SB-12 and S-1 /2 contained Class II material. It appears the colors in the legend are reversed. Please provide map with a revised legend.

B-0007.3 **BRP - Hazardous Materials Location Follow Up** **Closed** **07/22/2014** **08/01/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Per RFI-0007.2 Response, a map of locations of Class I and Class II contaminated soils located on the Bus Ramps site was provided by Treadwell & Rollo for use by SCCI. During the meeting held 6/20/2014 at the Webcor Offices to discuss the hazardous materials on site and development of a hazardous materials location map, it was indicated that there would be no federal RCRA material encountered on the site and that Class I and Class II contamination depths would vary between l' and 2' below grade.

During waste profiling with our disposal site, SCCI has encountered the following discrepancies:

Per the T &R map, the area around sample SB-05 should be Class I material. Per the soil test analytics provided in the Bus Ramps Site Mitigation Plan and the ERM-West Phase II Soils Report, samples SB- 5-3 and SB-5-6 test over the Class I limit for Lead and Barium, respectively. Without the STLC (Soluble Threshold Limit Concentration) and TCLP (Toxicity Characteristic Leaching Procedure)

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Peter Cusak 8/12/14:

As requested, additional samples were taken at deeper depths and tested including STLC and TCLP. The test results show soils locations and depths below 2' are Class II and as Class I Non-RCRA (See attached map dated 8/5/14).

Based on the recent samples taken at various location mentioned in the tables 1 & 2, and recent analytical report (copies attached), the results confirmed presence of Class I & Class II contaminations, and no Federal RCRA material encountered on site (map provided)

The abovementioned information is consistent with the Bid documents.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

test results to confirm otherwise, material with these TTLC (Total Threshold Limit Concentration) results would have to be classified and disposed of as a federal RCRA material which is in conflict with the direction provided by the T &R map and the 6/20 meeting discussion.

Per the T&R map and meeting discussion, areas approximately north of Folsom Street would be contaminated with Class I material to a depth of 2' below grade, and areas approximately south of Folsom Street would be contaminated with Class II material to a depth of l' below grade. A small portion of the area east of the Sterling substation would be contaminated with Class I material to a depth of 1 '. Per the soil test analytics provided in the Bus Ramps Site Mitigation Plan and the ERM-West Phase II Soils Report, samples SB-5-3 and SB-5-6 are both potentially contaminated to a Class I or federal RCRA classification level at depths below 2', which is in conflict with the direction provided by the T &R map and the 6/20 meeting discussion.

The following is a list of possible soil samples provided which may be in conflict with the T &R map and 6/20 meeting discussion direction and may require additional testing to confirm soil classification:

SB-4-3 Need STLC and TCLP for Lead
SB-4-28 Need STLC for Chromium
SB-5-3 Need STLC and TCLP For Lead
SB-5-6 Need STLC and TCLP for Barium
SB-7-3 Need STLC and TCLP for Lead
SB-7-5 Need STLC for Chromium, Need STLC for Copper, Need STLC and TCLP for Lead
SB-8-3 Need STLC and TCLP for Lead
SB-8-21 Need STLC for Chromium
SB-9-3 Need STLC for Chromium, Need STLC and TCLP for Lead
SB-9-6 Need STLC for Chromium, Need STLC for Nickel
SB-10-12.5 Need STLC for Chromium

Please advise on discrepancies and additional test results and provide additional detail on location and depth of contamination on the site map.

Also, all soil samples begin at 3' or greater depth below

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

grade - please advise how contamination classification was determined for 1-2' depths below grade as the landfill will not accept the information as currently provided.

B-0008 **BRP - Bus Ramp to Transit Center Elevation Confirmation** **Closed** **06/12/2014** **06/22/2014** **06/18/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author:

REQUEST:

Reference attached Contract Documents.

Elevation discrepancy's exist between the Transbay Transit Center drawings and the Bus Ramp Bridge drawings, see below.

TTC building drawing
A1-2502: 57' - 11 1/4" (57.938') [HP of Bus Deck Level]
A1-6102: 57' - 10" (57.833') [Bus Deck Level]

Bus Ramp drawing
S-2063: 56' - 1 3/16" (56.10') ["BBTT" STA 29+04.81 FB]
C-2202: 57' - 11 3/4 (57.98') [Calculated at STA 29+04.81 per vertical curve information)

Please confirm which elevation governs.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The elevation discrepancy within the Bus Ramp drawings (Sheets S-2063 and C-2202) shall be governed by the elevation shown on C-2202.

The elevation discrepance within the TTC Building drawings (Sheets A1-2502 and A1-6102) shall be addressed by the Architect.

The elevation discrepancy between the Bus Ramp drawings and the TTC Building drawing appears to be citing elevations from different locations. BBTT STA 29+04.81 does not

appear to coincide with the location of the 57'-11 1/4" elevation along the TTC Building bus deck. The elevations cited for this discrepency should be checked.

B-0009 **BRP - Exist Bent 20 Demolition** **Closed** **06/18/2014** **06/18/2014** **06/25/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

As shown in Contract Drawing D-1005, the entire existing Bent 20 foundation is to be removed. However, USA North ticket #219688 located two ATT duct banks 3' away from, and running parallel to, the property line on the south sidewalk of Clementina St. This utility is not shown on the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SCCI's proposal is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Contract Drawings. The utility is located directly on top of the Bent 20 foundation as shown on the attached sketch.

Per SCCI's understanding, the reason to remove Bent 20 is to facilitate the installation of CIDH B4-3 and the drainage system shown on Contract Drawings U-1005 and C-4102. Shimmick proposes to remove the Bent 20 foundation only to the extent needed to enable the installation of CIDH B4-3 and the drainage system (the catch basin and sewer manhole will still be protected and supported in place). The extent of demolition should end roughly 4'-8" north of the CIDH pile to allow sufficient room for shoring yet not intrude on the utility. See attached drawing for proposed limits of demolition. Is this acceptable?

B-0010 **BRP - Discrepancy Between Contract Drawing and As-Built** **Closed** **06/20/2014** **06/30/2014** **06/25/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

SCCI has reviewed Contract Drawing D-1006 and compared it to the Tieback As-built Document SH- 2600 per the Tieback Final Package from Balfour Beatty. The tieback angles are all different, most varying by roughly 8 degrees. The angle change affects the locations of the tiebacks as well. The precise location and angle of the tiebacks is paramount to the installation of shoring for pylon 9. SCCI would like to confirm that the As-builts are correct for layout use.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

As indicated on Contract Drawing D-1006, location of tiebacks is approximate. The as-built tieback drawings should be used.

B-0011 **BRP - Discrepancy In Girder layout** **Closed** **06/25/2014** **07/05/2014** **07/02/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

On contract drawing S-6066 "Girder Layout- Frame No. 3",

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

On contract drawing S-6066 "Girder Layout- Frame

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

the sum of the dimensions for girders 3A through 3F is 51 '-0" while the plans scale to 52'-0". It appears that the error is in the dimension "3 EQ Spaces = 29'-0"" which is dimensioned as 29' -0", but scales to 30' -0". Please advise.

No. 3", the "3 EQ Spaces = 29'-0" should be read as "3 EQ Spaces = 30'-0".

B-0012 **BRP - Requirements for Shoring Design** **Closed** **06/26/2014** **07/06/2014** **07/02/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Section 1.6H1 of Contract Specification Section 02 41 06 - Selective Site Demolition - Bus Ramps states that the "removal plan shall be prepared, wet-signed, and stamped by an engineer who is registered as a Structural Engineer in the State of California". This specification also applies to the design of temporary shoring for use in the demolition of existing foundations.

Per California Business and Professions Code, licensed Professional Civil Engineers may design structures except for public schools and hospitals. Therefore, SCCI proposes to allow the design of temporary shoring for demolition of existing foundations to be prepared, wet-signed and stamped by a licensed Professional Civil Engineer deemed by SCCI to have the qualifications and experience necessary for this work.

Is this acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SCCi's proposal to allow the design of temporay shoring for demolition of existing foundations by a licensed Professional Civil Engineer deemed qualified by SCCI to have the qualifications and experience necessary for this work would be acceptable.

B-0013 **BRP - Existing Conditions As-Built Utility Drawings** **Closed** **06/26/2014** **07/06/2014** **07/18/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** AECOM Technical Servic Tsu Ling Peng

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

SCCI requests existing condition as-built utility drawings for TG 18.1. Existing utilities have been provided for

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The available information of existing utilities during the design are shown on the contract drawings. Contractor

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Howard St in Contract Drawing U-1006, however, U-1003, U-1004 and U-1005 do not include any utilities (Harrison St, Folsom St, Clementina St and Tehama St).

SCCI requests that Contract Drawings U-1003, U-1004 and U-1005 be updated, or new drawings issued, to reflect all existing utility locations similar those shown in Contract Drawing U-1006. As-built utility drawings are needed for Harrison St, Folsom St, Clementina St, Tehama St and Howard St in between 1st St and 2nd St. This includes, but is not limited to, the roadway and adjacent sidewalks, the area surrounding the Caltrans Sterling Substation adjacent to Interstate 80, as well as all areas and lots in between the above mentioned streets.

shall perform site investigation, potholing and other requirements per specifications and the General Notes - Existing Utilities on sheet U-1001.

B-0014 **Construction of Bent 20A, 21, 22, 23** **Closed** **07/03/2014** **07/13/2014** **07/10/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche

To: Turner Construction Compan PHIL MILITELLO

Answered By: Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Contract drawings S-3100 and S-3102 show the bent details for Bent 20A, 21, 22 and 23. SCCI proposes to pour Section D of the main column using the following steps -

Step 1: Pour the inner section (shown in green on the attached drawing) using a round, steel column form

Step 2: Lateral reinforcement drilled and bonded to inner round core using an approved adhesive, from the Cal trans list of approved chemical adhesives (please see document attached).

Step 3: Pour the outer square (shown in blue) in 4 lifts (with the weakened joint installed after each lift) to maintain the concrete finish, as per Spec 03 30 06.

5 lifts total:
I center round core
4 outer separated by weakened joints

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The proposed construction method is acceptable. The contractor should submit shop drawings for review prior to construction.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Is this proposal acceptable?

B-0015 **BRP - AS-Builts of 303-2nd st** **Closed** **07/08/2014** **07/18/2014** **07/15/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Per Contract Drawing D-1003 and Section I on D-1103, there is an existing retaining wall to be removed adjacent to the building 303 2nd St. In order to properly design our temporary shoring system at this location, SCCI needs to know of any possible conflicts in the immediate proximity of the excavation. Please provide the foundation as-builts of 303 2nd St.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The design team does not have foundation as-builts for 303 2nd St.

B-0016 **BRP - Design Calculations for Connection to TTC** **Closed** **07/08/2014** **07/18/2014** **07/15/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Can the TJPA provide SCCI with ARUP's Frame 5 design calculations? This will allow OPAC to ensure that Frame 5 redesign will provide the same response characteristics, at the cable-stayed bridge and Transbay Terminal building interfaces, as were intended.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Calculations for Frame 5 (the drop-in span) are attached.

B-0017 **BRP - Frame 5 Dimension Discrepancy** **Closed** **07/11/2014** **07/21/2014** **07/24/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

1) Distance from RDS line to centerline bearing is shown to be 1'-3". Distance from centerline bearing to "TTBB" STA 29+07.235 is shown to be 3'-0". So the distance from RD5 to "TTBB" STA 29+07.235 should be 4'-3". However

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please see attached design sketch for clarification.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

RD5 is shown to be at "TTBB" STA 29+03.000 which is only 4.235' or 4'-2 13/16" from "TTBB" STA 29+07.235. Please explain why there is a discrepancy of 0.015' or 3/16".

2) LD5 is shown to intersect the left edge of deck at "BBTT" STA 29+02.21, 10.51 ' left. LD5 is shown to intersect the right edge of deck at "BBTT" STA 29+02.67, 13.00' right. SCCI took the "BBTT" and "TTBB" alignments shown on sheet C-2101 and drew in the RD5 line at "TTBB" STA 29+03.00. SCCI then extended the RD5 line to create the LD5 line. When doing so, SCCI found that the LD5 line intersects the left edge of deck at "BBTT" STA 29+03.135, 10.51' left and intersects the right edge of deck at "BBTT" STA 29+02.594, 13.00' right. Please clarify whether the LD5 stations shown at edge of deck are correct.

B-0018 **BRP - Bottom of Existing Footing Elevations** **Closed** **07/17/2014** **07/27/2014** **07/24/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

SCCI bid and planned the shoring necessary for demolition of the existing footings per the response to Question TG18.1-037 of IFB Questions & Answers TG18.1 Set #3 which included the statement that the bents north of Folsom Street were similar to Section P on Contract Drawing D-1106. This section shows a footing that is immediately below existing grade and is eight feet thick.

Additionally, SCCI reviewed the reference documents to confirm the bottom of footing elevations for these footings. Supplemental Drawing Nos. 7A and 8A of the San Francisco-Oakland Bay Bridge Railway Facilities drawings show the elevations of the bottom of footings. The first note on the Supplemental Drawing No. F-112 of the SFO Bay Bridge Railway Facilities drawings states to subtract 11 . 71' from these elevations to correct them to the city datum. SCCI has done this and compiled these elevations

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Arup does not have any more information than the Contractor has. We could not find a datum correction on the 1937 Contract R2 drawings, only on the 1939 Contract R3 drawings. For the purpose of proceeding with the work, we recommend that the contractor apply the datum correction from the Contract R3 drawings to the Contract R2 drawings and determine the existing foundation elevations based on this. Note the datum correction on Contract R3 drawing F-112 is from San Francisco-Oakland Bay Bridge Datum to City Datum. Refer to the survey drawings prepared by Martin M. Ron (specifically sheet 1 of 10) in the Contract Documents for the datum correction from NAVD88 to City datum.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

below.

This RFI will use the Bent 5 footing for example to show why SCCI does not believe that this is the correct datum correction to use. Section P on Contract Drawing D-1106 shows the Bent 5 footing immediately below grade and eight feet thick with a bottom of footing elevation of 53'-8". As shown in the table above, the elevation shown for this bottom of footing elevation on Supplemental Drawing 8A and correcting it to the city datum would provide an elevation of 29.29'. The same issue is easily seen using the section views on Bent 2 and 3 on the same Contract Drawing.

Please confirm that the Datum Correction shown on Supplemental Drawing F-112 does not apply to Supplemental Drawings 7 A and 8A and provide the correct datum correction if necessary.

B-0019 **BRP - Selective Demolition of Foundations for CIDH Piles** **Closed** **07/17/2014** **07/27/2014** **07/24/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

On July 11, SCCI performed potholing for the existing foundations to be demolished and discovered that the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is acceptable. The extent of existing footing to be removed shall equal the radius of the CIDH plus 1'-0"

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

depths of these foundations are significantly deeper than expected due to contradictory information provided in the responses to Bidder Questions and Reference Documents at bid time. The results of the potholing has allowed SCCI to eliminate certain information from these documents and is now proceeding under the assumption that the elevations provided in the San Francisco-Oakland Bay Bridge Railway Facilities and SFO Bay Bridge Railway Facilities are correct. These drawings indicate that these foundations are at depths as great as 34.5' from grade. SCCI requested that these elevations be confirmed in RFI B-0018 - Bottom of Existing Footing Elevations, submitted July 14.

The foundations to be removed are located adjacent to major San Francisco thoroughfares and buildings of up to ten stories. SCCI believes that large excavations next to these structures could potentially undermine these streets and the foundations of these buildings. SCCI also believes that it is possible to reduce the number of these large excavations by reducing the volume of concrete to be removed from these foundations.

SCCI has reviewed Contract Drawings D 1000 through D 1106 and has determined that the existing foundations Bent 5, 7 and 11 need only to be partially removed to facilitate the installation of CIDH piles. Additionally, SCCI is in receipt of Bus Ramps Change Order Request B-002 in which foundations similar to those in the base contract and in the same Bus Ramp alignment are only demolished to depths of five feet below grade.

Therefore, SCCI proposes to demolish Bents 5, 7 and 11 to a depth of five feet below grade and, below that, only to the extent necessary to allow for CIDH installation. Please see the attached drawing for reference.

Is this acceptable?

plus the maximum allowed tolerance (alignment and verticality) for the CIDH installation. Following removal, the excavation shall be backfilled and compacted in accordance with the requirements in Specification Section 31 00 06.

B-0019.1 **BRP - Selective Demolition - Additional Foundations** **Closed** **08/01/2014** **08/11/2014** **08/04/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

SCCI has received the response to RFI #B-0019 which allows for limited and selective demolition of existing foundations for Bent 5, 7 and 11. SCCI proposes to also demolish existing foundations for Bent 9 and 16 in a technique pursuant with the response to RFI #0018. Please see attached RFI #0018 for reference.
Is this acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is acceptable

B-0020 **BRP - Building Foundations at Pylon 9** **Closed** **07/17/2014** **07/27/2014** **07/24/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Contract Drawing D-1006 has a callout pointed at the Pylon 9 foundation that states "Remove existing building foundation and basement slab to place new foundation". SCCI found drawings in the Reference Document Transbay Transit Center Program Existing Terminal & Ramps Demo Plans - REVISIONS that show that the foundations under 564 Howard and 568 Howard, the buildings with foundation conflicts with Pylon 9, had been removed in a previous contract. SCCI, therefore, engineered and planned the work as if these foundations did not exist.

This reference drawing set also shows that the Bent 17 foundation on the south side of Howard was also removed in this same previous contract. Recent potholing for this foundation has led SCCI to believe that this foundation has not been removed. If the Bent 17 foundation was not removed, it is possible that building foundations in conflict with Pylon 9 may also not have been removed.

Please confirm that the foundations of 564 Howard and 568 Howard have been removed per the Reference Drawings.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is Arup's understanding that the drawings attached to the RFI which show the extent of demolition of 564 Howard and 568 Howard are correct.

B-0021 **BRP - Surcharge Loading for Pylon 9 Equipment** **Closed** **07/18/2014** **07/18/2014** **07/24/2014** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

Based on discussion in Tuesday's (7/15/2014) meeting (Movement Review Committee), the following heavy equipment is required to install the barrettes at the Pylon 9 foundation:
1. 'Manitowoc 888 crawler crane: Maximum total load when holding full length barrette rebar cage = 705± kips. As shown on Figure 1, the crane will be set back a minimum of about 40' clear from the back of the TTC shoring wall when it is working. The "footprint" of the crane (defined as a rectangle with a length equal to the bearing length of the tracks and a width equal to the outto-out track dimension) is 24.6'x23.2', which has a total area of 571 sqft. The average vertical surcharge load acting over the machine footprint is 705,000/571 = 1235 psf.

2. Bauer MC128 Foundation Crane with a BC40 Trench Cutter (Hydromill): Maximum total load when working = 540± kips (includes pull force when retrieving mill from trench). As shown on Figure 2, the hydromill will be set back a minimum of about 13' from the back side of the TTC shoring wall when it is working. The "footprint" of the hydromill is 23.0/x20.5' = 472 sqft. The average vertical surcharge load acting over the machine footprint is 540,000/472 = 1144 psf.

3. Liebherr HS855HD crawler crane with clam. Maximum total load when working = 260± kips. As shown on Figure 3, the clam will be set back a minimum of about 10' from the back side of the TTC shoring wall when it is working. The "footprint" of the clam is 17.6'/x16.2' = 285 sqft. The average vertical surcharge load acting over the machine footprint is 260,000/285 = 912 psf.

Please confirm whether the TTC shoring system is capable of resisting the surcharge identified above.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is a Contractor's means and methods issue. The Contractor shall provide estimates for additional horizontal loading on the internal bracing system for evaluation by the TG06 trade subcontractor. This shall include a horizontal pressure diagram which can be added to the plots shown on TG06 drawing GT-1110 and additional kips per linear foot of wall values which can be added to Table 1 and Table 2 on TG06 drawing GT-1110.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
B-0022	BRP - Surcharge Loading For Equipment Walking Off the Trestle	Closed	07/18/2014	07/28/2014	07/24/2014	Potentially	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

As discussed in Tuesday's (7/15/2014) Movement Review Commitee, please confirm whether the TTC shoring system is capable of resisting the surcharge loads from the following equipment walking off the trestle to the east of the Pylon 9:

1. Manitowoc 888 crawler crane: Maximum total load when walking off trestle = 565± kips. The "footprint" of the crane (defined as a rectangle with a length equal to the bearing length of the tracks and a width equal to the out-to-out track dimension) is 24.6'x23.2', which has a total area of 571 sqft. The average vertical surcharge load acting over the machine footprint is 565,000/571 = 990 psf.

2. Bauer MC128 Foundation Crane with a BC40 Trench Cutter (Hydromill): Maximum total load when walking off trestle = 460± kips. The "footprint" of the hydromill is 23.0/x20.5' = 472 sqft. The average vertical surcharge load acting over the machine footprint is 460,000/472 = 976 psf.

3. Liebherr HS855HD crawler crane with clam. Maximum total load when walking off trestle = 240± kips. The "footprint" of the clam is 17.6'/x16.2' = 285 sqft. The average vertical surcharge load acting over the machine footprint is 240,000/285 = 842 psf.

This is a Contractor's means and methods issue. The Contractor shall provide estimates for additional horizontal loading on the internal bracing system for evaluation by the TG06 trade subcontractor. This shall include a horizontal pressure diagram which can be added to the plots shown on TG06 drawing GT-1110 and additional kips per linear foot of wall values which can be added to Table 1 and Table 2 on TG06 drawing GT-1110.

B-0023 **BRP - Restrainer Pipe Clarification** **Closed** **07/21/2014** **07/31/2014** **07/24/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche

To: Turner Construction Compan PHIL MILITELLO

Answered By: Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

1. Detail C on sheet S-6217 shows an API 5L80X Schedule 120 pipe. At the right, an end plate is shown welded to the pipe with a ¼" fillet weld. Please clarify the size and thickness of the end plate. Also please clarify the extent of the pipe since the length is not shown. It is not clear how far the pipe extends beyond the stiffener plate which is 1'-0" behind the end plate. The pipe is also sown in plan view of sheet S-6216 but the length is not given there either.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached SK-S-0003 in Arup Response Transmittal.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

2. Please clarify the vertical location from the profile grade of the API 5L80X Schedule 120 pipe shown on Diaphragm LD1/S-6104, Diaphragm RD1/S-6107, and detail C-S6217.

B-0024 **BRP - Shear Key Clarifications** **Closed** **07/21/2014** **07/31/2014** **07/23/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

On section A/S-6216, please clarify the locations of the centerline of shear key and the centerlines of bearings.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See S-6104 and S-6107 for centerline of bearings. See S-6216 for location of shear key relative to bearings.

B-0025 **BRP - Diaphragm Dimension Clarifications** **Closed** **07/21/2014** **07/31/2014** **07/29/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

1. On Diaphragm LD5/S-6106, Diaphragm RD5/S-6109, Section H/S-6113, Section J/S-6113, and Section K/S-6113, please clarify the vertical dimension from the profile grade to the bearing surface at the top of the sole plate.

2. On Diaphragm RD5/S-6109, the centerline of tie to TTC column is how at the centerline of the web plate. Please clarify the location of the web plate.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. The dimension shallbe consistent with the depth of Hinge 9 shown on B/S6111.

2. Locations of web plates shall be consistent with centerlines of columns. Column locations are shown on S-6218.

B-0026 **BRP - Steel Box Girder Detail Clarification** **Closed** **07/21/2014** **07/31/2014** **08/24/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

On section K/S-6113, please clarify the vertical dimension from the profile grade to the center of the pin.

As shown on K/S-6113, the centerline of the pin is located at the intersection of TTC Grid Line H and the centerline of the inclined pipe, i.e., the workpoint of the cast node. Refer to the TTC structural drawings for the elevation of this work point.

B-0027 **BRP - Restrainer Pipe Clarification 2** **Closed** **07/21/2014** **07/31/2014** **07/29/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference CD sheets S-6217. Would it be acceptable to substitute a member of equal axial tension capacity for the 12" API 5L80X Schedule 120 Pipe? It is SCCI's understanding that this pipe acts as a seismic longitudinal catch and will only experience axial tension, is this the designer's intent?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The pipe is serving as a seat extender should the drop-in span become unseated during a seismic event. This criteria was requested by the TJPA¿s SSRC to provide a redundant support.

B-0028 **BRP - Bus Deck Level Slab Zone 1** **Closed** **07/21/2014** **07/21/2014** **07/23/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author:

REQUEST:

Please confirm that the bus deck level slab at Zone 1 does not need to be placed prior to installation of the Steel box girders.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

All bus deck structural framing west of TTC Grid 10, including the concrete slab, need to be completed before connecting the drop-in span to the TTC.

B-0029 **BRP - Clementina Pedestrian Access** **Closed** **07/23/2014** **08/02/2014** **07/24/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

SCCI has found a conflict between demolition drawing D-1005 and specification section 011570 3.2G.

According to drawing D-1005, existing Bent 22 extends underneath the entire south Clementina sidewalk width and 3' into the street. The shoring required to remove this footing along with the water barriers will extend another 5' into the street totaling to 8' intrusion into the street. The street is 18' wide at this bent location leaving a 10' for vehicle traffic as noted in approved traffic control plan 002 (TG 1801-036.1).

Specification section 011570 3.2G requires a 5' pedestrian walkway on the north and south side of Clementina. This is not possible due to the demolition of Bent 22 described above. SCCI proposes to keep the sidewalk on the south side of Clementina closed during demolition and re-open it to pedestrians once the footing and shoring has been removed.

Please confirm this is acceptable.

According to drawing D-1005, existing Bent 22 is not demolished and is to remain - please resubmit RFI with correct information.

If the Contractor is referring to drawing D-1005 Bent 20 which does have a portion of the demolition beneath the Clementina Street south sidewalk, there is no conflict.

If the Contractor determines that a section of the sidewalk must be closed for any reason, obtain STP from SFMTA before closing sidewalk.

For example; even with an approved Traffic Control Plan, to close the sidewalk requires an approved STP Special Traffic Permit. If during potholing and investigative work or during construction activity you wish to close the sidewalk, it is the expectation of the City and specification section 01 15 70, 3.2G that pedestrians have the use of the sidewalk at all times when construction is not in progress.

As was discussed last week in the field, there are options such that the sidewalk can be re-opened at end of shift or peds diverted into a sidewalk using part of Clementina Street if necessary.

B-0030 **BRP - Construction of Pylon 9 and Link Beam** **Closed** **07/28/2014** **08/07/2014** **07/29/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Contract drawings S-3174 through S-3182 show the details for Pylon 9. As per S-3175 and S-3176, the link beam has reinforcement through the Pylon 9. SCCI proposes to pour Pylon 9 using perimeter steel forms and double ended form savers to avoid running rebar through the steel form and compromising the structural integrity of the steel Pylon forms.

Is it acceptable to use double ended form savers for the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is not acceptable. Continuity of the reinforcement at this critical connection is important. The drawings show the bars continuous through the pylon with a splice 20 feet from the centerline of the pylon.

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horizontal link beam rebar that extends beyond the width of Pylon 9?

B-0030.1 **BRP - Construction of Pylon 9 and Link Beam** **Closed** **08/04/2014** **08/14/2014** **08/05/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Jeremiah Kent

REQUEST:

Further to RFI 0030, SCCI is proposing to pour Pylon 9 and the link beam in 3 separate pours and have 2 construction joints at the locations shown on the attached drawings. All horizontal rebar will remain as per the contract drawings and will be continuous at the link beam & Pylon 9 connection.

Pour # 1 will be Pylon 9 and the center section of link beam, to the extent of Section B and Pylon 9 (see attached drawings).

Pour #2 and #3 will be the left and right sections of link beam (see attached drawings).

Is this acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is not acceptable. Refer to note 1 on S-3176: "Construction joint is not allowed in Pylon 9 link beam."

B-0031 **BRP - Harrison and Folsom Falsework Design** **Closed** **07/30/2014** **08/09/2014** **07/30/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

SCCI has received the rejection of Traffic Control Plan numbers 007 (Folsom) and 008 (Harrison) and has attempted to design the falsework to span the entire width of the roads. Upon review by SCCI and VAK Construction Engineering Services, this design does not comply with the project specifications.

Please see our concerns with spanning the full length

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

WOJV to confirm the spans that are reported in the RFI as they are considerably longer than those listed in the August 10, 2012 memo from Sandis to WOJV.

Please provide all dimensions including sidewalks and parking lanes which may be able to be used for Falsework.

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below:
- In order to cross Harrison without a center falsework support, our required span is 79'-6". Per specification section 03 11 14 1.7-A4, the maximum allowable falsework span is 60'-9".

-In order to cross Folsom without a center falsework support, our required span is 76'-8". Per specification section 03 11 14 1.7-A4, the maximum allowable falsework span is 50'.

- The minimum possible depth of the falsework is 3'6" (36" beam + 4x4s + plywood). The vertical clearance would be 14'-2" which is under the required 15' clearance.

- Reference VAK's memo and Folsom Falsework Schematics attached

Due to these design issues, SCCI proposes to use traffic islands to give the falsework a center support. This will divert traffic into the parking and maintain the same number of open lanes as shown in Traffic Control Plans 007 and 008. Is this acceptable?

B-0032 **BRP - Barrette Acceptance Criteria** **Closed** **07/30/2014** **08/09/2014** **08/01/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche

To: Turner Construction Compan PHIL MILITELLO

Answered By: Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please see attached Memo from Bencor, SCCI¿s Barrette subcontractor. In light of the recent issues they have encountered at a nearby project with similar design and specifications and the fact that we only have two production barrettes, restricting us having test barrettes, SCCI asks the following questions:

1. Can the drill core verification process be substituted for the Crosshole Sonic Logging as the post installation acceptance criteria?

2. If not, please provide actual acceptance criteria for the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Specification Section 31 63 32 1.7 A requires the Contractor to submit qualifications for the contractor / subcontractors performing the barrette foundation work. Arup has not yet received this.

In response to the questions listed in the RFI:

1. No. Specification Section 31 63 32 1.8 D 1 a states "Crosshole sonic logging will be used to test the concrete density of the pile for homogeneity."

2. The test results will be reviewed for anomalies. An

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Crosshole Sonic Logging. 31 63 32 does not provide any criteria for what defines a rejected pile. The specification only references ASTM 06760, which SCCI understands only provides how to do the test and provide results, but not acceptance criteria.

3. Can the #6 cross-tie rebar spacing be opened up? Possibly even increasing the rebar size, as remediation for the increased spacing.

anomaly will be indicated by the CSL test if the first arrival time increases significantly, or if the energy reduces significantly, relative to a moving baseline. The evaluation of the test results will include the location, extent and quantity of anomalies. Acceptance or rejection of a pile will be based on the evaluation of the CSL test results, pile construction reports (see Specification Section 31 63 32 1.5 E), the results of additional testing if deemed necessary by the TJPA (see Specification Section 31 63 32 1.8 D 4) and any other information or observations which indicate conformance / nonconformance of the installed work with the Contract Documents.

3. The Contractor may propose alternate reinforcing steel arrangements for review. The capacity of the reinforced concrete section shall be the same as or greater than that shown on the Drawings and each longitudinal bar along the long faces of the pile shall be confined with a stirrup or tie as shown on the Drawings.

Arup will not comment on the July 29, 2014 Bencor memo attached to the RFI. This is internal correspondence between SCCI and their subcontractor. The Contractor's requests for interpretation or clarification of the Contract Documents are the three questions listed on the Webcor Obayashi Joint Venture letterhead.

Arup has not yet received the Comprehensive Construction Work Plan required by Specification Section 31 63 32 1.5 D.

B-0033 **BRP - Discrepancy in Location of Pylon 9** **Closed** **08/05/2014** **08/15/2014** **08/07/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Jeremiah Kent

REQUEST:

Shimmick Construction (SCCI) has verified the BBTT alignment per the beginning bearing and distance from the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached SK-S-0004 for the correct location of the pylon. Drawing S-6079 will be revised and issued in a

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

contract drawings, and the End bearing and distance per RFI B-001. The pylon center at Pylon 9 is listed per the alignment stations of BBTT & TTBB on S-2261. SCCI has noted a discrepancy in this position of .16 feet between the alignment position of the pylon and the center position of the pylon as shown in CAD drawing S-2261. SCCI has checked/verified the BBTT alignment positions of other CIDH centers as shown on the CAD S-2261 drawing. SCC realizes that CAD drawings are not for record, but this may indicate a possible issue of the pylon location. SCCI also noted that the pylon centerline coordinate on S-6079 (Cable stay drawing) is different from these values. Supporting documents are attached.

Please confirm the center coordinate for the bent 9 pylon.

forthcoming ASI.

B-0034 **BRP - Folsom Falsework Vertical Clearance** **Closed** **08/06/2014** **08/16/2014** **08/14/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Shimmick Construction Company, Inc Jeremiah Kent

REQUEST:

Per the traffic coordination meeting between SCCI, Turner and SFMT A on 8/4/14, a traffic island for the falsework on Folsom Street will be avoided. The lane widths and striping will be changed in order to meet the falsework width requirements.

The falsework doesn't meet the 15 foot vertical clearance requirements per specification section 01 15 70 3.2H. Reference RFI B-0031 and attached drawings for further detail. SFMTA has proposed to allow a vertical clearance of 14'2" or greater with proper signage. Please confirm and provide any signage requirements and restriping

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SFMTA has stated they would allow a formwork vertical clearance of 14'2" or greater at Folsom Street overcrossing with an approved Traffic Control Plan. The Traffic Control Plan (TCP) for this street overcrossing shall be submitted via Constructware by the Contractor's licensed traffic engineer in accord with Spec. 01-15-70 and include the details (proper lane striping and 14-2" signage etc.) that are required to evaluate the proposal.

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details to shorten lane widths.

Traffic Control Plan development including signage and recommending lane striping changes etc. is a Contractor responsibility per Spec. 01-15-70

B-0035 **BRP - Tie Down for Cable Stayed Bridge (CSB)** **Closed** **08/12/2014** **08/22/2014** **08/14/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

Please reference Drawing S-1201.

Cable Stay Construction Sequence on Drawings No. 2 (S-1201) shows Frame 5 being installed after all of the stays are fully stressed. Does this sequence require a tie down at Hinge 9 prior to installation of Frame 5?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The means by which the cable stay bridge and the drop-in span are constructed, and the sequence of construction including placing and removing temporary supports, shall be determined by the Contractor. The erection analysis required by Specification Section 34 80 06 will verify the means and the sequence.

B-0036 **BRP - Bent 8 Link Beam Dimensions Clarification** **Closed** **08/12/2014** **08/22/2014** **08/14/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

Reference attached sheet S-3172.

S-3172 shows two different dimension from the centerline of bent 8 to edges of the link beam for details B and C. Which dimensions are correct?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The dimensions shown in Section C are a drafting error. Refer to Section B for the dimensions of the link beam.

B-0037 **BRP - Monitoring of CDSM Wall Tieback Detensioning** **Closed** **08/12/2014** **08/22/2014** **08/14/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Jeremiah Kent

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Note 4 on Contract Drawing D-1006 states:

"De-tension and remove existing tiebacks which interfere with construction of the pylon foundation. Do not de-tension the tiebacks until the TTC mat slab in Zone 1 has been placed and has reached its 28 day strength."

The mat slab in Zone 1 has been placed and has reached its 28 day design strength.

SCCI submitted Submittal TG 1801-208.1 Selective Site Demolition - Pylon 9 Temporary Shoring which included the memo De-tensioning of Existing Tiebacks at TTC South CDSM Wall for Pylon 9 Foundation Construction. This memo provided a procedure for de-tensioning these tiebacks. The response to this submittal stated that the tiebacks were to be de-tensioned and removed one at a time and that "instrumentation placed at the adjacent TTC excavation shall be reviewed for movements".

In response to the submittal comments received, SCCI plans to establish a baseline survey of the CDSM wall at the tieback locations and to monitor these benchmarks after each tieback is de-tensioned. All surveying/monitoring will be done with a Total Station. If no movement is detected at the time of monitoring, SCCI will proceed with de-tensioning of the next tieback. Is this acceptable?

Arup has no issue with the plan proposed by SCCI in RFI B-0037 as Arup commented in the Submittal TG1801-208.1 Selective Site Demolition - Pylon 9 Temporary Shoring.

In response to WOJV/SCCI email dated 8/18/14 (attached) Arup has no issue with the plan proposed:

The proposed baseline survey of the CDSM wall at the tieback locations with "all surveying/monitoring will be done [by Shimmick] with a Total Station".

The de-tensioning and cutting of the first two (2) of the tie backs, at the end of the first day shift, and monitoring [by Shimmick] during the next day using the benchmarks with a Total Station.

The proposed "If no movement is detected at the time of monitoring", SCCI will proceed with de-tensioning of the next (3) tiebacks at the end of the second day's shift. This "will allow a cold cycle" prior to de-tension the remaining (3) tiebacks.

It is assumed that WOJV and the Internal Bracing contractor will continue monitoring movement as per contract. If movement is detected at the time of monitoring, and MRP meeting will be held to determine next steps in accord with contract.

B-0038 **BRP - Removal of Pylon 9 Soldier Piles** **Closed** **08/14/2014** **08/24/2014** **08/20/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Jeremiah Kent

REQUEST:

Submittal TG 1801 -208. l - Selective Site Demolition - Pylon 9 Temporary Shoring detailed the procedure for the installation and removal of the beam and plate shoring system at Pylon 9. Step 15 of the Construction Sequence on Sheet SH-I stated that the final step would be to "extract" soldier piles. One of the comments received on

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is not acceptable. The soldier piles may not be removed by pulling.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

this submittal was that the soldier piles "may not be removed by pulling as this will reduce the strength of the soil and its ability to resist later load-resisting capacity of the soil at the top of the barrettes". SCCI plans to remove these piles using a vibratory hammer as this will increase consolidation of the soil as the pile is removed.

Is this acceptable?

B-0039 **BRP - Removal of Unexpected Structure in Lot G** **Closed** **08/14/2014** **08/24/2014** **08/14/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Webcor Construction LP Claude Titche

Co-Author: Shimmick Construction Company, Inc Jeremiah Kent

REQUEST:

While excavating around existing Bents 16 and Bent 17 in Lot G, SCCI encountered an unexpected structure comprised of concrete and brick at a depth of approximately six feet. The extent and dimensions of this structure have yet to be detennined. SCCI has determined that this structure will conflict with the Bent 8 pile cap to be constructed as well as the shoring system to be used for the demolition of existing Bent 16 and 17 and the construction of new Bent 8.

Please advise on how to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Bashar Dayoub 8/14/2014

CR B005 "Unknown building foundation" is being processed

Please track your time to this CR, and coordinate daily with TJPA representative.

B-0040 **BRP - Existing Column Foundation Removal for CIDH C1** **Closed** **08/15/2014** **08/25/2014** **09/03/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Jeremiah Kent

REQUEST:

Contract Drawing D-1005 calls for the removal of an existing column foundation at the location of new CIDH C1. The detail on this drawing shows a column coming up from a spread footing. Therefore, SCCI expected this bottom of this spread footing to be at a reasonable depth similar to other foundation to be removed. No as-builts of

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Demolish the existing CIDH to an elevation of +14.00 (NAVD88). The location of column C1 will shift to clear the remaining portion of the existing CIDH. This will be issued in an upcoming ASI.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

this footing have been provided. Potholing performed by SCCI on August 14 determined that no spread footing exists within 40 feet from grade. Without additional drawings or information about this footing, SCCI believes it is possible that this foundation is actually a CIDH installed in a retrofit contract.

If this foundation is indeed a CIDH pile and extends as deep as to bedrock, its removal would be both cost and time intensive if it is possible at all. As shown on the attached picture, the edge of CIDH C1 is in conflict with the existing foundation at grade. This condition will prevent the installation of CIDH C1. Possible solutions include decreasing the diameter of the CIDH or moving the CIDH and column away from the existing foundation.

Please advise on how to proceed.

B-0040.1 **BRP - Additional Foundation Adjacent to Exisitng Bent 5 CIDH** **Closed** **08/27/2014** **09/06/2014** **09/09/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Jeremiah Kent

REQUEST:

SCCI previously submitted RfI B- 040 which stated that the footing to be demolished adjacent to new CIDH C1 appeared to be a CIDH pile. SCCI has since received Reference Drawings SFOBB - San Francisco Approach Replace which appears to confim that this footing is actually the CIDH at Bent 5 installed in this 2004 retrofit.

While doing hazardous material removal for new CIDH C1 on August 27, SCCI encountered an additional footing adjacent to the Bent 5 CIDH. Pictures of this footing are attached. Also attached are sketches for clarification that show the footing as currently exposed.

Please provide as-builts of this footing and advise on how to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached sketch SK-S-0007 for zone of removal.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
B-0041	BRP - Design Reaction at Hinge H	Closed	08/15/2014	08/25/2014	08/29/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Jeremiah Kent

REQUEST:

Please provide the design reaction, that were submitted to the TTC building designer, for the Hinge H bearing.

This was discussed at the weekly Structural Issues Review Meeting on 8/14/2014. Information requested would help coordinate the interface work between the two trade packages at hinge H (TG7.1 and TG18.1), and progress on the Box Girder V.E.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See table on attached SK-S-0005.

B-0042	BRP - Existing Bent 16 Retrofit Anchor Tiedown Length	Closed	08/19/2014	08/29/2014	09/03/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Jeremiah Kent

REQUEST:

Contract Drawing D-1005 calls for the existing Bent 16 foundation to be removed to allow for the installation of the new Bent 8 CIDH piles and pile cap. The response to RFI B-0019.1 Selective Demolition - Additional Foundations stated that it was acceptable to demolish the Bent 16 foundation one foot plus the maximum tolerance outside of the CIDH footprint.

After reviewing the Reference Drawings Seismic Retrofit No. 14B, TT Ramps, SCCI has determined that CIDH B8-3 is in direct conflict with one of the anchor tiedowns installed at the Bent 16 retrofit as shown on the attached drawing. Sheet 23 of this Reference Drawing set shows the minimum unbonded length of this anchor tiedown to be 20 feet but does not specify the bonded length. SCCI needs to know the bonded length used for this tiedown to determine the appropriate removal method.

Please provide complete as-builts of this retrofit that show the total depth of these anchor tiedowns.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See enclosed Requested Tie-Back As-Built.

B-0043	BRP - CIDH Permanent Casing	Closed	08/21/2014	08/31/2014	08/27/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Shimmick Construction Company, Inc Jeremiah Kent

REQUEST:

SCCI proposes to use corrugated metal pipe (CMP) as permanent steel casing for the CIDHs when using the optional construction joint, is this acceptable? The specifications are confusing on this subject.

Per Specification Section 31 63 30 3.5-B, " ... The permanent casing must:" then in section 3.5-B-5 " ... must comply with article 3.3." Per 31 63 30 3.3-C,"Temporary casings must be:" then in section 3.3- C-2; "noncorrugated with smooth surfaces." Since we are discussing a permanent casing and this section applies to temporary casings, does the noncorrugated rule apply?

Project Specification 31 63 30 appears to be based on the Caltrans Standard Specification. Using the 2010 version of the CTSS, 49-3.02C(6)-5 is similar to the project specification 31 63 30 3.5, except it refers the "must comply" to a section on "Permanent Steel Casing Installation" {49-3.02C(5)}. As SCCI's Project Specification does not include a section on permanent steel casing materials, SCCI believes the reference to the Temporary Steel Casing to be inadvertent.

If safety and/or quality is a concern, SCCI can provide stamped engineering to stating that the CMP is capable of withstanding loads from installation, lateral concrete pressures and earth pressures and will support personnel working inside the casing after the CIDH installation is complete.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The use of corrugated metal pipe (CMP) as permanent steel casing for the CIDHs when using the optional construction joint is acceptable provided the following:

- The casing complies with Specification Section 31 63 30 3.5-B. In regard to paragraph 5 in Section 31 63 30 3.5-B, casings placed in a drilled hole must comply with Caltrans Standard Specifications section 49-3.02C(5) "Permanent Steel Casing Installation".

- Contractor submits for record stamped calculations demonstrating that the CMP is capable of withstanding loads from installation, lateral concrete pressures and earth pressures, and will support personnel working inside the casing after the CIDH installation is complete.

- The Contractor includes a description of the optional construction joint and the use of CMP in the Pile Installation Plan re-submittal. Include the name of a Caltrans project where CMP was used, and the name and contact information of the engineer or resident engineer.

Note: the Drawings specify permanent casing for the CIDH piers at the Fremont Off Ramp. Arup's acceptance of using CMP pertains to the bents at Frames 1 through 3 only at this time. Contractor to include a description of the work specific to the Fremont Street Off Ramp in the Pile Installation Plan re-submittal for Arup to evaluate. The description shall include the type of casing proposed for use, diameter, depth, etc.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
B-0044	BRP - CIDH Pile Splice Detail	Closed	08/29/2014	08/29/2014	09/02/2014	Potentially	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Jeremiah Kent

REQUEST:

Note 8 on Contract Drawing S-3190 states that the vertical

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is acceptable. Contractor to ensure splice, if

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

reinforcement bars, CI , are to be fabricated ten feet longer and that ten feet of additional hoops, D, are to be provided. To avoid fabricating all CIDH cages ten feet longer than may be necessary, SCCI and Case Pacific preproposing to fabricate all CIDH cages to the lengths shown on Contract Drawing S-3190 and to splice the additional ten feet of rebar cage when conditions require it. The proposed splice detail is shown on the attached sketch. The additional reinforcement for these splice lengthened cages will be kept on site.

used, is adequately tied to longer cage to ensure the two do not separate during placement in shaft.

B-0045 **BRP - Seismic Displacement of Sliding Bearings at Hinge 9** **Closed** **08/29/2014** **09/08/2014** **09/05/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Jeremiah Kent

REQUEST:

For the design of the sliding bearings at Hinge 9 as part the post bid VE for Frame 5, please provide the maximum seismic displacement demands, at Hinge 9, for the cable-stayed bridge.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See table on attached SK-S-0006

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
B-0046	BRP - Erection Sequence and Diagrams	Open	09/04/2014	09/14/2014		Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Shimmick Construction Company, Inc Jeremiah Kent

REQUEST:

Are the camber diagrams on drawing S-6069 and the cable loads shown on column 5 of Stay Cable data table, drawing S-6079, based on the erection sequence analysis shown on drawings S-1200 and S-1201?

SCCI intends to adhere to the design engineer's specified erection sequence shown on the contract plans. Therefore, for our erection analysis and plan, it is important to understand if the design engineer calculated these girder cambers and stay cable loads based on the shown sequence of installing the dropin span after frame 4 has its cables stressed, barriers and rails installed and the falsework removed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
B-0048	BRP - Changes to Barrette Pile Slurry Parameters	Closed	09/08/2014	09/18/2014	09/09/2014	Potentially	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Jeremiah Kent

REQUEST:

Part 2.4.A of Specification Section 31 63 31 - Barrette Piles - Bus Ramps provides the design criteria for the sodium bentonite slurry to be used at the Pylon 9 barrette piles. Based on their experience and their knowledge of constructability, SCCI's barrette pile subcontractor, Nicholson Construction Company (NCC), would like to propose the following changes.

1. 2.4.A.4.b.1 and 2: A mix of water and bentonite at the minimum 5.5% per unit weight of water produces a slurry density of 65 pounds per cubic foot (62.4 pcf + 0.055 x (bulk density of bentonite around 50 pct)= 65 pcf). A 3.5 - 4% per unit weight of water is required in order to produce an initial slurry density of 64 pounds per cubic foot as required in §2.4 A 4. Please confirm that a mix of water and bentonite at the minimum 4% per unit weight of water is acceptable.

2. 2.4.A.4.c.3: The maximum fluid loss, by filter press, is the same for in-trench as it is for initial slurry. This is not attainable in field conditions as the slurry fluid loss increases as the slurry is being reused. The widely utilized

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The changes proposed by the Contractor are acceptable provided all of the slurry test requirements and acceptance criteria, not just those listed in the RFI, follow Tables 1 and 2 from EN 1538.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

European standard (EN 1538) specifies the maximum fluid loss values of 50 cc (for in-trench slurry) and 30 cc (for initial slurry). As these are more attainable values based on experience, please confirm 50 cc (for in-trench slurry) and 30 cc (for initial slurry) is acceptable.

3. A significant part of the Barrettes will be excavated in clay and, when mixed with the bentonite slurry, the viscosity will increase. If the initial and in-trench slurry viscosity minimum is 40 seconds as specified, there is very little tolerance available on the slurry viscosity before it causes excess stress on the desanding pumps. The widely utilized European standard (EN 1538) specifies 32 seconds as a recommended minimum. Please confirm 32 seconds is acceptable as a minimum for slurry viscosity.

B-0049 **BRP - Barrette Pile Slurry Retention** **Closed** **09/08/2014** **09/18/2014** **09/09/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Jeremiah Kent

REQUEST:

Slump retention requirements specified in the Contract Specifications 31 63 32 § 1.8 C 4 indicate a minimum slump of 7" after "duration of the pour" + 2 hours. The anticipated pour duration for each Barrette is 8-10h leading to a slump retention of I0-12h. Such slump retention is difficult to control which may delay setting time (well above l2h) and increases risks of excessive bleed and segregation. Based on experience, Nicholson and its concrete supplier recommend 6-8h of slump retention.

Please confirm min. 7" slump 6-8h after batch time is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is acceptable.

Note: The title of the RFI was incorrectly changed from SCCI's original RFI. The title of the RFI should be Barrette Pile Slump Retention.

B-0050 **BRP - Length of Barrette Piles** **Closed** **09/08/2014** **09/18/2014** **09/09/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Jeremiah Kent

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Contract Drawing S-3191 indicates a Barrette pile length of 20 feet. The standard construction method to build the barrettes involves two full primary bites being dug first followed by a middle bite in between the previously dug primary bites. With a Barrette measuring 20 feet in length, the middle bite will only be 1.6' in length. Such small middle bite may collapse on itself while digging a primary bite which could affect the verticality of that primary bite. Nicholson proposes to increase the length of the Barrettes to 21' to decrease the chance of the middle bite to collapse.

Please confirm Barrettes 21 feet in length is acceptable.

This is acceptable provided there is no additional cost to the TJPA.

B-0051 **BRP - Intumescent For Frame 5** **Open** **09/08/2014** **09/18/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche

To: Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Shimmick Construction Company, Inc Jeremiah Kent

REQUEST:

SCCI is actively pricing and re-designing the frame 5, drop-in span as part of CR B-005 and needs to better understand the original design intent for this bridge section as it relates to the intumescent paint.

1. The only drawings SCCI see reference to intumescent are S-5068, S-6111 Detail B, S-6112 Detail D, S-6113 Detail H and K, and S-6114 Detail N. Per these it appears the design intent is to install intumescent on the underside of the "tub" (S-5068), the additional "Tub" piece (N/S-6114), and all of the exposed steel on the frame 4 side, except the lowest horizontal steel (B/S-6111 and C/S6-112). At the building side, it is confusing as only H/S-6113 shows intumescent similar to the frame 5 side. K/S-6113 only shows the intumescent on the bottom of the restraining rod steel box. J/S-6113 and L/S-6114 do not show intumescent. Also of note, the steel link beam on details D and B of S-6115 do not show intumescent. Please confirm design intent of intumescent coverage.

2. Per specification 09 96 46 Intumescent Paint ¿ Bus Ramps, SCCI is to "provide the specified fire resistance

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

classification approved by Authorities having Jurisdiction" Who are the authorities having jurisdiction? What is the fire resistance classification for frame 5? SCCI assumed during bid time and currently a 1- hour rating.

B-0052 **BRP - U-Turn Ramp Temporary Supports** **Open** **09/08/2014** **09/18/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Shimmick Construction Company, Inc Jeremiah Kent

REQUEST:

SCCI has received the following Memo from VAK, please advise on the following.

Not 3 on sheet S-6062 indicated that temporary supports/tie downs are required adjacent to the closure pours on either end of the U-Turn Ramp in order ¿to prevent uplift/twist during construction stages". All else being equal, it seems that the most effective way to prevent this twisting tendency would be to leave the falsework in place until after the closure pours are made. However, note 3 on sheet S-3164 indicates that the falsework must be removed proper to the closure pours being made; thus requiring the temporary supports. The intent of this sequence is not readily obvious.
If the falsework must indeed be removed prior to the closure pours being made (to allow the curved tubs to deflect under their own self weight, for example), please provide the required loading that must be resisted at the indicated temporary support locations.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

B-0053 **BRP - S-2001 Revision 2 Clarification** **Open** **09/12/2014** **09/22/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Shimmick Construction Company, Inc Jeremiah Kent

REQUEST:

Please see attached.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

ASI 150-003 contained Rev 2 of S-2001. The changed was summarized as:

"Revise barrier along outside of Fremont Street off-ramp to existing. Add Signature for Caltrans Structures Design Oversight"

Please describe in detail what changes were made within the revision cloud shown on S-2001 Rev 2.

B-0054 **BRP - Barrette Pile Concrete Cover** **Open** **09/12/2014** **09/22/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Shimmick Construction Company, Inc Jeremiah Kent

REQUEST:

Section A and B of Contract Drawings S-3191 call for 6" concrete cover around the reinforcing cage in the barrette piles. Per Nicholson Construction Company's experience, given the rebar congestion of the reinforcement cage, the 6" concrete cover allows for a path of least resistance for the concrete to rise faster on the outside of the cage and increase the risks of having bentonite being trapped inside the cage during the concreteting operation. Nicholson believes that reducing the concrete cover to 3" will decrease the risk of this happening. SCCI's proposal will not change the width of the barrette pile, it will increase the width of the rebar cage by 6". Please note that the response to RFI B-0050 allowed for the barrette pile to be on foot longer in length. These changes will be shown on the shop drawings, to be submitted in a forthcoming submittal.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Is this acceptable?

B-0055 **BRP - Barrette Pile Reinforcement Cage** **Open** **09/15/2014** **09/25/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Shimmick Construction Company, Inc Jeremiah Kent

REQUEST:

Contract Drawing S-3191 details the reinforcement needed for the Barrettes. The current reinforcement details indicate a clear space between rebar as low as 3.75" in some areas. Per Nicholson's experience and several codes (such as EN 1534 and US FHW A), a larger clear space is recommended as small clear spaces may impede the flow of concrete inside the cage and increase the risks of concrete anomalies.

As a result, Nicholson proposes to increase the bar sizes and use anchor heads (in lieu of hooks) in order to increase the clear space between rebar. Please see attached sketches SD-02 and SD-03. Note that the section of steel remains similar in any direction in order to avoid impacting the structural capacity of the Barrette.

Furthermore, due to space constraints at the site the cage will be built in two (2) 1 Oft wide by three (3) 60ft long sections approximately (the length will vary depending on the reinforcement requirement by elevation). Each 10ft x 60ft section will be prefabricated and transported to the site. Two 1 Oft sections will be joined together to form a 20ft section. Our sketches include the required horizontal reinforcement to join the sections. The three 20ft by 60ft sections will be lifted and installed in the trench.

Please confirm the reinforcement cage proposed is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
B-0056	BRP - Stay Cable Strand Size	Open	09/15/2014	09/25/2014		Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Shimmick Construction Company, Inc Jeremiah Kent

REQUEST:

SCCI has received the following RFI from VStrutural LLC (VSL):

"The contract documents for the Transbay Transit Center Bus Ramp project (ASI 150-003) specify that the steel strand for the stay cables be 0.6" diameter, 270 ksi, weldless low-relaxation seven-wire strand with fy=0.9fs, conforming to the requirements of ASTM A416. The majority of VSL's recent and ongoing stay cable projects have used or are using strand with the same overall properties, but with a slightly larger diameter of 0.62". Some of the projects using the 0.62" diameter strand include:

St. Croix River Crossing project in Stillwater, Minnesota (ongoing)
Tappan Zee Bridge Replacement project in Tarrytown, New York (ongoing)
Gerald Desmond Bridge Replacement project in Long Beach, California (ongoing)
Ironton-Russell Bridge project in Ironton, Ohio (ongoing)
Audubon Bridge project in St. Francisville, Louisiana (recent)
A25 Bridge project near Montreal, Quebec, Canada (recent)

In addition to being more widely utilized on recent stay cable projects than its 0.6" diameter counterpart, the 0.62" diameter strand has a slightly larger cross-sectional steel area (0.2325 sq in vs. 0.217 sq in for the 0.6" diameter strand). Using the larger individual strand steel area allows for the overall steel area in a particular stay cable to be achieved using fewer strands. Using fewer strands in a stay cable allows for extra unused holes in the cable anchorages, which allows for future expansion of load capacity within the stay. VSL's stay cable anchorages are designed to use either 0.6" or 0.62" diameter strand.

To illustrate the principle described above on the Transbay project, the currently project parameters specify that VSL's 109-strand anchorages be utilized with 109 EA, 0.6" diameter strands. In this configuration, the anchorages are completely filled with strand and thus cannot allow for future expansion of load capacity within the stays. The total required steel area for each cable is: 0.217 sq in x

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

109 = 23 .653 sq in. By using 0.62" diameter strands, the strand count for each anchorage could be reduced to 102 EA (0.2325 sq in x 102 = 23.715 sq in > 23.653 sq in). Using 102 EA strands in each cable leaves seven open holes in each anchorage, allowing for a significant expansion of load capacity should the need arise in the future. As noted above, VSL's stay cable anchorages are designed to be used with either strand size, and therefore the anchorages could sustain the extra loading that would come with any future addition of 0.62" diameter strands.

As one can see from the list above, 0.62" diameter strand has also become the norm for current and recent projects that VSL has worked on here in the USA. As such, it is more readily available from domestic strand suppliers.

VSL therefore proposes to use 0.62" diameter strands on the Transbay Transit Center Bus Ramp project stay cables in lieu of 0.6" diameter strands. The 0.62" diameter strand will meet all of the other criteria specified within the contract documents and the current edition of the PTI Stay Cable Recommendations."

Is it acceptable to replace the 0.6" diameter steel stay cable strands with 0.62" diameter strands?

B-0057 **BRP - Stay Cable Geometry and Loading** **Open** **09/15/2014** **09/25/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Shimmick Construction Company, Inc Jeremiah Kent

REQUEST: **SUGGESTION:** **ANSWER:** **Accept Suggestion:** ☐

SCCI has received the following RFI from VStructural LLC.

After a review of the contract drawings and specifications, the following items are requested for the design of the saddle body/system:

1. Change the tangent points of the saddle to the locations shown in the drawing and provide coordinates to VSL for final design

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

2. Review the Stay Cable Data on Sheet No. S-6079 and update as necessary. In particular, it appears that Note 3 may need to be revised to reflect the revised conditions.

3. The stay cable strands are continuous through the saddles. Update stay cable lengths "Ls" and nominal stay steel weights "Ms" in the table on Sheet No S-6079 to reflect the cable lengths from bearing plate to bearing plate, inclusive of the saddle in the pylon

4. Provide work points at the bearing plate location on the deck

5. Provide cable rotation in ULS and FLS (characteristics and fatigue)

6. Provide angular rotation of each anchorage under ULS, SLS, FLS

7. Provide tension variation under SLS, ULS, FLS

Please advise on the above points.

B-0058 **BRP - Stay Cable Design Temperatures** **Open** **09/15/2014** **09/25/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Shimmick Construction Company, Inc Jeremiah Kent

REQUEST:

SCCI has received the following RFI from VStructural LLC
-

After a review of the contract drawings and specifications, the following item is requested for the design of the stay cable system:

Please provide the design temperature range (maximum and minimum temperatures) for the stay cables in order to determine the correct HDPE stay pipe lengths and the lengths of connecting elements.
Expansion and contraction of the HDPE pipes must be taken into account when specifying the lengths

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

of these components.

BALFO900-0001 **BSE Natoma Street Trestle Access** **Closed** **04/18/2011** **05/02/2011** **04/20/2011** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Webcor Construction LP Masashi Kojima **Answered By:** Webcor Construction LP Masashi Kojima

Co-Author:

REQUEST:

Reference Project Bidding Manual (Exhibit A)

Per the requirements outlined in the project bidding manual (Exhibit A), BBII has developed our trestle design to provide access for Natoma street extending from gridline 11.5 at the center of the excavation (grid line E) to gridline 10 at the centerline of the shoring wall. After staking out this point on the shoring wall, it is apparent that the 530 Howard St. building is in conflict with the access point. See the attached sketch and photos indicating the approximate location of 530 Howard in relation to the trestle access. Please advise if the Natoma St. access point should be changed to a more suitable location.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The geometric requirements for Access Trestle in Exhibit A, A3 and SL-001 are schematic and minor adjustments can be acceptable based on the actual site conditions.
For this particular item, it is acceptable to shift the Natoma Access of the Access Trestle to west by approximately 30 ft.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
BALFO900-0001.1	BSE - Natoma Street Trestle Access	Closed	05/05/2011	05/15/2011	05/09/2011	Potentially	☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal
To: Webcor/Obayashi Joint Ventu Masashi Kojima
Answered By: Webcor/Obayashi Joint Ve Masashi Kojima
Co-Author:

REQUEST:

Reference Project Bidding Manual (Exhibit A)

Per our discussion at our meeting on 4/26/11, the response to BBI RFI 076 indicated that BBII should relocate the access trestle but was not specific enough. Please provide an exact location for the Natoma St. offshoot that will satisfy the access requirements of future trade subcontractors. BBII requests a meeting to discuss any impacts of the relocation.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Access Trestle design should be included in BSE Trade Subcontractor's scope.

The geometric requirements for Access Trestle in Exhibit A, A3 and SL-001 are schematic and minor adjustments can be acceptable based on the actual site conditions. The "exact" locations should be designed by BSE Trade Subcontractor as the Design-Built scope.

Also, please refer to the General section regarding to the coordination in Exhibit A, Attachment 3.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
BALFO900-0002	BSE - Scaffolding For Interim Screen Wall	Closed	03/21/2011	03/31/2011	03/22/2011	Potentially	☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal
To: Webcor Construction LP Masashi Kojima
Answered By: Webcor/Obayashi Joint Ve Masashi Kojima
Co-Author:

REQUEST:

Reference attached photo

Scaffolding is currently being erected for the interim screen wall within Zone 4. It appears that the scaffolding lies in the path of the CDSM wall and will conflict with our work (See attached photo). When is the scaffolding scheduled to be completely dismantled and removed from the area?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The scaffolding installation is per the response to RFI T-0034. The conflict mentioned is unconfirmed. BBI shall provide a work plan for pile removal and CDSM installation in zone 4 showing specific activities and schedule dates for coordination purposes.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
BALFO900-0003	BSE - Additional Project Control	Closed	04/19/2011	04/26/2011	04/25/2011	Potentially	☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal
To: Webcor Construction LP Masashi Kojima
Answered By: Webcor Construction LP Masashi Kojima
Co-Author:

REQUEST:

Reference Specification 01 10 50 and Drawing GT-0100

Drawing GT-0100 indicates four points established for control. Our surveyors, KCA Engineers, are concerned about maintaining consistent control between various contractors on the project with such extensive distance

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please refer to IFB Documents for TG05.1 Survey Package contained in the compact disk, which sent to BBII on 04/22/2011, Transmittal No. 2011.04.22-0006. After review and define the scope for TG05.1 Survey Package, please identify missing bench marks specified in your specification and TG05.1 Package.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

between the provided control points. It is suggested that additional control points with horizontal and vertical coordinates be provided at the following locations:
- Howard St. at Fremont St.
- Howard St. at First St.
- Howard St. halfway between First and Second St.
- Mission St. at Fremont St.
- Mission St. at First St.
- Mission Street at Shaw Alley.

KCA RFI 001 has been attached for reference.

BALFO900-0004 **BSE - CDSM Pile Tolerance** **Closed** **06/06/2011** **06/16/2011** **06/13/2011** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Webcor/Obayashi Joint Ventu Masashi Kojima **Answered By:** Webcor/Obayashi Joint V Masashi Kojima

Co-Author:

REQUEST:

Reference Specification Section 31 56 13

In reference to the CDSM Shoring Wall DFOW QC meeting held in BBII's office on June 1, 2011, please find below the following RFI submitted by BBII's sub-contractor DND Construction:

"The reference specifications for tolerance relative to centerline of wall for both the CDSM and steel soldier beams are extremely strict compared to what is common for this nature of work, particularly given the depth of the work. It is also more strict than if the verticality tolerance (1:150 CDSM/1:200 pile) is applied at a conservative excavation depth of 60 feet. Can the tolerance be changed from 0" in/2" out (CDSM) & 0" in/3" out (piles) to a uniform 0" in/4" out"?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Trade Subcontractor is responsible for the necessary means and methods to install the CDSM Shoring Wall within the tolerances specified in Specification section 31 56 13.

BALFO900-0005 **BSE - Temporary Power For Construction** **Closed** **06/21/2011** **07/01/2011** **07/05/2011** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Webcor/Obayashi Joint Ventu Masashi Kojima **Answered By:** Webcor Construction LP Nhi Tran

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Temporary Power Package TG05.2 was awarded to Bass Electric on 5/12/2011. Drawing SL-003 shows locations for Temporary Power Skids that will be used to facilitate construction. Please provide dates of when the following Temporary Power Skids are going to be made available to BBII:

Skid 1 by Natoma St.
Skid 2 by Minna St.
Skid 3 by First St.
Skid 4 by Fremont St.
Skid 5 by Beale St.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please refer to Exhibit A, IV. B., mentioning "Temporary power skids might be available at beginning of the dewatering."
For the latest information, please refer to the latest weekly update schedule for the available dates of Temporary Power Skids. The next latest weekly update schedule will be issued on 07/06/2011.

BALFO900-0006 **BSE - Discharge Point for Buttress Operation** **Closed** **06/23/2011** **07/05/2011** **07/05/2011** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Webcor/Obayashi Joint Ventu Masashi Kojima **Answered By:** Webcor Construction LP Nhi Tran

Co-Author:

REQUEST:

Please reference attached sketch.

BBII is planning to discharge water generated by the Buttress operation into the sewer manholes shown in the sketch. Please confirm that this is acceptable. Note that location of sewer manholes is approximate and will be per As-Built. Temporary piping layout shown in the attached sketch is diagrammatic.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This question is not appropriate as RFI, but logistics Submittal. Please submit as Buttress Water Discharge Logistics Plan in Zone 4 accordingly.

BALFO900-0007 **BSE - Archeological Dig Site D-3 Information** **Closed** **10/13/2011** **10/23/2011** **10/13/2011** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Webcor/Obayashi Joint Ventu Masashi Kojima **Answered By:** Webcor/Obayashi Joint Ve Masashi Kojima

Co-Author:

REQUEST:

Reference Specification Section 01 13 50 and Sheet D-1002

Due to the recent Archeological Investigation at dig site D-3, at the depth of 10-25 feet, BBII request confirmation that the excavation, observation, and all the investigations at that depth have been completed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The area of archaeological investigation dig approx. D-3 was released to BBII 10/5/2011.
Per Ural Yal BBII would perform the backfill of the archaeological investigation dig at no cost to W/O or the TJPA in consideration of CR(s) T-020 & T-005.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please Confirm.

BALFO900-0008 **BSE - PG&E Dimensions at Tie-in Points - VOID** **Closed** **10/12/2011** **10/12/2011** **10/13/2011** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Webcor/Obayashi Joint Ventu Nhi Tran **Answered By:** Balfour Beatty Infrastructu Ural Yal

Co-Author:

REQUEST:

Reference CR T-017 and attached drawings

The drawings provided for the installation of the PG&E phases 2 utilities do not provide dimensions for the tie ins between the existing utilities and the phase 2 utility installation. Please see attached modified sketch indicating areas of concern.

Please provide updated drawings, with dimensions from existing property lines to the tie in locations for the existing utilities and phase 2 utilities.

Confirm MH/Vault number for the tie north west of A line (see attached drawing)

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Update by BBI -

Per PG&E meeting 10/13/2011 (Phase II Utility Installation)
The location of existing PG&E tie in points / connection points will be determined in the field with PG&E inspector & BBII.

BALFO900-0009 **BSE - D.I. Installation on First Street** **Closed** **10/27/2011** **11/06/2011** **10/31/2011** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Webcor/Obayashi Joint Ventu Nhi Tran **Answered By:** Webcor/Obayashi Joint Ve Nhi Tran

Co-Author:

REQUEST:

Reference Sheet U-3021 and D-2230

The attached drawing shows a new Catch Basin #501
RUP drawing U-3021
BSE drawing D-2230 to be installed on First Street.

Currently this CB does not exist. Please confirm it will be installed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Catch Basin #501 was deleted per RFI #U-0101, response issued on 2/28/2011.

☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
BALFO900-0010	BSE - Conflicts between revised trainbox columns and internal bracing	Closed	10/31/2011	11/10/2011	11/03/2011	Potentially	

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Webcor/Obayashi Joint Ventu Nhi Tran **Answered By:** Webcor/Obayashi Joint Ve Masashi Kojima

Co-Author:

REQUEST:

Reference Specification Section 31 55 00

BBII received additional comments on the internal bracing from Thornton Tomasetti on 10/17/11, after the 100% submittal had already been reviewed and approved by DBI. The comments provided include revised column locations and sizes that differ from our BSE drawings.

The attached drawings highlight conflicts and reduced clearances presented by these revisions to the trainbox columns. As trainbox drawings are not available to BBII, please provide direction on where to locate bracing elements to resolve these conflicts.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This RFI was superseded by RFI T-251.1 and the answer is no longer required.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
BALFO900-0011	BSE - CR T-018 Gate Requirements	Closed	11/02/2011	11/12/2011	11/03/2011	Potentially	☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Webcor/Obayashi Joint Ventu Nhi Tran **Answered By:** Webcor/Obayashi Joint Ve Masashi Kojima

Co-Author:

REQUEST:

Reference CR T-018

CR T-018 issued to BBII indicates that the gates need to be installed at the fire lane access of 540-580 Howard. The gates will prevent access to the rear of the building from Howard and Natoma Street.

Please advise if the gates specified in CR T-018 are due to be installed by BBII.
If BBII is requested to install the gates under CR T-018, please provide a specification and detail for the gate system that will be in meet fire regulation and standards.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This RFI was covered by the response for RFI T-256 and the answer is no longer required.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
BALFO900-0012	BSE - Natoma Street Trestle Access - VOID	Closed	11/01/2011	11/11/2011	12/02/2011	Potentially	☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Webcor/Obayashi Joint Ventu Nhi Tran **Answered By:** Webcor/Obayashi Joint Ve Masashi Kojima

Co-Author:

REQUEST:

Reference CR T-018, Specification Section 01 53 13, BBI Letter #4225-000-0145 (attached), and attached sketch

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please consider the following the response to BBII's RFI(s) 243 & 251.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

CR T-018 included drawings for access to the side and rear of 540 Howard St. BBII issued letter 4225-000-0145 in response and included a sketch highlighting a conflict between the proposed building access and the Natoma St. trestle offshoot.

The Natoma St. trestle offshoot was originally specified to span from Grid 11.5 at the center of the excavation to Grid 10 at the edge of excavation. The offshoot was moved further west per [W/O] response to the conflict with 530 Howard St.

The 540 Howard St. building access arrangement as proposed in CR T-018 does not provide sufficient access to the Natoma offshoot (see attached sketch). Please provide direction if the offshoot is to be relocated or eliminated.

Please refer to marked-up sheets SH-2202 & SH-2200 for the revised trestle configuration. The depicted configuration is to be effective immediate.

BALFO900-0012.1 **BSE - Natoma Street Trestle Access** **Closed** **12/06/2011** **12/16/2011** **12/06/2011** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal

To: Webcor/Obayashi Joint Ventu Masashi Kojima

Answered By: Webcor/Obayashi Joint V Masashi Kojima

Co-Author:

REQUEST:

Reference CR T-018, Specification Section 01 53 13, BBI Letter #4225-000-0145 (attached), and attached sketch

CR T-018 included drawings for access to the side and rear of 540 Howard St. BBII issued letter 4225-000-0145 in response and included a sketch highlighting a conflict between the proposed building access and the Natoma St. trestle offshoot.

The Natoma St. trestle offshoot was originally specified to span from Grid 11.5 at the center of the excavation to Grid 10 at the edge of excavation. The offshoot was moved further west per [W/O] response to the conflict with 530 Howard St.

The 540 Howard St. building access arrangement as proposed in CR T-018 does not provide sufficient access to the Natoma offshoot (see attached sketch). Please

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

REVISED RESPONSE to BALFO900-0012: Delete the Natoma St. access and provide credit proposal.

provide direction if the offshoot is to be relocated or eliminated.

BALFO900-0013 **BSE - Access Trestle at Gridline 3 - VOID** **Closed** **11/21/2011** **12/01/2011** **12/02/2011** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Webcor/Obayashi Joint Ventu Nhi Tran **Answered By:** Webcor/Obayashi Joint V Masashi Kojima

Co-Author:

REQUEST:

Reference RFI #T-0251.1 and Specification Section 01 53 13

In order to avoid conflicts with both the Thornton Tomasetti "pile exclusion zones" provided in response to RFI T-0251.1, the first trestle pier near gridline 3 must be relocated. BBII Proposes two options:

Option A - Move the last pier East to clear the pile exclusion zones and adjacent bracing struts, resulting in a trestle deck that ends approximately 15' East of gridline 3. The capacity of this end span would be increased to allow for the additional reach.

Option B - Move the last pier West and extend the end span to clear the pile exclusion zones and adjacent bracing struts, resulting in a trestle deck that ends approximately 20' West of gridline 3.

Please advise how BBII should proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please consider the following the response to BBII's RFI(s) 243 & 251.

Please refer to marked-up sheets SH-2202 & SH-2200 for the revised trestle configuration. The depicted configuration is to be effective immediate.

BALFO900-0013.1 **BSE - Access Trestle at Gridline 3 Revised W/O Response to BALFO900-0013** **Closed** **12/06/2011** **12/16/2011** **12/06/2011** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Webcor/Obayashi Joint Ventu Masashi Kojima **Answered By:** Webcor/Obayashi Joint V Masashi Kojima

Co-Author:

REQUEST:

Reference RFI #T-0251.1 and Specification Section 01 53 13

In order to avoid conflicts with both the Thornton

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

REVISED RESPONSE to BALFO900-0013: Option A

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Tomasetti "pile exclusion zones" provided in response to RFI T-0251.1, the first trestle pier near gridline 3 must be relocated. BBII Proposes two options:

Option A - Move the last pier East to clear the pile exclusion zones and adjacent bracing struts, resulting in a trestle deck that ends approximately 15' East of gridline 3. The capacity of this end span would be increased to allow for the additional reach.

Option B - Move the last pier West and extend the end span to clear the pile exclusion zones and adjacent bracing struts, resulting in a trestle deck that ends approximately 20' West of gridline 3.

Please advise how BBII should proceed.

BALFO900-0014 **BSE - Location of Security Cameras** **Closed** **01/16/2012** **01/26/2012** **01/16/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Webcor Construction LP David Fields **Answered By:** Webcor Construction LP David Fields

Co-Author:

REQUEST:

According to Exhibit A - Rev H of the trade subcontractors bid manual. "Temporary poles shall include conduit for security cameras, power at the pole tops for security cameras, and mounting hardware for security cameras." Please advise on quantity and the location of these temporary poles.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per Exhibit A - Rev H:
"Trade Subcontractor shall be responsible for installing and maintaining temporary lighting at the perimeter traffic/pedestrian barricades, at pedestrian walkways, and as required to provide code-minimum lighting at egress paths, as well as sufficient foot candle lighting levels to safety perform the work at all times, including within the excavation. At a minimum, Trade Subcontractor's lighting plan will include temporary poles at street level. In addition to supporting lighting, temporary poles shall include conduit for security cameras, power at the pole tops for security cameras, and mounting hardware for security cameras. Security cameras will be installed and maintained by others. Temporary lighting work item includes, but is not limited to, installing lighting poles, installing all hardware, switch boxes, breakers, conduits, pulling strings

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

among temporary power skids /generators /lighting poles and maintenance required for temporary lighting works. Trade Subcontractor's lighting plan will be a submittal requirement for the project. Trade Subcontractor is responsible for maintaining the temporary lighting and related facilities for each zone until completion of Mud/Rat Slab construction. Those facilities for Temporary Bridges and Access Trestles shall be maintained by Trade Subcontractor until their removal. Temporary lighting for Staging Areas that may be provided by TJPA shall be maintained by Trade Subcontractor all the time."

BALFO900-0015 **BSE - Beale St. Trestle Pile Conflict Follow-Up** **Closed** **02/08/2012** **02/18/2012** **02/08/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Shad Gardner **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Marina Rosso

Co-Author:

REQUEST:

The response to RFI T-264.1 requested BBII provide the loading that would placed onto the CDSM wall.
This response leads us to believe that the option to leave the pile in the current location was unacceptable.
Please confirm that the pile must be moved and provide a detailed location of where the pile placement would be accepted.
Upon receipt of this information BBII can accurately determine the load to placed on the Wall for Arup¿s review.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Can't find answer in Constructware.

BALFO900-0016 **BSE- Stabilization of CDSM Wall** **Closed** **04/10/2012** **04/20/2012** **04/10/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Webcor Construction LP Kirk Nielsen **Answered By:** Webcor Construction LP Kirk Nielsen

Co-Author:

REQUEST:

BBII is requesting direction for a method to stabilize the unimproved soil conditions along the interior face of the CDSM wall. This request was generated after a field review of the wall conditions revealed a potential safety

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

During the 4/4/12 BSE meeting AAI indicated that a RFI was not the correct format to inquire with regard to a safety issue the responsibility of the contractor. Further in addition to the +1" cavity issue per section

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

issue regarding workers working on the mass excavation, bracing and dewatering activities

The current condition of the CDSM wall includes unimproved soil conditions that have the potential to become detached from the wall and create a falling safety hazard to workers as the mass excavation and bracing reach lower depths.
Please reference attached photo for visual details.

Based on our records, the CDSM wall met all the specification requirements for uniformity and improved soil as per section 31 56 13 of the contract specifications.

31 00 00.3.8.L, contrary to section 3156 13.3.7.C which indicates no individual lump of unimproved soil shall exceed 6", there are a pervasive amount of +6" lumps of unimproved soil throughout the CDSM. W/0 will contact a waterproofing manufacture to investigate this issue further. KN 4/6/12

BALFO900-0017 **BSE - Beale Street Bridge Pile Location Conflicts** **Closed** **09/19/2012** **09/29/2012** **09/19/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Diarmuid Cregg **To:** Webcor Construction LP David Fields **Answered By:** Webcor Construction LP David Fields

Co-Author:

REQUEST:

The response to submittals TG0300-206.1 and TG0300-261.1 states that BBII¿s Beale St Bridge fails to comply with specification section 01-53-13.1.3D with regard to coordination and constructability, but does not elaborate. BBII assumes this is related to future work not included in the BSE contract documents. BBII had previously coordinated pile locations, and cleared future concrete structures shown in drawings that were available to us, however please advise us what clashes you have detected or what specific clearances revisions are necessary for future work, so BBII can properly incorporate into our design.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This addresses only one of W/O's multiple comments in response to BBII's submittal TG0300-206.1 and TG0300-261.1. Columns were clearly depicted on, to include however not limited to, 1/S1-2027. Beams atop said columns were depicted on TG03 drawings, to include however not limited to, 2/A1-2005, 3/A1-6000, and A/S1-3201. Should BBII have further inquiries please footnote on BBII's revised submittal and remit.

BALFO900-0018 **BSE - Beale Street Bridge Pile Location Conflicts** **Closed** **09/24/2012** **10/04/2012** **09/24/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Webcor Construction LP David Fields **Answered By:** Webcor Construction LP David Fields

Co-Author:

REQUEST:

Based on the discussions at today's BSE meeting, BBII understands that the W/O's intention is to relocate the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to TCCO response to submittal TG0300-206.1.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Beale Bridge from the location depicted in BBII's current submittal in order to accommodate work of future trade packages. Please provide detailed information regarding where to place the bridge, and what horizontal and vertical clearances are required.
Time is of the essence for BBII to receive this additional, previously unavailable information, so the re-design process can be started as soon as possible.

BALFO900-0019 **BSE - Removal of Over Head Power Lines In Lot N** **Closed** **10/08/2012** **10/19/2012** **10/09/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Webcor Construction LP David Fields **Answered By:** Webcor Construction LP David Fields

Co-Author:

REQUEST:

In order to construct the Beale Street Bridge per submittal: TZ1030-015313A38, it must be pre constructed in Lot N. In order to do this the overhead power lines located on the east side of Lot N must be taken down throughout the bridge deck fabrication phase and during the final installation of the deck on Beale Street.
The attached drawing illustrates the fabrication area in Lot N and the location of the overhead power lines through this area. BBII will also need to acquire a section of the W/O lot to complete the bridge deck fabrication.
Please confirm that these items will be resolved before the Beale Street Bridge deck fabrication commences.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Submittal TZ1030-015313A38 was returned "Not Reviewed" on 10/3/12. BBI's Beale St. bridge layout proposal is currently under review by the TJPA as RFI T-0264.7.

In response to the existing utility facilities inquiry: Contractor to follow the provisions set forth in the contract documents regarding existing utility facilities.

In response to inquiry relative to W/O lot south of pacel pacel N:
Infringing on W/O's lot south of lot N in order to construct the Beale St. Bridge is a Trade Subcontractor is means and methods issue. As a result, all cost associated with this work would be borne by BBII. In order for W/O to respond relative to the logistics of this inquiry at a minimum a plan demonstrating the following would need to be provided:

-W/O's trailer complex will maintain ADA compliance. Drawing(s) should show relocated K-Rails and other pertinent information relative to W/O's Trailers and other facilities.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

- Expected duration of the infringement into W/O's Lot.
- Demonstration that areas disturbed will be restored to original condition upon the completion of Beale St. bridge installation.

BALFO900-0020 **BSE - Rebracing Supports above the Lower Concourse Level** **Closed** **11/06/2012** **11/16/2012** **11/06/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Webcor Construction LP David Fields **Answered By:** Webcor Construction LP David Fields

Co-Author:

REQUEST:

In futher review of W/0 letter COM 00479, dated November 2, 2011, regarding rebracing of internal bracing above concourse level, BBII requests the following clarification.

The letter states "internal bracing cannot be rebraced to a pin pile above the concourse level." Are trestle piles considered pin piles in this statement? Also, please clarify why rebracing above the concourse level cannot be supported to pin piles and/or trestle piles.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

BBII elected to utilize the trestle piles to function as reaction elements for its design-build internal bracing system. COM0479 was in response to concerns relative this means and methods decision and was authored to provide notification that trestle pile utilization would not be possible for re-bracing reactions at the lower concourse level given the coordination requirement for trestle removal prior to the final level of rebracing.

BBII may elect to utilize existing piles for rebracing reactions provided the re-shoring and removal sequence is developed and coordinated with Concrete Trade Subcontractor, Structural Steel Trade Subcontractor and other Trade Subcontractors.

BALFO900-0021 **BSE - Sump Pit Location and Dimension** **Closed** **12/05/2012** **12/15/2012** **12/05/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Joe Chapman **To:** Webcor Construction LP Robert Kjome **Answered By:** Webcor Construction LP Joanne Filipas

Co-Author:

REQUEST:

In Drawing S1-2022 the Sump Pit on the North Side of Zone 1 between GL 4 and GL 5, does not have all necessary dimensions to properly excavate. Please provide the dimensions drawn in blue on Drawing GT-2101, and the dimensions of the bottom footprint of the pit

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The drawings referenced in BBI RFI #336 have been superseded. Please refer to current drawings, issued via Field Order #00010R2 dated 9/26/2012 which included revised drawings dated 8/30/2012. Refer to drawings including but not limited to S1-2022 and S1-

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

(See G-3004). 3006.

BALFO900-0022 **BBII RFI # 342: Minna Street Manhole Sewer As-built Video** **Closed** **01/21/2013** **01/31/2013** **01/22/2013** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Dean Wallahan **To:** Webcor Construction LP Jackson Tukuafu **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author:

REQUEST:
Please provide BBII a copy of the as-built CCTV (video recording) of Minna Street sewer from SSMH#203 to SSMH#501.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
Pleae download videos and reports from the following Box website:
https://webcor.box.com/s/3gidqeq942xzx0hwiwfg.

BALFO900-0023 **BSE - Chain Link Fence Locations on Beale Street Temporary Bridge** **Closed** **02/19/2013** **03/01/2013** **02/19/2013** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Brandon Miller **To:** Webcor Construction LP Lynn Kowallis **Answered By:** Webcor Construction LP Lynn Kowallis

Co-Author:

REQUEST:
Ref: CR T-043A

Please refer to CRT -043A Scope of Work regarding installation of chain link fence on temporary bridges in lieu of contract specified plywood. CR T-043A references blind spots for "199 Fremont Street and 301 Mission Street onto Beale Street." Please see the attached sketch of Beale Street Temporary Bridge with location for chain link fence to be installed per CR T-043A.

Please confirm locations for chain link fence on Beale Street Temporary Bridge.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
Confirmed. Per RFI T-293.2

BALFO900-0024 **BSE - Relocate Zone 3 Dewatering and Electrical Equipment** **Closed** **02/27/2013** **03/09/2013** **02/27/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Kirk Nielsen

Co-Author:

REQUEST:
BBII will be relocating equipment along the North perimeter wall in Zone 3 per W/0 and TCCO direction.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
1. The direction to evacuate the Muni Hump was provided by QBD #TG0300-0162.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Items to be relocated include but are not limited to dewatering header pipe, dewatering control boxes, site electrical, monitoring equipment, etc. Please see the attached photos and sketches and for approval to proceed with relocation of said equipment.

Please confirm the utility locations shown herein do not conflict with other trade subcontractors and can remain for the duration of the dewatering system.

2. WOJV recommends relocating the utilities consistent with BBII's RFI #352 SK(s) 1/2 & 2/2.
3. While WOJV will coordinate as necessary to avoid utility relocation(s) WOJV cannot confirm the utilities may remain the duration of the dewatering system, nor is WOJV obligated to:
a. Specification section 31 23 19.1.3.C instructed bidders to "Locate system components to allow continuous dewatering operations without interfering with installation of permanent Work and existing public right-of-way, sidewalks, and adjacent buildings, structures, improvements and construction operations performed under this Contract or other contracts."
b. Exhibit-A.Section IV.C.15 instructed bidders to "he design and the installation sequence shall be coordinated with Permanent Structure construction, Temporary Structures / Equipment by other Trade Subcontractors, Internal Bracings, Access Trestle, Temporary Bridges and other structures."
BBII was instructed as what to anticipate as it pertains to the permanent structure reference the BSE A-series drawings.

WOJV 2/26/13

BALFO900-0025 **BSE - As-built Minna Street Manhole Rim Elevations** **Closed** **03/04/2013** **03/14/2013** **03/05/2013** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Brandon Miller **To:** Webcor Construction LP Lynn Kowallis **Answered By:** Webcor Construction LP Lynn Kowallis

Co-Author:

REQUEST:

Please provide BBII with as-built elevations of Minna Street sewer manholes: MH#201 , 202, 203, 204, 205, 206, 207.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached As-Built Drawings for Minna Street sewer manholes: MH#201 , 202, 203, 204, 205, 206, 207.

BALFO900-0026 **Project Milestones and Substantial Completion** **Closed** **08/08/2013** **08/18/2013** **08/08/2013** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Rodney Gordon **To:** Webcor/Obayashi Joint Ventu Joanne Filipas **Answered By:** Webcor/Obayashi Joint Ve Joanne Filipas

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:
Based on conversation in today's progress meeting, please confirm that substantial completion is not a prerequisite of project milestones and is therefore not required to meet any milestone obligations.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
Refer to COM2209

BALFO900-0027 **BSE - Waterproofing Damage at Area 2** **Closed** **11/12/2013** **11/22/2013** **11/18/2013** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Diarmuid Cregg **To:** Shimmick Construction Comp Ben Gordon **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:
During bracing removal at area 2, a section of waterproofing was damaged. This damage is consistent to the top of the concrete.

Please confirm the minimum waterproofing material lap needed by the WP subcontractor to repair this Section.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
See attached Grace repair procedure for the burnt waterproofing as requested.

P-0035 **P - Steel Basket Column Strut Connection at Glazing** **Closed** **07/12/2012** **07/12/2012** **07/18/2012** **Potentially** ☐

From: Webcor Construction LP Jeff Heath **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Gary Krutsch

Co-Author:

REQUEST:
Ref: 14/SI-6092

1. The strut connecting the basket columns to the glazing sub framing is currently shown as part of the TG08.1 package. Because of structural steel tolerances of the basket columns, the length of the strut will vary depending on the final location of the basket column. The discussions have been going on for months about speeding up the fabrication and installation of the glazing system, therefore we would like to incorporate the strut as part of the TG07.1 Structural Steel package. Please confirm it is acceptable to incorporate the strut into the Structural Steel package.

2. Provide details for an adjustable end strut at the glazing sub frame connection.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
This request is neither an RFI nor QBD. If W/O would like to pursue this issue, please formalize a letter addressed to PMPC and route through the proper venue.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

3. Provide a typical length that takes into account the tolerance of the basket columns.

P1-0001 **Perimeter Protection Bollard Cladding** **Closed** **06/05/2014** **06/05/2014** **06/23/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Provide documents for secondary mitigation to be incorporated for TG07.9 - Eliminate decorative SS cladding from the perimeter protection bollards and provide painted steel jacket in lieu of SS.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Secondary Mitigation updates have been included in section 28 16 44, with VE Round 2 documentation delivered on 06/18/2014.

P1-0002 **Operable /Retractable Bollards and Wedge Barrier Traffic Lights** **Closed** **06/05/2014** **06/15/2014** **06/23/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-2302, A1-2303, A1-2304, A1-2310

Do operable/retractable bollards and wedge barrier traffic lights interface with street light signals? If so provide specifications for this interaction.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Reference to traffic light interface is specified in section 28 16 44/APA - 3.5.I.1 included with VE Round 2 documentation delivered on 06/18/2014.

P1-0002.1 **Additional Information for Operable Wedge Barriers** **Closed** **07/25/2014** **08/04/2014** **08/20/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 28 16 44/APA, RFI P1-0002, A1-2302, A1-2303, A1-2304, and A1-2310

RFI response P1-0002: "Reference to traffic light interface

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractor shall provide two (2) dry contact relay outputs to the traffic control system, one per barrier, as a base design.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

is specified in section 28 16 44/APA - 3.5.I.1 included with VE Round 2 documentation delivered on 06/18/2014"

Original comment remains. 28 16 44/APA, 3.5.I. indicates that wedge barriers provide an output to the traffic control system. Provide details and output requirements.

P1-0003 **HPU Bollard Detail** **Closed** **06/05/2014** **06/15/2014** **06/23/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-2302, A1-2304, A1-2203, A1-2210

Provide detail of HPU for retractable bollards.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

HPU is provided by the bollard manufacturer/supplier. Comment to be addressed by subcontractor.

P1-0004 **Retractable Bollard Hydraulic Connections and Lines** **Closed** **06/05/2014** **06/15/2014** **06/23/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-2302, A1-2303, A1-2304, A1-2310

Provide detail and routing for retractable bollard hydraulic connections and lines.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Retractable bollard is a Design/Build system. Routing from HPU to individual or grouped bollards shall be provided by the bidder. Comment to be addressed by subcontractor.

P1-0005 **Hydraulic Hose Conduit** **Closed** **06/05/2014** **06/15/2014** **06/23/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference - 28 16 44 Section 3.3.I

Specify type of containment infrastructure/conduit required for hydraulic hoses.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Containment conduit to be provided by the Design/Build bidder to suit their hydraulic hose dimensions. Comment to be addressed by subcontractor.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0006	HPU for Wedge Barriers	Closed	06/05/2014	06/15/2014	06/23/2014	Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-2306, A1-2307, A1-2310, A1-2206, A1-2207, A1-2210

Provide detail of HPU for wedge barriers.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

HPU is provided by the bollard manufacturer/supplier. Comment to be addressed by subcontractor.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0007	Wedge Barrier Hydraulic Connections and Lines	Closed	06/05/2014	06/15/2014	06/23/2014	Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-2306, A1-2307, A1-2310

Provide detail and routing for wedge barrier hydraulic connections and lines.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Wedge Barrier is a Design/Build system. Routing from HPU to individual or grouped barriers to be provided by the bidder. Comment to be addressed by the subcontractor.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0008	HPU Containment Pans	Closed	06/05/2014	06/15/2014	06/23/2014	Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-2306, A1-2307, A1-2310

Confirm that HPU containment pans are not required for leakage of hydraulic fluid.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

HPU's are product specific. If a drip pan is not included with the unit, then no additional components shall be required. Comment to be addressed by subcontractor.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0009	Details and Cuts for Wedge Barriers at Beale and First Streets	Closed	06/05/2014	06/15/2014	06/23/2014	Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-2306, A1-2307

Provide details and cuts for wedge barriers at Beale and First Streets. Coordinate with Structural drawings.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Wedge barriers are located within Landscape/Civil build-up layer, and are not attached to the structural lid of the Train Box. Coordination with structural is not required.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0010	HPU location	Closed	06/06/2014	06/06/2014	06/30/2014	Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-2303, A1-2203

Provide final location and details of HPU for the retractable bollards at the end of Natoma Street between GL 10 & 11 and J & K. An interim location is called out on A1-2203 on the Lower Concourse.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Reference to "interim" HPU locations has been removed from sheets A1-2303 and A1-2203. HPU details to be provided by the wedge bollard manufacturer/contractor.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0011	HPU location for wedge barriers	Closed	06/06/2014	06/16/2014	06/23/2014	Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-2306, A1-2307, A1-2206, A1-2207

Provide final locations and details of HPU for the wedge barriers at the Muni Bus Plaza on Fremont and Beale Streets. Interim locations are called out on A1-2206 at GL 27 and A1-2207 at GL 33 on the Lower Concourse.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Reference to "interim" HPU locations has been removed from sheets A1-2306, A1-2307, A1-2206 and A1-2207. HPU details to be provided by the wedge barrier manufacturer/contractor.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0012	HPU location for bollard and wedge barriers	Closed	06/09/2014	06/19/2014	06/23/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-2310, A1-2210

SUGGESTION:

Provide final location and details of HPU for the retractable bollards and wedge barriers at the Vehicle/Bike Ramp on Howard Street. An interim location is called out on A1-2210 at GL3.

ANSWER: **Accept Suggestion:** ☐

Reference to "interim" HPU locations has been removed from A1-2310 and A1-2210.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0013	Traffic Light Details for Wedge Barriers	Closed	06/09/2014	06/19/2014	06/23/2014	Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-2306, A1-2307, A1-2310

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

No indicator lights are required at the wedge barriers in the Bus Plaza (sheets A1-2306 and A1-2307).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Provide traffic light details and locations for all wedge barriers.

Indicator lights for the wedge barriers at the Vehicle Ramp are now shown on A1-7402 and A1-7418 delivered with MEPTSc Addendum # 4 to be issued on 06/20/2014.

P1-0013.1 **Traffic Light Details for Wedge Barriers** **Open** **07/25/2014** **08/04/2014** **08/20/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-7402, A1-2306, A1-2307, A1-2310, 28 16 44, P1-0013

RFI response P1-0013: "No indicator lights are required at the wedge barriers in the Bus Plaza (sheets A1-2306 and A1-2307). Indicator lights for the wedge barriers at the Vehicle Ramp are now shown on A1-7402 and A1-7418 delivered with MEPTSc Addendum # 4 to be issued on 06/20/2014."

Original comment remains. 28 16 44, 3.5.I. indicates that wedge barriers provide an output to the traffic control system. Provide details and output requirements. A1-7402 shows one indicator light for two wedge barriers, while 28 16 44 2.3.H. states that each wedge barrier shall have their own light. Clarify what is required.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Wedge barrier controller to provide two (2) dry contact relay outputs to the traffic control system, one per barrier set.

2. Custom pylons shown on A1-7402 and A1-7418 should have indicator lights in front and rear sides of same pylon (one set of lights per barrier/traffic direction).

P1-0014 **Impact of Attenuator** **Open** **06/09/2014** **06/19/2014** **08/05/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-2502

What is the Impact Attenuator located at GL F & 2? Provide specifications and details.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to attached SKA-3907 for Impact Attenuator location and proposed products.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0015	Wedge Barrier and Retractable Bollard Details	Closed	06/09/2014	06/19/2014	06/23/2014	Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: Secondary Mitigation

Provide updated details for wedge barriers and retractable bollards showing removal of topping slab with proper elevations, etc., as they are impacted by the following secondary mitigation measure: Delete 87K sf topping slab in the west end of the Lower Concourse at the SOC, Engineering and Vehicle & Bike Ramps.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It has been agreed that deletion of the topping slab is no longer a secondary mitigation measure. Topping slab will remain on Lower Concourse at the SOC, Engineering and Vehicle and Bike Ramps. Details for wedge barriers and retractable bollards will not be revised to accommodate removal of topping slab.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0016	Retractable Bollards on Howard	Closed	06/09/2014	06/19/2014	06/30/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-2310

Provide locations and dimension retractable bollard traffic lights at the Vehicle/Bike Ramp on Howard Street.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Locations of indicator light pylons and other devices shown on updated sheets A1-7402 and A1-7418 delivered with MEPTSc Addendum # 4, to be issued 06/20/2014.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0016.1	Additional Information for Retractable Bollards	Closed	07/25/2014	08/04/2014		Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Reference: A1-2310, ASI 118 A1-7418, and ASI 119 A1-7418 (SKA-3526),

RFI response P1-0016: "Locations of indicator light pylons and other devices shown on updated sheets A1-7402 and A1-7418 delivered with MEPTSc Addendum # 4, to be issued 06/20/2014."

A1-7402 is not related to retractable bollards, just to wedge barriers. Sheet A1-7418 from ASI 118 has been superseded by sheet A1-7418 (SKA-3526) issued in ASI 119 which does not show any indicator lights. Clarify

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

which sheet is meant to be the most current version.

P1-0017 **Incorrect Details on A1-8168** **Closed** **06/09/2014** **06/09/2014** **06/23/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-8168

Detail 3 - Bollard placement is missing on 3/A1-8168. Section cut B/A1-8168 needs to be verified. Section B/A1-8168 and plan view on A1-2502 don¿t match. Confirm which placement is correct and update details accordingly.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Bollard placement is not shown on A1-8168. However, the issue of bollard placement is dependent on the final layout of the Pre-fabricated Supervisor Booth, which will be delivered with VE Round 4 documentation, at which point the locations of bollards will be finalized.

P1-0018 **Design Build Bollards** **Closed** **06/09/2014** **06/09/2014** **06/23/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 05 50 00

2.3.E through H - Bollards are indicated as being design build in this specification. Confirm that they are design build.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Bollard scope has been removed from section 05 50 00, and consolidated into section 28 16 44. Bollards are performance specification - design/build.

P1-0019 **Structural Drawings for Bollards** **Closed** **06/09/2014** **06/19/2014** **06/23/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-3190

Detail 2 - Says "Refer to Structural Dwgs", but there are no bollard details in the structural drawings. Provide structural details. Confirm that BOL-3 as shown in Detail 2 and 4 is

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

All bollards are performance specification - design/build items. Provide design to comply with required performance criteria in 28 16 44 issued with VE Round 2 deliverable on 06/18/2014.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

sturdy enough to withstand impact from a vehicle at required forces.

P1-0020 **Bollards Detail** **Closed** **06/09/2014** **06/19/2014** **06/30/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 05 50 00

2.5.E. - The specification for BOL-1 and BOL-2 do not indicate that they are concrete filled, however the details on A1-8676 show that they are concrete filled. Coordinate drawings and specifications accordingly.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

BOL-1 and BOL-2 are performance specification - design/build items. Provide design to comply with required ASTM M-ratings.

P1-0021 **WPM Detail for Retractable Bollard Drain** **Closed** **06/09/2014** **06/19/2014** **06/30/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-8721

Provide waterproofing details for retractable bollard drain and all penetrations.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Slab penetrations required for retractable bollards are located on plans. For the retractable bollard waterproofing details, refer to Details 3,4, and 5 of A1-8721.

P1-0021.1 **Slab penetration for Bollard** **Open** **07/25/2014** **08/04/2014** **08/20/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-8721

RFI response P1-0021: "Slab penetrations required for retractable bollards are located on plans. For the retractable bollard waterproofing details, refer to Details 3,4, and 5 of A1-8721"

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For the retractable bollard and wedge barrier vertical and horizontal penetration details at the train box lid and side wall/curb, refer to SKA-3922.

Number	*Subject*	*Status*	*Date Created*	*Date Required*	*Date Answered*	*Cost Impact*	*Proceed*

Provide waterproofing details for all penetrations, including hydraulic and electrical lines which will need to penetrate the waterproofing at the side wall of the pit.

P1-0022 **Design Build Bollards - Quality Assurance** **Closed** **06/09/2014** **06/19/2014** **06/23/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 12 93 30/APA (SSI)

1.5 - Quality Assurance - This states that the site bollards are design build. Confirm that they are design build.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Specification section 12 93 30/APA has been deleted. Content of specification section 12 93 30/APA has been consolidated into specification section 28 16 44/APA. Site bollards, as part of Perimeter Security Systems are performance based design/build.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0023	Operable Bollards at Natoma Pedestrian Area West, Location 12	Closed	06/09/2014	06/19/2014	06/23/2014	Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 28 16 44/APA (SSI) 1.2.E

Shows that there are operable bollards at Natoma Pedestrian Area West, location 12, which is at Natoma and 2nd Street. Provide location and details of HPU for this set of operable bollards. Confirm this is TJPA's property. There are no details for operable bollards at this location. Clarify that this is a requirement and if so provide details and confirm that the TJPA is allowed to install operable bollards at this location and that other businesses/buildings are not adversely impacted.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Refer to updated sheets A1-2302 and A1-2210, delivered with MEPTSc Addendum # 4, to be issued 06/20/2014. Location of Natoma Street West bollards has been revised per TJPA directive.

2. Locations of bollards and HPU is shown on the updated sheets A1-2302 and A1-2210.

3. Details of HPU's to be provided by the bollard manufacturer/fabricator.

4. Location of bollards identified in A1-2302 and A1-2210 is within TJPA property.

5. Perimeter protection is TJPA security requirement.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0024	Number of Wedge Barriers at Fremont	Closed	06/09/2014	06/09/2014	06/23/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 28 16 44/APA (SSI)

1.2.E - Shows only five wedge barriers at Fremont Street (Bus Plaza). The drawings show eight wedge barriers at Fremont Street (Bus Plaza) at GL 27. Revise and coordinate documents accordingly.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Description of work diagram identifies location of bollards and wedge barriers that are grouped together to operate in unison, irrespective of the number of the HPU's and controllers. No coordination action required.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0025	Wedge Barriers at Beale Street	Closed	06/09/2014	06/19/2014	06/23/2014	Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 28 16 44/APA 1.2.E - Shows only two wedge barriers at Beale Street (Bus Plaza). The drawings show four wedge barriers at Beale Street (Bus Plaza) at GL 33. Revise and coordinate documents accordingly.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Description of work diagram identifies location of bollards and wedge barriers that are grouped together to operate in unison, irrespective of the number of the HPU's and controllers. No coordination action

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

required.

Please note, that this RFI's number is incorrectly labeled as #0002 on the PDF file "Attached_file__P1-0025_-_Wedge_Barriers_at_Beale_Street.

P1-0026 **Removable Bollards** **Closed** **06/09/2014** **06/19/2014** **06/27/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 28 16 44/APA (SSI)

1.2.E - This does not show all Manually Removable Bollard locations that are indicated in the drawings, for example on L1-2302 GL 2-4 @ GL A. Remove from specification or provide all locations.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to updated 28 16 44/APA delivered with VE Round 2, issued 06/18/2014.

P1-0027 **Utility Vault Bollards** **Closed** **06/09/2014** **06/19/2014** **06/30/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: L1-2305

Confirm that B3 and not B3A is required at utility vaults between GL 20-22 at GL J. All other utility vaults have B3A bollards.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

P1-0028 **Secondary Controllers** **Closed** **06/09/2014** **06/19/2014** **06/23/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 28 16 44/APA (SSI)

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to 1.3.5 table in the updated section 28 16

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

1.3.A.2 - Locate all Secondary Controllers for all operable bollards and wedge barriers. They are not indicated in the drawings and quantities are not provided.

44/APA, included with VE Round 2 deliverable, issued 06/18/2014.

P1-0029 **Card Readers for Operable Bollards and Wedge Barriers** **Closed** **06/09/2014** **06/19/2014** **06/23/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 28 16 44/APA 3.5.G:

Locate all Card Readers for all operable bollards and wedge barriers. They are not indicated in the drawings and quantities are not provided.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Locations for all required card readers are identified in updated sheets A1-2302, A1-2303, A1-7402 and A1-7418 included with MEPTSc Addendum # 4, to be issued 06/20/2014.

P1-0029.1 **Card Readers for Operable Bollards and Wedge Barriers** **Open** **07/25/2014** **08/04/2014** **08/20/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 28 16 44/APA 3.5.G:

RFI Response P1-0029.1: Locations for all required card readers are identified in updated sheets A1-2302, A1-2303, A1-7402 and A1-7418 included with MEPTSc Addendum # 4, to be issued 06/20/2014.

Original comment remains. Card Reader locations are not indicated.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to attached sketches SKA-3979 and SKA-3980, where locations of card readers have been highlighted. Dimensions have been added to the drawing.

P1-00291 **VOID** **Void** **07/18/2014** **07/28/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST: **SUGGESTION:** **ANSWER:** **Accept Suggestion:** ☐

P1-0030 **Touchscreen Controllers** **Closed** **06/09/2014** **06/09/2014** **06/23/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 28 16 44/APA (SSI)

1.3.A.3 - Locate all Touchscreen Controlers for all operable bollards and wedge barriers. They are not indicated in the drawings and quantities are not provided.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See response to RFI P1-0028.

P1-0030.1 **Additional Information for Touchscreen Controllers** **Open** **07/25/2014** **08/04/2014** **08/20/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 28 16 44/APA (SSI)
RFI response: P1-0030: "See response to RFI P1-0028"

Confirm that only one touch screen is required and that location is in the Security Command Center.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed. Only one touchscreen controller is located for operation and it is to be located in the Security Command Center [B1232].

P1-0031 **Design Build Perimeter Security System** **Closed** **06/09/2014** **06/19/2014** **06/23/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 28 16 44 1.2.E:

This states that the perimeter security system (operable bollards and wedge barriers) are design build. Confirm they are design build.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See the specifications, which call for performance based items which WOJV likes to label as design-build items. Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0032	Photoelectric Beam for Operable Barriers	Closed	06/09/2014	06/19/2014	06/23/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 28 16 44 (SSI)

1.2.I - Provide detail for the photoelectric beam required to detect people or vehicles on or near the operable barriers. Locate and dimension on drawings. They are not indicated in the drawings and quantities are not provided.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Equipment and detail to be provided by the Operable Barrier manufacturer/supplier. Locations for photoelectric beam pylons identified on updated sheets A1-2302, A1-2303, A1-7402 and A1-7418 included with MEPTSc Addendum # 4, to be issued 06/20/2014.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0032.1	Additional Information Photoelectric Beam for Operable Barriers	Open	07/25/2014	08/04/2014	08/20/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference:28 16 44 (SSI), A1-2304, A1-2306, A1-2307, A1-2302, A1-2303, A1-7402, A1-7418 from ASI 118, A1-7418 (SKA-3526) issued in ASI 119

RFI response P1-0032: "Equipment and detail to be provided by the Operable Barrier manufacturer/supplier. Locations for photoelectric beam pylons identified on updated sheets A1-2302, A1-2303, A1-7402 and A1-7418 included with MEPTSc Addendum # 4, to be issued 06/20/2014."

- Locations of photoelectric beams are not called out on sheet A1-2302, A1-2303. Provide updated details. Also provide details for sheets A1-2304, A1-2306, A1-2307.
- Confirm that photoelectric beam on A1-7402 is wide enough to cover the entire wedge barrier if someone is standing on it.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Location of photoelectric beams are not called out on sheets A1-2302, A1-2303 and A1-2304. However, location of indicator light pylons and/or knox box and key switch + indicator light is clearly shown, (see attached). Per section 28 16 44.2.7.C, Custom Pylons describe two configurations of the pylon matching the annotations on plans. Design of custom pylon, complete with photoelectric beams and other equipment shall be provided by the Bollard Manufacturer.

Additionally, photoelectric beams are not shown on sheets A1-2306 and A1-2307, which describe the wedge barriers at West and East ends of the MUNI Bus Plaza, because they are not required at those locations.

2. Photoelectric beam shown on sheet A1-7402 does not require full width coverage of the entire wedge because of the limited accessibility by the general public and saturated video area coverage.

3. Sheets included with this response include [A1-2302, A1-2303, A1-2304 from ASI 0119], [A1-3100, A1-3105 from ASI 0123], [A1-7402 and A1-7418 from ASI 0121].

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0033	HPU Relocations and Cosntruction Scheduling	Closed	06/09/2014	06/19/2014	06/23/2014	Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 28 16 44 1.2.J:

"The contractor will be required to install the anti-ram barrier systems in phases to match the construction schedule of the project. The phasing includes the relocation of the hydraulic power units at a later date and re-installation of hydraulic hoses, fittings and valves based on the revised distance between the hydraulic power unit and the barriers it is controlling." Why are the HPU's being relocated? What is the phasing in the construction schedule that is being referred to here? How does is the relocation of the hydraulic lines, piping and drainage being accounted for in the drawings? Routing and all accommodations for temporary and permanent locations needs to be provided. Coordinate all drawings and specifications. Revise accordingly.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Phasing language deleted from specification.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0034	Vehicle Barrier Controller locations	Closed	06/09/2014	06/19/2014	06/23/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: 28 16 44 (SSI)

2.1 - Locate and provide detail for all vehicle barrier controllers. They are not indicated in the drawings and quantities are not provided.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to updated specification section 28 16 44/APA - 1.3.A.5.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0035	Wedge Barrier CIP Locations	Closed	06/09/2014	06/19/2014	06/23/2014	Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 28 16 44/APA 2.2

Coordinate and detail wedge barrier cast in place locations at the Bus Muni Plaza on Beale and Fremont Streets. These are not in the Structural drawings.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to response in RFI P1-0009.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0036	Road Loop Details	Closed	06/09/2014	06/19/2014	06/23/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 28 16 44 (SSI)

2.2.H - Provide details and location of road loops. They are not indicated in the drawings. Provide quantities.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Final location of road loops provided by the Barrier System manufacturer/fabricator. Locations of road loops currently shown on C1-7xxx series. Road loop locations for Howard Street Vehicle Ramp and West Natoma Street barrier to be provided in a future Civil package. Contractor shall obtain quantitites from Contract Documents.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0036.1	Road loop Location	Open	07/25/2014	08/04/2014	08/20/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 28 16 44/APA (section 2.6.B),

RFI response P1-0036: "Final location of road loops provided by the Barrier System manufacturer/fabricator. Locations of road loops currently shown on C1-7xxx series. Road loop locations for Howard Street Vehicle Ramp and West Natoma Street barrier to be provided in a future Civil package. Contractor shall obtain quantitites from Contract Documents."

This states that loop detectors are located on both the secure and non-secure side of an operable barrier. The current Civil drawings do not show loops on both sides of the operable barriers, for example on sheet C1-7001. Clarify this requirement.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Road loop sensors to be located at every operable barrier, both on the secure side and the non-secure side.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0037	Final Sequence of Operations	Closed	06/09/2014	06/19/2014	07/28/2014	Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Transbay PMPC Ray Quesada

Co-Author:

REQUEST:

Reference: 28 16 44/APA 3.5.A:

Confirm that "The final sequence of operations will be

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The contractor providing these items will be required to spend time coordinating with the Owner's security concept of operations and should include this time in

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

identified at a later time and will require coordination with the Owner's security concept of operations." does not require any work from the bidders.

their bid.

P1-0038 **Operable Bollards Finish Details** **Closed** **06/09/2014** **06/19/2014** **06/23/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference 28 16 44 (SSI)

2.3.C.2 - Provide finish and material for operable bollard decorative sleeve.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to response provided with RFI P1-0001

P1-0039 **Decorative Bollard Detail** **Closed** **06/09/2014** **06/19/2014** **06/23/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 28 16 44 2.4.E

Provide details for decorative bollard for traffic light.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to updated specification section 28 16 44 - 2.7 Custom Pylon. Custom pylon shall be designed and manufactured by the retractable bollard manufacturer.

P1-0040 **Bollard Base Plate Detail** **Closed** **06/09/2014** **06/19/2014** **06/23/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-8676 A1-2502

Detail 1 - Based on the BOL-1 bollard steel base plate 4'-10" width and 4'-6" spacing indicated on A1-2502, the base plates are overlapping by 4". Confirm there is enough space in the slab to accommodate an overlap. Corner bollards are also setting on top of the neighboring bollard plate. Revise accordingly.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Base plate dimensions deleted from sheet A1-8676.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0041	Bollard Plate and Rebar Cover	Closed	06/09/2014	06/19/2014	06/30/2014	Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-8676

Confirm there is enough cover for the BOL-1 plate and rebar in topping slab. 4/S1-5003 Note #6 states that top and bottom rebar are required while 5/S1-5000 requires 1" clear. If there is not enough cover, revise accordingly.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The top rebar in the topping slab per note 6 on 4/S1-5003 shall be continued over the base plates. The bottom rebar shall be stopped short at the base plates.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0042	Topping slab Detail	Closed	06/09/2014	06/19/2014	06/30/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-8676

Detail 1 shows 6" for the topping slab, including waterproof membrane. Calculations from elevations and slab thicknesses for the Bus Deck equal 5.5". Correct this discrepancy.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The 6" dimension in question identifies the total thickness of the build-up assembly on top of the structural concrete slab. The dimension is being revised to 5 3/4" and will be issued in a future ASI.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0043	Bollard Coordination Between L and A Drawings	Closed	06/09/2014	06/19/2014	07/11/2014	Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-2302 through A1-2310, L1-2302 through L1-2310

Bollard locations and number are not coordinated in Landscape and Archictectual drawings. For example B2 bollards on GL 5. Coordinate and revise accordingly.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. For location and type of all bollards with B** designation, Landscape Drawings shall govern.

2. For location and type of all bollards with BOL** designation, Architectural Drawings shall govern.

3. For location of retractable bollards and wedge barriers Architectural Drawings shall govern.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0044	Bollard 3	Closed	06/09/2014	06/19/2014	06/24/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

reference: 12 93 30 A1-3190

Bollard 3 is not showing as removable on A1-3190 or in spec 05 50 00, where it is completely filled with concrete. Provide details for a removable concrete filled bollard or revise accordingly.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Section 12 93 30 has been consolidated into Section 28 16 44. Refer to 06/18/2014 Secondary Mitigation VE Round 2 package.

P1-0044.1 **Conflicting Details Bollard 3** **Open** **07/25/2014** **08/04/2014** **08/05/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 12 93 30, A1-3190, 28 16 44

RFI P1-0044 response: "Section 12 93 30 has been consolidated into Section 28 16 44. Refer to 06/18/2014 Secondary Mitigation VE Round 2 package."

A1-3190 still refers to 05 50 00 in detail 7. Detail 2 and 4 are also in conflict with specification 28 16 44 regarding BOL-3 details. Detail 2 also refers to structural drawings, yet there are no structural drawings for any bollards. Clarify the conflicting details and requirements. Provide what the correct details and requirements are for BOL-3.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Bollard type BOL-3 is a design-build product. Sheet A1-3190 has been updated; refer to attached SKA-3912.

P1-0045 **Slab Plate at Bollard** **Closed** **06/09/2014** **06/19/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 05 50 00 2.5.F.1

Through slab plate is not detailed in the drawings, but the specifications say that this is part of the bollard. Coordinate documents and revise accordingly.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Reference 05 50 00 / 2.5.F.1 has been deleted from specifications and incorporated into consolidated section 28 16 44 "Perimeter Security Systems" issued as an ASI with Secondary Mitigation VE Round 2 package.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0046	Bus Deck Bollard	Closed	06/09/2014	06/19/2014	06/24/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-2507, A1-2502, 05 50 00

Confirm that BOL-3 on the Bus Deck is a crash bollard. Is it strong enough, as designed, to withstand ramming from a vehicle?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

BOL-3 is a design/build bollard with required performance to comply with CFC 312 2007. It is not intended to stop head-on collisions with vehicles. Refer to 06/18/2014 Secondary Mitigation VE Round 2 package.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0047	Bollard Coordination Between Specifications	Closed	06/09/2014	06/19/2014	06/24/2014	Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 12 93 30, 05 50 00

Bollards in spec 12 93 30 and 05 50 00 do not match in regards to their parameters, ratings and requirements. Clarify why there are two incongruous lists of bollards that use three of the same numbers. Correct and revise accordingly.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Bollard specifications from Sections 12 93 30 and 05 50 00 have been consolidated into updated Section 28 16 44. Refer to 06/18/2014 Secondary Mitigation VE Round 2 package.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0048	Bollard Detail type	Closed	06/09/2014	06/19/2014	06/30/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: L1-7360

Landscape drawings do not detail each bollard type. Clarify which bollard type is on this sheet. Coordinate with Architectural and Structural drawings. Clarify if bus deck level BOL-1 and BOL-2, and loading dock BOL-3 are to be used for all areas? Provide details for all bollard types required.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Bollard manufacturer/fabricator shall design/build bollards of various types to suit identified conditions. Locations of individual types and conditions are clearly identified on drawings along with proximity to ramps, OCS poles, etc.

2. Bollards identified on Landscape drawings do not engage TTC Structure.

3. Bus Deck BOL-1, BOL-2, and Loading Dock BOL-3 are to be used only where identified on Architectural drawings.

4. Details to be provided by the bollard manufacturer/fabricator.

Number	*Subject*	*Status*	*Date Created*	*Date Required*	*Date Answered*	*Cost Impact*	*Proceed*
P1-0049	Bollard Details	Closed	06/09/2014	06/19/2014	06/24/2014	Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 12 93 30 2.2

Provide details for bollards listed under section 2.2. Including but not limited to, details for removable bollards, stationary bollards, footings, special footings, anchorages, concrete fill level, concrete type, sleeves, etc.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Bollards specified in 12 93 30 have been consolidated into section 28 16 44. Bollards to be provided under 28 16 44 scope are performance design or design/build.

P1-0050	Stationary Bollards	Closed	06/09/2014	06/19/2014	06/23/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: L1-2304, L1-2306

B1B is shown on L1-2304 and L1-2306 but is not specified in 12 93 30, for example at GL C between 17 and 18. Revise accordingly.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See L-0002 for description of bollard. Rating to match Bollard Type 1. Refer to updated consolidated specification section 28 16 44.

P1-0050.1	Stationary Bollards	Open	07/28/2014	08/07/2014	08/27/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: L1-2304, L1-2306, 28 16 44

RFI P1-0050 response: "See L-0002 for description of bollard. Rating to match Bollard Type 1. Refer to updated consolidated specification section 28 16 44."

RFI original Question P1-0050: "B1B is shown on L1-2304 and L1-2306 but is not specified in 12 93 30, for example at
GL C between 17 and 18. Revise accordingly."

Original question remains. There is no listing for Bollard Type B1B in the consolidated 28 16 44.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Bollard type B1B is the equal to bollard type B1A. B1B is located at MUNI OCS pole locations. Design and coordination required is at MUNI OCS pole locations.

☐

Number	*Subject*	*Status*	*Date Created*	*Date Required*	*Date Answered*	*Cost Impact*	*Proceed*
P1-0051	**Retractable Bollard Drain Detail**	**Closed**	**06/09/2014**	**06/19/2014**	**06/24/2014**	**Potentially**	

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-8720 and A1-8721

Provide detail for Retractable Bollard Drain, piping route and termination. Does the effluent need to be collected and treated as hazardous waste? Coordinate with Plumbing Drawings.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Retractable bollard drains connect to plumbed drainage lines located under the structural slab. Refer to Plumbing drawings delivered with MEPTSc Addendum # 4, issued 06/20/2014.

2. There is no special consideration required for the collected effluent.

P1-0051.1	**Stationary Bollards**	**Open**	**07/25/2014**	**08/04/2014**	**09/03/2014**	**Potentially**	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-8720, A1-8721 P1-2252, and P1-2202

RFI P1-0051 response: "1. Retractable bollard drains connect to plumbed drainage lines located under the structural slab. Refer to Plumbing drawings delivered with MEPTSc Addendum # 4, issued 06/20/2014.
2. There is no special consideration required for the collected effluent."

- Original question remains for retractable bollard locations at Minna Street on GL 1 and 10 where no drain lines are shown.
- Confirm that both retractable bollard drain and pit drain connect to the single plumbing line as stated on P1-2202 "2" SAN/AD - UP (TYP 9) TO RETRACTABLE BOLLARDS CASING AND PIT".
- P1-2252 states "2" UP TO RETRACTABLE BOLLARD DRAINS (TYP 6)". Please clarify if this drain line is meant to be for the retractable bollard drains and the pit drains.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Arup believes the RFI incorrectly states Minna Street when the question was intended for the retractable bollards at Natoma Street.

The retractable bollards that are located near grid line 1, and the retractable bollards that are located near grid line 10 which are outside the footprint of the trainbox, shall drain to a dry well as shown on the attached two sketches (SK-C-0001 and SK-C-0002).

P1-0052	**HPU detail**	**Closed**	**06/09/2014**	**06/19/2014**	**06/24/2014**	**Potentially**	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:
Reference: 28 16 44

Is an equipment pad required for HPU? If so provide details.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
Subcontractor to provide details of HPU equipment pad.

P1-0053 **Material Around Retractable Bollards** **Closed** **06/09/2014** **06/19/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:
Clarify what type of foundation material is required around retractable bollards. Is this Controlled Density Fill (CDF) or concrete? What strength?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
Foundation material (concrete) is part of bollards manufacturer's design/build scope, because it is linked to the performance rating of the device.

P1-0054 **Details for 1-A pole** **Closed** **06/09/2014** **06/09/2014** **06/23/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:
reference: 1/C1-7001

Detail 1 / C1-7001 calls out a "INST. TYPE 1-A POLE WITH 8" DIA. 2 SECTION RED WITH TV-2-T MOUNTING" Provide more detail and description of type 1-A pole, TV2-2-T Mounting, 2 section RED.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
Arup Repsonse:

Mounting Details attached for specified poles.

P1-0054.1 **Details for Indicator Light Pylon** **Open** **07/25/2014** **08/04/2014** **08/20/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:
reference: 28 16 44

RFI P1-0054 response: "Mounting Details attached for specified poles"

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
Details referenced in response to RFI P1-0054 are specific mounting details for traffic and MUNI OCS. Indicator light pylon is a design/build element by the operable barrier manufacturer. Foundation/mounting detail shall be provided by the operable barrier

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Confirm that these details are to be used for the indicator light pylon. They do not match the criteria in 28 16 44.

manufacturer.

P1-0055 **Missing Note** **Closed** **06/09/2014** **06/19/2014** **06/23/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 3/L1-9636

Missing note. Please provide.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to attached SKLA-302.

P1-0056 **Wedge Barriers on Civil Drawing** **Closed** **06/09/2014** **06/19/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: C1-2009

Civil Drawings do not indicate wedge barriers, but civil contractor will need to know where wedge barriers are located. Show wedge barriers on civil drawings.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Arup Response:

Wedge barrier locations and pickup loops are shown for reference on C1-7006, Bus Plaza Signingand Striping. Detailed design is shown in architectural drawings.

P1-0057 **Missing Bollard Locations** **Closed** **06/09/2014** **06/19/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: L1-2312A

Missing bollard locations. Clarify what the alternate is on this sheet.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to sheet L1-2312 for bollard locations.

Number	*Subject*	*Status*	*Date Created*	*Date Required*	*Date Answered*	*Cost Impact*	*Proceed*
P1-0058	**Water tank Liners spec**	**Void**	**06/09/2014**	**06/19/2014**		**Potentially**	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

reference 07 13 55 2.1

07 13 55 2.1 does not provide a specific manufacturer for thermoplastic water tank liners. Webcor intends to require all manufactures be approved via QBD prior to bid. If this is not acceptable, please provide specific manufacturers and products which are acceptable to use.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

P1-0059	**Structural Details for 24" Curb at GL 1.4**	**Closed**	**06/09/2014**	**06/19/2014**	**06/24/2014**	**Potentially**	☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 2/A1-8157

Please provide structural details for 24" wide curb at GL 1.4, Second Level.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached sketch SKS-0359 for rebar details in the concrete curb at GL 1.4 on second floor.

P1-0060	**2/A1-8151**	**Closed**	**06/09/2014**	**06/19/2014**	**06/24/2014**	**Potentially**	☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 2/A1-8151

Please confirm that the future finish floors are not part of Phase 1 work.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Future finished floors are not part of Phase 1 Work. Floor Finishes in Retail Areas are part of Tenant improvement (TI).

P1-0061	**Sheet Note on A1-3001 - Vertical Joints**	**Closed**	**06/09/2014**	**06/19/2014**	**06/24/2014**	**Potentially**	☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 1/A1-3001

A note on sheet A1-3001 to the right of detail 1 indicates

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For all Transformer Vault Rooms, the lower portion of the 12" thick concrete perimeter walls do not have vertical joints. The vertical joints in the walls start from

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

"All Vertical Joints stop @ 30" above structural slab except the foundation wall," no joints appear to be required at this location. Please confirm no joints are required, or revise drawings to show joints.

8" above the high point of the vault FFL datum. Refer to SKA-3569 to SKA-3575 which show updated notes, a typical vault schematic isometric drawing and tagged locations of CJs.

P1-0062 **GFRC Details** **Closed** **06/09/2014** **06/19/2014** **06/30/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 4/A1-8454

Per secondary mitigation meetings, stucco is to be used in lieu of GFRC. Please revise details.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The system will be changed to portland cement plaster. Details will be revised in a forthcoming ASI. See the work plan distributed to WOJV for the date of this ASI issue.

P1-0062.1 **Details for Portland Cement Plaster per RFI Response P1-0062** **Closed** **07/03/2014** **07/13/2014** **08/05/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0062

As stated in RFI Response P1-0062, "The system will be changed to portland cement plaster. Details will be revised in a forthcoming ASI. See the work plan distributed to WOJV for the date of this ASI issue."

Per RFI Response P1-0062, revised details using cement plaster in lieu of GFRC are to be issued. No revised details have been received. Please provide the revised detail referenced in RFI Response P1-0062.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

System W-18 Portland Cement Plaster work and associated drawings will be issued in VE Round #4 August 18, 2014.

WOJV helped determine when this package would be issued.

P1-0063 **Detail 2/A1-9228 Similar Condition** **Closed** **06/09/2014** **06/19/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

SUGGESTION:

ANSWER:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Reference: 2/A1-9228

4/A-0026 is called out to be similar to the detail shown. 4/A-0026 does not appear to be a similar condition. Please provide detail reference for the condition shown.

Accept Suggestion: ☐

Detail 2/A1-9228 has been updated. Detail reference 4/A-0026 SIM has been removed. Refer to the attached SKA-3667.

P1-0063.1 **Details for Embedded Plate per Detail 2/A1-9228** **Void** **07/01/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

REFERENCE: RFI P1-0063 Response, Detail 2/A1-9228, Sheet SKA-3667 (IFC Drawings for Main Package dated 3/31/2014)

Per RFI P1-0063 response, "Detail 2/A1-9228 has been updated. Detail reference 4/A-0026 SIM has been removed. Refer to the attached SKA-3667."

The revised detail shows an embedded plate at the B.O. Lower Concourse Deck. No information is provided for the embeded plate. Please provide information on embedded plate.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

P1-0064 **Continuous Seal at Interior Side of Exterior Concrete Wall** **Closed** **06/09/2014** **06/19/2014** **06/30/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 4/A1-9211

Detail 4/A1-9211 shows a continuous seal between the structural steel, and the interior side of the exterior concrete wall. Is cont. seal required at the int. side of ext. wall? If so, please provide detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. On the exterior side of concrete wall/topping slab ¿ Separation is required between concrete wall and topping slab, which will consists of typical sealant/compressible material joint fill.

2. On the interior side of concrete wall/column base plate ¿ Physical Separation between column plate and concrete wall is still required, but sealant is not necessary.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

3. Refer to attached sketch SKA-3582 for clarification.

P1-0065 **Steel Plate Supporting Concrete Topping Slab** **Closed** **06/09/2014** **06/19/2014** **06/30/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 1/A1-3190

The contract documents show a metal plate supporting the topping slab, but does not provide structural details. Please provide detailing (size, thickness, attachment, waterproofing, etc) for steel plate supporting concrete topping.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Detail have been revised to include all requested information. Refer to the attached SKA-3703.

P1-0066 **Escalator Pit at Shaw Alley** **Closed** **06/09/2014** **06/19/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 4/A1-7550

The detail shows a metal plate at the edge of the escalator pit, while S1-7301 and 4/S1-7660 shows a conc. wall on all sides of the pit. Please coordinate the drawings.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The discrepancy has been clarified through an RFI. See response to RFI T-868.2.

P1-0067 **Column Base Detail at Loading Dock** **Closed** **06/09/2014** **06/19/2014** **07/01/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 1/A1-3190

Curb is shown on Plan Detail 1, but not on the section detail (5/A1-3190). Please coordinate the drawings, and

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The curb around the column noted in detail 1/A1-3190 has been revised. It is a architectural element that is part of the floor finish and not a structural element. Refer to the attached SKA-3703.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

provide structural information.

P1-0068 **Insulation at Detail 2/A1-8181** **Closed** **06/09/2014** **06/19/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 2/A1-8181

A note calls out for 2" rigid insulation, but points to concrete. Is rigid insulation required? If so, please revise drawing and specify which insulation is to be used.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The note is incorrect; no rigid insulation is required. In a future Addendum the Bus Deck Superintendent's Station will be revised to a pre-fabricated booth per VE mitigation meetings. The referenced sheet has been omitted in TG08.10. Documentation for pre-fabricated booths to be issued in a future package.

P1-0068.1 **Documentation for Concrete Platform at Bus Deck Superintendent Station** **Void** **07/01/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

REFERENCE: RFI P1-0068 Response, Detail 2/A1-8181 (IFC Drawings for Main Package dated 3/31/2014)

As stated in the RFI P1-0068 Response, "The note is incorrect; no rigid insulation is required. In a future Addendum the Bus Deck Superintendent's Station will be revised to a pre-fabricated booth per VE mitigation meetings. The referenced sheet has been omitted in TG08.10. Documentation for pre-fabricated booths to be issued in a future package."

The concrete platform is to be furnished and installed as part of topping slab scope of work. Please provide documentation for concrete platform.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

P1-0069 **Grout at Steel Beam** **Closed** **06/09/2014** **06/19/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference: 4/A1-9228

Detail 4/A1-9228 shows a fully grouted beam pocket, but does not show details on securing grout to the steel beam, or specify a grout to be used. Please provide details and specs.

SUGGESTION:

Webcor recommends SAFP at the steel, cutting CMU around the beam and installation of a UL rated fireproofing assembly at the penetration

ANSWER: **Accept Suggestion:** ☐

Detail on 4/A1-9228 has been updated and will be issued in a future Addendum. The Lower Concourse Exit Passageway B1567 composite slab and CMU wall changed to concrete slab and RCW. Refer to the attached SKA-3368. Also, refer to previously issued S1-2252 and S1-3504.

In addition, see the attached SKA-3669 for updated composite slab with steel beam, hangers and bracing interface with CMU Wall at the STAIR 502A.

P1-0070 **Steel Flashing at Column** **Closed** **06/09/2014** **06/09/2014** **06/09/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 3/A1-3190

Detail calls out for a 12 ga. steel flashing closure plate within the web of interior cruciform columns, but does not provide details for attachment, or where material is to flow from the flashing (there is a checker plate cap at the top of the column to deflect material from entering the enclosure). Is the 12 ga steel flashing required? If so, please provide details on attachment and draining. If not, please revise detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The 12ga steel flashing is supported using metal Z-Grits. Please refer to detail 5/A1-3190 for a cross section through the flashing. Any water the gets past the flashing cap will drain down the flashing closure to the drainage layer beneath the floor finish topping. Refer to the attached SKA-3703.

P1-0071 **Layout for Guardrail** **Closed** **06/09/2014** **06/19/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 1/L1-9665

Provide layout for guardrail and associated stone header.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to attached SKLA-303.

P1-0072 **C-Channel Support in Mech Shaft 01424** **Closed** **06/11/2014** **06/21/2014** **07/11/2014** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 1/A1-7575

This C-channel support is not shown in plan view in the Architectural or Structural drawings. Please provide size and layout.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See structural documents including S1-5000 for slab edge support requirements at openings in the structural slabs.

P1-0073 **C-Channel Support in Mech Shaft 01242** **Closed** **06/11/2014** **06/21/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 7/A1-7579

This C-channel support is not shown in plan view in the Architectural or Structural drawings. Please provide size and layout.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See structural documents including S1-5000 for slab edge support requirements at openings in the structural slabs.

P1-0074 **Davit Arm Sockets** **Closed** **06/11/2014** **06/21/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 2/A1-3001

Detail calls out for davit arm sockets, but does not provide a detail or specification for the davit arm sockets. Please provide details and specs for the davit arms sockets.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Transformer vaults¿ davit arm sockets have been deleted at ground floor as requested by SFPUC on July 03, 2014. The drawings will be revised accordingly and issued in a forthcoming ASI.

P1-0075 **Angle at Shaw Alley Bridge Topping Slab** **Closed** **06/11/2014** **06/11/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 1/A1-8179

Detail shows an angle behind the deck closure plate

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See the note on detail 1/A1-8179 which says, "bridge guardrail and soffit assembly omitted for clarity". Refer to detail 3/A1-8156 for the guardrail/soffit

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

(screenshot attached), but does not identify the function of the angle. Please provide the function, size and location of the angle.

assembly. Detail 3/A1-8156 shows the angle behind the deck closure plate supporting the guardrail. The size and location of the angle to be determined by the W-2 system design-build contractor.

P1-0076 **CMU Lateral Ties** **Closed** **06/11/2014** **06/21/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 1/A1-9207

Details call out for lateral ties to support CMU and directs to "ref. to structural." Structural does not appear to provide details for this work. Please provide structural detail for this work.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Lateral ties have been eliminated. Detail shall be updated in future ASI.

P1-0076.1 **Structural Details for Lateral Ties per Detail 1/A1-9207** **Void** **07/01/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0076, Detail 1/A1-9207

Per RFI Response P1-0076, "Lateral ties have been eliminated. Detail shall be updated in future ASI."

RFI Response P1-0076 refers to a revised detail to be issued in a future bid package. The detail is required to accurately bid TG07.4 - Concrete Masonry Unit. Please provide the revised detail referenced in RFI Response P1-0076.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

P1-0077 **CMU Lateral Ties** **Closed** **06/11/2014** **06/21/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:
Reference: 5/A1-9206

Details call out for lateral ties to support CMU and directs to "ref. to structural." Structural does not appear to provide details for this work. Please provide structural detail for this work.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
Lateral ties have been eliminated. Detail shall be updated in future ASI.

P1-0077.1 **Structural Details for Lateral Ties per Detail 5/A1-9206** **Void** **07/01/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:
REFERENCE: RFI Response P1-0077, Detail 5/A1-9206

Per RFI Response P1-0077, "Lateral ties have been eliminated. Detail shall be updated in future ASI."

RFI Response P1-0077 refers to a revised detail to be issued in a future bid package. The detail is required to accurately bid TG07.4 - Concrete Masonry Unit. Please provide the revised detail referenced in RFI Response P1-0077.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

P1-0078 **Flood Coat of Asphalt** **Closed** **06/11/2014** **06/21/2014** **07/21/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:
Reference: 3/A1-3191

Detail calls out for a "flood coat of asphalt" over foam glass insulation. Please provide the specification of the asphalt flood coat.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
The "flood coat of asphalt" was a remnant of the original WPM-1A system build-up which is no longer applicable. Detail 3/A1-3191 has been updated to reflect current train box lid build-up (see attached sketch SKA-3805). Revised drawing A1-3191 will be issued as part of a future ASI.

P1-0079 **Topping Slab in Loading Dock Area** **Closed** **06/11/2014** **06/21/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Reference: 3/A1-3192

Detail calls out for a traffic topping at the loading dock area, but A1-9523 does not call out the topping slab as a traffic topping. Please confirm the topping slab requirement at this location.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Detail 3/A1-3192 is for a rated assembly in a CMU wall. Floor finishes should not be inferred from this detail.

Per specification section 01 10 40 / 1.6 C.2.f "The TJPA will reject requests for interpretations or clarification of the Contract Document which can reasonably be derived from a review of the Contract Documents."

Turner shall void this RFI and delete it.

P1-0079.1 **Topping Slab and Reinforcement Requirements for Loading Dock 01222** **Closed** **07/16/2014** **07/26/2014** **07/24/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Sheet A1-9526 (IFC Drawings for Main Package dated 3/31/14)

Please confirm Loading Dock 01222 is to receive non-vehicular rated concrete topping slab and reinforcement as called out in Item 4.0 of the A1-9526 Notes.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Areas within the loading dock that have vehicular access will require reinforcement as call out in Item 3.0 BUS DECK LEVEL TOPPING AND CURB. All other areas will receive reinforcement as called out in Item 4.0. Refer to SKA-3895.

P1-0080 **Gantry Crane Support at Transformer Vaults** **Closed** **06/11/2014** **06/21/2014** **07/16/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 2/L1-7317

Detail indicates that the architect and structural engineer are to confirm the detail. A1-8717 refers back to Landscape, and structural does not appear to address the issue. Please coordinate landscape, architectural and structural.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

TT Response:

The gantry equipment is to be supported by concrete blocks over the concrete MFB beams. See attached sketch SKS-0360 for concrete block details at the gantry supports. These details will be added to the structural drawings in a future ASI.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

PWP Response:

1. The concrete block (by structural) which is exposed to the sidewalk should be specified as integral color to match landscape cast in place concrete. Refer to attached SKLA-304.

2. TT¿s sketch SKS-0360 reflects a notch in the concrete block at manhole covers. It should be clarified that in order to avoid cracking and failure of the paving at the notch, that the notch in concrete to occur adjacent to metal lined frame of lift out lids. Metal frame and tray by others. Refer to attached SKLA-304.

AAI Response:

Gantry support concrete blocks are not a part of TG07.2 except for cast-in dowels as identified by structure. Refer to attached sketches SKA-3694, SKA-3700, SKA-3701 and SKA-3702.

P1-0080.1 **Concrete Block Placement for Gantry Crane Support at Transformer Vaults** **Closed** **07/18/2014** **07/28/2014** **08/05/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0080, Sketch SKA-0360, Sketch SKA-3694

Per RFI Response P1-0080, Sketch SKS-0360 shows the reinforced concrete block is to be placed directly on top of the structural MFB Beam.

Per RFI Response P1-0080, Sketch SKA-3694, the reinforced concrete block is placed directly on top of all the following components: the drainage composite and protection board, WPM-1A flashing, and structural MFB.

Please clarify if the reinforced concrete block is to be placed directly over the structucal MFB, or on top of drainage composite and protection board. Please revise

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The reinforced concrete block supporting the gantry rails shall be cast on top of the protection board. Refer to details 8 and 9 of A1-9255 issued with ASI-0121.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

details to match.

P1-0080.2 **Concrete Mix for Concrete Block at Gantry Crane Support** **Closed** **07/18/2014** **07/28/2014** **08/20/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0080, Sketch SKS-0360

Per RFI Response P1-0080, the gantry equipment is to be supported by a reinforced concrete block as detailed on Sketch SKS-0360, but does not call out the type of concrete mix to use.

Specification Section 03 30 02 2.1 does not specifically note a mix for "Concrete Blocks".

Please confirm the "All other concrete" mix called out in Specification Section 03 30 02 2.1 is to be used to furnish and install the concrete block referenced in RFI Response P1-0080.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

P1-0081 **Pour Stop at Column** **Closed** **06/11/2014** **06/21/2014** **06/30/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 1/A1-9211

Detail appears to show a break metal pour stop around the column. Please provide information (material, attachment, size, etc.) of the pour stop.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to attached sketch SKA-3583 for clarification.

P1-0082 **Dimension of Seismic Joint** **Closed** **06/11/2014** **06/21/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Reference: 3/L1-7633

Dimension conflicts with Architectural - Conflicts with 2/A1-8897. Please coordinate landscape and architectural.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Architectural Dimensions generally will govern. Please ask specific questions on conflicts.

P1-0082.1 **Clarification of Siesmic Joints and Curb Dimensions on the Roof Park Level** **Closed** **07/01/2014** **07/11/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0082, Detail 3/L1-7633, Detail 2/A1-8897

RFI Response P1-0082 states, "Architectural Dimensions generally will govern. Please ask specific questions on conflicts."

Per Detail 3/L1-7633, the park level seismic joints are 1'-10" and are flanked by 1'-6" curbs. Per Detail 2/A1-8897, the park level seismic joints at GL 10 and GL 20 are 2'-0" and are flanked by 8" curbs. Please confirm the roof park level seismic joint and associated curb dimensions, and coordinate the details.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Architectural Detail 2/A1-8897 governs.

P1-0083 **PVC Roofing Substrate Requirement** **Closed** **06/11/2014** **06/21/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: Specification Section 07 54 19 3.2A

07 54 19 3.2A requires "the general contractor shall examine substrates, areas, and conditions" with the installer for compliance with the contract documents. Please remove the requirement for the general contractor to verify existing conditions with subcontractor. Subcontractor is solely responsible to verify and accept existing conditions prior to commencing work.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Contract Documents refer to the Contractor defined as the General Contractor/Construction Manager (CMGC) in the TJPA/CMGC Agreement for responsibility to complete the Work and for coordination of the Work, not to individual subcontractors that are contracted to the CMGC. The specification is correct.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0083.1	Additional Review of PVC Substrate Requirement	Closed	07/01/2014	07/11/2014	09/01/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Transbay PMPC Ray Quesada

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0083, Specification Section 07 54 19 3.2A

As stated in RFI Response P1-0083, "The Contract Documents refer to the Contractor defined as the General Contractor/Construction Manager (CMGC) in the TJPA/CMGC Agreement for responsibility to complete the Work and for coordination of the Work, not to individual subcontractors that are contracted to the CMGC. The specification is correct."

Per the contract, the CMGC verifies compliance of the work with the contract documents via the QA/QC process at the time of installation. Additional review of the work to reverify conformance with the contract documents as set forth in Specification Section 07 54 19 3.2A is an added service. Please confirm TJPA intends to have this added service to CM/GC's contract incorporated into the work.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The TJPA does not agree that what is required in this specification section is an added service. The CM/GC is ultimately responsible for the quality of the entire project. If the CM/GC wishes to assign or delegate any responsibility to a subcontractor related to quality control, that is your prerogative.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0084	Attachment Details for Linear Supply Air Diffuser	Closed	06/11/2014	06/21/2014	07/01/2014	Potentially	☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 5/A1-9040.

Please provide attachment details for 2" linear supply air diffuser

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The linear supply air diffuser shall be attached to the plenum above it, as per manufacturer's details and recommendations.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0085	Trench Drain Type 1	Closed	06/11/2014	06/21/2014	06/24/2014	Potentially	☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 1/L1-7318

There does not appear to be a specification for the trench drain body, grate, or grate support. Please provide spec.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to specification section 05 60 00, 2.3 D and E.

Number	*Subject*	*Status*	*Date Created*	*Date Required*	*Date Answered*	*Cost Impact*	*Proceed*
P1-0085.1	**Specification for Continuous Metal Liner in Detail 1/L1-7318**	**Closed**	**07/01/2014**	**07/11/2014**	**07/11/2014**	**Potentially**	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: RFI Response 0085, Specification Section 05 60 00 2.3D & 2.3E, Detail 1/L1-7318

As stated in RFI Response 0085, "Refer to specification section 05 60 00, 2.3 D and E."

Detail 1/L1-7318 calls out for a continuous metal liner. Specification Section 05 60 00 does not appear to provide a specification for this metal liner. Please provide a specification for the metal liner called out in Detail 1/L1-7318.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to specification section 05 60 00, 2.3 N.

P1-0086	**Trench Drain Type 2**	**Closed**	**06/11/2014**	**06/21/2014**	**06/24/2014**	**Potentially**	☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 2/L1-7318

There does not appear to be a specification for the trench drain body, grate, or grate support. Please provide spec.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to specification section 05 60 00, 2.3 D and E.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0086.1	Specification for Continuous Metal Liner in Detail 2/L1-7318	Closed	07/01/2014	07/11/2014	07/11/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0086, Specification Section 05 60 00, 2.3D & 2.3E, Detail 2/L1-7318

As stated in RFI Response P1-0086, "Refer to specification section 05 60 00, 2.3 D and E."

Detail 2/L1-7318 calls out for a continuous metal liner. Specification Section 05 60 00 does not appear to provide a specification for this metal liner. Please provide a specification for the continuous metal liner called out in Detail 1/L1-7318.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to specification section 05 60 00, 2.3 N.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0087	Trench Drain at Property Line	Closed	06/11/2014	06/21/2014	06/24/2014	Potentially	☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 3/L1-7318

There does not appear to be a specification for the trench drain body, grate, or grate support. Please provide spec.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to specification section 05 60 00, 2.3 D and E.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0087.1	Specification for Continuous Metal Liner in Detail 3/L1-7318	Closed	07/01/2014	07/11/2014	07/11/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0087, Specification Section 05 60 00, 2.3D & 2.3E, Detail 3/L1-7318

As stated in RFI Response P1-0087, "Refer to specification section 05 60 00, 2.3 D and E."

Detail 3/L1-7318 calls out for a continuous metal liner. Specification Section 05 60 00 does not appear to provide a specification for this metal liner. Please provide a specification for the continuous metal liner called out in

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to specification section 05 60 00, 2.3 N.

Per specification section 01 10 40 / 1.6 C.2.f "The TJPA will reject requests for interpretations or clarification of the Contract Document which can reasonably be derived from a review of the Contract Documents."

Turner shall void this RFI and delete it.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Detail 3/L1-7318.

P1-0088 **CMU Support Wall at Seismic Joint** **Closed** **06/11/2014** **06/11/2014** **08/05/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 1/L1-7613

Detail does not agree with what is on 1/A1-8898. Please coordinate drawings (waterproofing, adj. wall/curb, topping slab, etc.)

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See architectural drawings for seismic joint; insulation and waterproofing transitions and protection slab.

See structural drawings for structural wall, structural slab and concrete footing.

See attached SKLA-0310 landscape elements and SKA-310 for architectural elements.

P1-0089 **WPM-6** **Closed** **06/11/2014** **06/21/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 4/A1-7511.

Detail calls out WPM-6. No specification for WPM-6 has been provided. Please provide a specification for WPM-6.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Detail as been revised and waterproofing membrane has been removed. Refer to SKA-3718, SKA-3719, SKA-3720, SKA-3721.

P1-0090 **Waterproofing soffit** **Closed** **06/11/2014** **06/21/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: 4/A1-7511

Detail shows waterproofing at the top of soffit below the stairs. The stair must be installed before soffit, which will

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Detail as been revised and waterproofing membrane has been removed. Refer to SKA-3718, SKA-3719, SKA-3720, SKA-3721.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

prevent access to the top of soffit for waterproofing.
Please revise design to allow installation of waterproofing
(sheet metal

P1-0091 **Plywood Installed with Soil** **Closed** **06/11/2014** **06/21/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: 2/L1-9665

Detail calls out for 3/4" plywood to be installed directly in contact with soil. Please provide specification for plywood.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

3/4" plywood is temporary protection. It is not necessary to be treated or finished surfaced.

P1-0091.1 **Specification for Plywood Installed with Soil per Detail 2/L1-9665** **Closed** **07/02/2014** **07/12/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0091, Detail 2/L1-9665

As stated in RFI Response P1-0091, "3/4" plywood is temporary protection. It is not necessary to be treated or finished surfaced."

The response to RFI P1-0091 does not appear to provide the requested specification. Please provide a specification for the 3/4" plywood called out in Detail 2/L1-9665.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

3/4" Shop Grade Type 1 is the specification.

P1-0092 **Rated Soffit** **Closed** **06/11/2014** **06/21/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: 4/A1-7511

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

In the attached sketches the detail is revised. The

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Detail calls out for a rated soffit below the stairs, but the top end of the soffit does not appear to be a rated condition. Please confirm the end of the soffit does not need to be rated.

soffit does not need to be a fire rated soffit. Refer to the attached SKA-3718, SKA-3719, SKA-3720, SKA-3721.

P1-0093 **Fire rated assembly** **Closed** **06/11/2014** **06/21/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: 1/A1-7575

Is this a fire rated assembly? Code calls out for stl. to be independently rated, does TS meet this requirement?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Detail has been revised. Refer to the attached SKA-3685.

P1-0094 **Elevator Deferral** **Closed** **06/11/2014** **06/21/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: 1/A1-7589A

The elevator in this detail has been deferred. Is the elevator call lantern on this deleted elevator to be roughed in as part of Phase 1? If so, please provide rough-in information. If not, please revise details.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The elevator will be roughed-in as part of Phase 1. Refer to sheet A1-7576 & A1-7577 for rough-in information.

P1-0094.1 **Additional Information For Elevator Deferral** **Closed** **07/02/2014** **07/12/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: P1-0094, 1/A1-7589A

P1-0094:The elevator will be roughed-in as part of Phase

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See response to RFI P1-0095.1.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

1. Refer to sheet A1-7576 & A1-7577 for rough-in information.

RFI P1-0094 provides direction to rough-in the elevator call lanterns as part of Phase 1 work. The elevator contractor has not been selected for the deferred elevators, and there may be a conflict having the phase 1 elevator contractor provide rough-in if the deferred elevators are installed by a different future elevator contractor. Please confirm response to RFI P1-0094

P1-0095 **Elevator Deferral** **Closed** **06/11/2014** **06/21/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

2/A1-7589A

The elevator in this detail has been deferred. Is the elevator call lantern on this deleted elevator to be roughed in as part of Phase 1? If so, please provide rough-in information. If not, please revise details.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Yes, the elevator will be roughed-in as part of Phase 1. Refer to sheet A1-7576 & A1-7577 for rough-in information.

P1-0095.1 **Additional Information Elevator Deferral** **Closed** **07/02/2014** **07/12/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: P1-0095, 2/A1-7589A

RFI P1-0095 Response: "Yes, the elevator will be roughed-in as part of Phase 1. Refer to sheet A1-7576 & A1-7577 for rough-in information."

RFI P1-0095 provides direction to rough-in the elevator call lanterns as part of Phase 1 work. The elevator contractor has not been selected for the deferred elevators, and there may be a conflict having the phase 1 elevator contractor provide rough-in if the deferred

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed, this is the direction from TJPA to the WOJV and PCPA teams.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

elevators are installed by a different future elevator contractor. Please confirm response to RFI P1-0095.

P1-0096 **Framing Material** **Closed** **06/11/2014** **06/21/2014** **07/01/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 4/-A1-7823

Specs indicate that drawings will provide size and spacing of framing material, dwg does not show size or max spacing. Please provide size and spacing of Z girts.

SUGGESTION:

Size of horizontal girts is shown on 4/A1-7823 as 2" depth. Vertical spacing of Z girts to match panelization pattern of W-5 cladding.

ANSWER: **Accept Suggestion:** ☐

Size of horizontal girts is shown on 4/A1-7823 as 2" depth. Vertical spacing of Z girts to match panelization pattern of W-5 cladding.

P1-0096.1 **Information for Vertical Z Girts** **Closed** **07/09/2014** **07/19/2014** **08/05/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0096

As stated in RFI Response P1-0096, "Size of horizontal girts is shown on 4/A1-7823 as 2" depth. Vertical spacing of Z girts to match panelization pattern of W-5 cladding."

Please provide the information requested and referenced in RFI P1-0096 regarding vertical Z girt adjacent to door openings.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to sheets A1-7845 and A1-7846 issued as part of the Main Package IFC on 03/31/14.

P1-0097 **Bench Details** **Closed** **06/11/2014** **06/21/2014** **07/01/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: 1/A1-9061
Detail calls out for benches, but does not provide

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

As per specification section 10 51 13, benches are manufactured product and need to be

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

installation details. Please provide bench details.

installed/anchored in accordance with manufacturer's standard details. There is a basis for design product in the specification. However, through the bidding process this may not be the product that is provided on the Project. The specification calls for the benches to be bolted to floor with galvanized expansion fasteners.

P1-0097.1 **Clarification for Choice in Bench Anchors** **Closed** **07/09/2014** **07/19/2014** **08/05/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0097, Specification Section 10 51 13

As stated in RFI Response P1-0097, "As per specification section 10 51 13, benches are manufactured product and need to be installed/anchored in accordance with manufacturer's standard details. There is a basis for design product in the specification. However, through the bidding process this may not be the product that is provided on the Project. The specification calls for the benches to be bolted to floor with galvanized expansion fasteners."

RFI Response P1-0097.1 indicates that the bench is to be anchored per the manufacturer's standard details, then goes on to require bolting to the floor with galvanized expansion fasteners. Please clarify whether the manufacturer's details are to be used or galvaninzed expansion anchors.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per Specification Section 10 51 13 / 2.5, benches shall be "bolted to the floor with galvanized expansion fasteners." However, if the manufacturer or Contractor recommend an alternate attachment detail, the CMGC shall submit an RFI with information on the alternate proposed fastening method for the TJPA Representative's review and comment. In addition, on the bench side of the bolt, the bench manufacturer shall provide for fastening of the bench to the floor.

P1-0098 **Locker Base Detail** **Void** **06/11/2014** **06/21/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

reference: 9/A1-9060

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Detail appears to show a base for the lockers, but no base is specified or called out on the drawings. Is a base required? Please confirm no base is required, or provide information on the base.

P1-0099 **Painted Shaft Wall** **Closed** **06/11/2014** **06/21/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

1/A1-7575

Detail calls for "painted shaft finish wall" Confirm we are painting/finishing interior elevator shaft wall

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The elevator shafts interiors shall be painted.

P1-0099.1 **Finish Level Clarification for Painted Interior Shaft Walls** **Closed** **07/02/2014** **07/12/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0099, Detail 1/A1-7575, Specification Section 09 21 16 3.7 F 2

As stated in RFI Response P1-0099, "The elevator shafts interiors shall be painted."

Specification Section 09 21 16 3.7 F 2 states that the interior faces of the shafts are to be a Level 1 finish. Per RFI Response P1-0099, the interiors of all elevator shafts are to be painted. It is not industry standard to paint a Level 1 finish. Please confirm that a Level 1 finish is to be used as a paintable surface within the elevator shafts, and provide a paint finish standard for this work (typically, a min. Level 3 finish is used for painted surfaces, and the industry standard finish requirements are based upon the drywall finish level).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed, we want a paint finish in the elevator shaft on the least expensive drywall finish possible (level 1). The paint is being utilized to enhance the durability of the materials in the elevator shaft. WOJV should inform the design team if there is a constructability issue here, or if paint on a level 1 drywall finish is just not pretty.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0099.2	Level 1 Paint Finish Requirements	Closed	07/15/2014	07/25/2014	08/05/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0099.1, GA-214-10

RFI Response P1-0099.1 confirms a Level 1 finish is to be furnished, installed and painted on the interior of the elevator shafts, however does not provide the requested paint finish requirements.

Per industry standard (see attached GA-214-10), Level 1 finish includes embedment of tape in joint compound, but tape and fastener heads need not be covered with joint compound. Per 09 91 00 3.2 I, joints and screw heads are to be covered with joint compound and sanded smooth and flush with adjacent surfaces (i.e. a higher finish level than Level 1).

Please provide the requested paint finish requirements referenced in RFI P1-0099.1.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Gypsum Board Finish ¿ In the elevator shafts, provide Level 3 finish.

Paint Finish requirements shall be as specified in section 09 91 00 (Painting) item 3.2.I.

Paint shall be per products specified in Paint Finish Schedule for exterior surfaces (for Portland Cement Plaster, . . .) 100 percent Acrylic Flat - Refer to section 09 91 00, item 3.7.A.

Color to be selected in the future.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0099.3	VOID	Void	08/14/2014	08/24/2014		Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0100	Floor Mislabeled	Closed	06/11/2014	06/21/2014	06/24/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

3/A1-7513

Floor is mislabeled as "galv steel pour stop," Please revise note.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The note has been revised. Refer to the attached SKA-3686.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0101	Access Door	Void	06/11/2014	06/21/2014		Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:
reference: A1-7427

Details 1 & 2 call out for an access door, but no door number, door material, or hardware information is provided. Please provide information on this access door.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

P1-0102 **Door Callout** **Void** **06/11/2014** **06/21/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:
reference:1/A1-3001
Note calls out for a door, however no Door is shown should this just opening? Sim E/A1-9235

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

P1-0103 **Decking Support Architectural vs Structural Coordination** **Closed** **06/11/2014** **06/21/2014** **07/14/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:
reference: 2/A1-9229

Detail shows decking supported on a C-channel wedge anchored into the adjacent CMU. Structural shows decking penetrating CMU, please coordinate arch vs. structural.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
For beam end connection at continuous CMU wall, where beam penetrates wall, refer to 12/S1-9001. Composite slab stops at face of continuous CMU wall, wall reinforcing is tied into slab and deck is supported by continuous angle, refer to attached SKS-0368.

Architectural details on A1-9229 have been updated to correspond with structural details at CMU to composite slab connection. Refer to attached SKA-3752.

P1-0104 **Wide Flange assembly Details** **Closed** **06/11/2014** **06/21/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

1/A1-7550
Code requires structural steel members to be fire proofed independently of adj. walls. Is the top of wide flange in this detail a rated UL assembly?

Detail as been revised. Refer to the attached SKA-3687.

P1-0105 **Plate over Wide Flange** **Closed** **06/11/2014** **06/21/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:
reference: 1/A1-7550

Detail indicates the plate over the wide flange is identified on structural. Structural does not appear to call out this plate. Please provide information (size, attachment, etc.) for steel plate.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
Detail as been revised. Refer to the attached SKA-3687.

P1-0106 **Conflicting Details** **Closed** **06/11/2014** **06/21/2014** **07/14/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:
reference: 3/A1-9229

Detail appears to conflict with assembly shown on S1-2252, please coordinate arch and struct.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
Please resubmit the question with more specific comments. It is not apparent what you are referring to.

P1-0106R **Composite Deck Type S1 Support** **Closed** **07/16/2014** **07/26/2014** **07/28/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:
REFERENCE: Detail 1/S1-2252 (Attached), Detail 10/S1-9001, Details 2 & 3/A1-9229, Sheet A1-8662 Fire Protection Matrix & Schedule (All from IFC Drawings for Main Package dated 3/31/14)

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
TT Response:

For the exit passageway composite deck structural steel framing, refer to response to RFI P1-0103.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Per Detail 1/S1-2252 (Attached), Composite Deck Type S1 extends through the face of the northerly CMU wall, and is supported by this wall (see attached). This condition is shown on Detail 10/S1-9001 (direction to this detail is given on 4/S1-5032).

Details 2 & 3/A1-9229 show this condition as being supported by structural steel framing which does not show on structural drawings and fireproofed which would not be required per Sheet A1-8662 Fire Protection Matrix and Schedule. Please coordinate architectural and structural drawings to match.

Updated detail 10 of S1-9001 was issued with ASI-0121.

AAI Response:

Fireproofing is required for the exit passageway composite deck structural steel framing, beams, and hangers. Refer to attached SKA-3905. Refer also to A1-9229 and A1-9230 issued with ASI-0121.

P1-0107 **Elevation coordination** **Closed** **06/11/2014** **06/21/2014** **07/09/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: 1/SG1-6000 and 3/A1-8719

Elevations need to be coordinated with details on 3/A1-8719. Structural does not detail these footings. Architect to verify the elevation between top of structure and finish surface. This applies to interior and exterior signs

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The sheet A1-8719, referenced in the RFI, details the waterproofing at signage pylon footings (detail 2) and monument boulder footings (detail 3).

For the signage pylon and monument boulder footings sizes, elevations and locations please refer to the Ground Floor slab edge plan sheets (A1-2862 to A1-2867). The attached SKA-3700, SKA-3724 and SKA-3725, based on slab edge drawings, provide signage and monument boulder footing updates at Zones 2, 4 and 7 (at red clouds). Refer to Landscape drawings for general locations and details of signage pylons and monument boulders. For signage types, refer to Signage drawings

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P1-0108 **Waterproofing System Spec** **Closed** **06/11/2014** **06/21/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

reference: 07 54 19 2.2A

07 54 19 2.2A specifies only Sika Sarafil Waterproofing systems, or substitute products of another manufacturer for RF-1. Webcor intends to require all manufactures be approved via QBD prior to bid. If this is not acceptable, please provide specific manufacturers and products which are acceptable to use.

The Request for Substitution process established by TJPA and WOJV as outlined in the General Conditions specification section 00 04 40 is the process to be utilized for Bidder proposed substitutions to the Basis of Design. In the Substitution Request, the bidder shall provide the information that outlines how the product is equivalent for the JPA representative's review. The QBD process is not the correct process, because it will leave the burden for researching how the product is equivalent on the TJPA team rather than the bidder and manufacture who are the experts on their proposed products.

P1-0108.1 **Product/Manufacturer Substitution for PVC Roofing** **Closed** **07/31/2014** **08/10/2014** **08/05/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0108, Specification Section 00 04 40

RFI Response P1-0108 states, "The Request for Substitution process established by TJPA and WOJV as outlined in the General Conditions specification section 00 04 40 is the process to be utilized for Bidder proposed substitutions to the Basis of Design."

Specification Section 00 04 40 states, "Contractor will be provided a period of 10 days after the date of each Trade Package award for submission of data substantiating a request for a substitution with an "or equal" item."

The specification section referenced in RFI Response P1-0108 indicates that substitutions are addressed post-bid.

Per the meeting between TJPA, PCPA, Turner, and Webcor-Obayashi on 7/17/14, the response to RFI P1-0108 is to be revised to state that the QBD process is to be used for suggested alternate materials/manufacturers pre-bid.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Your understanding is not correct. TJPA will alter Specification section 00 40 40 to adjust the current process.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

RFI Response P1-0108 has not been revised.

Please confirm the QBD process is to be used to suggestion of alternate materials/manufacturers.

P1-0109 **Dampproofing spec** **Closed** **06/11/2014** **06/21/2014** **07/01/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: 07 11 16 2.3

07 11 16 2.3 specifies Degussa Building Systems (BASF Company), or equal for dampproofing. In an attempt to prevent single sourcing, and assure bidders only bid approved materials, Webcor intends to require any alternate manufactures be approved via QBD prior to bid. If this is not acceptable, please provide alternate manufacturers/products which are acceptable to use.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Request for Substitution process established by TJPA and WOJV as outlined in the General Conditions specification section 00 04 40 is the process to be utilized for Bidder proposed substitutions to the Basis of Design. In the Substitution Request, the bidder shall provide the information that outlines how the product is equivalent for the JPA representative's review. The QBD process is not the correct process, because it will leave the burden for researching how the product is equivalent on the TJPA team rather than the bidder and manufacture who are the experts on their proposed products.

P1-0109.1 **Product/Manufacturer Substitution for Site Dampproofing** **Closed** **07/31/2014** **08/10/2014** **08/05/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0109, Specification Section 00 04 40

RFI Response P1-0109 states, "The Request for Substitution process established by TJPA and WOJV as outlined in the General Conditions specification section 00 04 40 is the process to be utilized for Bidder proposed substitutions to the Basis of Design."

Specification Section 00 04 40 states, "Contractor will be

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Your understanding is not correct. TJPA will alter Specification section 00 40 40 to adjust the current process.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

provided a period of 10 days after the date of each Trade Package award for submission of data substantiating a request for a substitution with an "or equal" item."

The specification section referenced in RFI Response P1-0109 indicates that substitutions are addressed post-bid.

Per the meeting between TJPA, PCPA, Turner, and Webcor-Obayashi on 7/17/14, the response to RFI P1-0109 is to be revised to state that the QBD process is to be used for suggested alternate materials/manufacturers pre-bid.

RFI Response P1-0109 has not been revised.

Please confirm the QBD process is to be used to suggestion of alternate materials/manufacturers.

P1-0110 **Anchoring Details for Bicycle Sign** **Closed** **06/11/2014** **06/21/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 1/SG1-6202

Please provide anchoring details for the post mounted bicycle directional sign shown on detail 1 / SG1-6202

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please refer to SG1-6202, General Sheet Notes, Item 'D' - "SIGN SUB-CONTRACTOR TO PROVIDE SIGN MOUNTING LOCATIONS/SURFACE CONDITION REQUIREMENTS AND METHOD OF ATTACHMENTS TO TJPA REPRESENTATIVE". Sub-Contractor's proposed anchoring details (proposed 'methods of attachment') are to be included as a component of the required signage submittal/shop drawing package.

P1-0110.1 **Signage Mounting Design Requirements** **Closed** **07/03/2014** **07/13/2014** **08/05/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0110, SG1 Drawings,

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please reject and void this RFI as it is too vague and

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Division 10 Specifications

Please refer to SG1-6202, "General Sheet Notes, Item 'D' - "SIGN SUB-CONTRACTOR TO PROVIDE SIGN MOUNTING LOCATIONS/SURFACE CONDITION REQUIREMENTS AND METHOD OF ATTACHMENTS TO TJPA REPRESENTATIVE". Sub-Contractor's proposed anchoring details (proposed 'methods of attachment') are to be included as a component of the required signage submittal/shop drawing package."

SG1 Drawings and Division 10 Specifications do not appear to provide mounting design requirements (i.e. allowable point loads, mounting into concrete over geosynthetic fill, mounting into waterproofing, etc.). Please provide design requirements for mounting all signage.

not possible to address.

The previous response to P1-0110 makes it clear that mounting of the sign is the contractor's responsibility for this performance based item. In addition, the Contract Documents show signage mounting for many signs in various locations. If the contractor has a question about a particular location, the RFI should refer to a specific location and detail.

P1-0111 **Callout on L1-9612** **Closed** **06/11/2014** **06/21/2014** **07/01/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 3/L1-9612

"DECK BOARD TYP" is called out twice, one of which is pointing to a boulder. Please provide correct callout.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The callout pointing to the boulder should be labeled boulder. Refer to attached SKLA-305

P1-0112 **Concrete Cure** **Closed** **06/11/2014** **06/21/2014** **07/01/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 32 34 10 3.3 B3

Requires that concrete cure for 28 days above 70 degrees Fahrenheit, which will require heating of the concrete for a month. Is this what TJPA wants to do?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Omit requirement 3.3 B3. Refer to curing requirements for concrete substrates as specified in other sections, as applicable.

Number	*Subject*	*Status*	*Date Created*	*Date Required*	*Date Answered*	*Cost Impact*	*Proceed*
P1-0113	**Incorrect Detail on A1-6014 and A1-6016**	**Closed**	**06/11/2014**	**06/11/2014**	**06/24/2014**	**Potentially**	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-6014 & A1-6016

A1-6014 and A1-6016 call out 7/A1-8717 at the detail at center of street. This appears to be the incorrect detail, and should be 5/A1-8717. Please revise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Detail reference has been revised. Refer to the attached SKA-3689 & SKA-3690.

P1-0114	**Steel Plate Coordination on Architectural Drawings**	**Closed**	**06/11/2014**	**06/21/2014**	**07/01/2014**	**Potentially**	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-8881, A1-8717 & A1-8710

2/A1-8710, 5/A1-8717 and 3/A1-8881 requires 1" steel plate under roadways and curbs below roadways. A1-2922 through A1-2927 omit a significant amount of plate shown on Beale, Fremont, First, Minna, and Natoma Streets by the details. Please revise the details or plan sheets to agree with each other.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Protection slab sheets have been revised to match details. Note that the details are typical and the protection slab drawings show extents of steel plate at ground level. Refer to SKA-3699 for typical waterproofing note at roadway to train box lid and sketches SKA-3693, 3695, 3696, 3697, and 3698.

P1-0114.1	**Metal Plate Omissions for Ground Level Protection Slab**	**Closed**	**07/18/2014**	**07/28/2014**	**08/20/2014**	**Potentially**	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE:
RFI Response P1-0114
Sketch SKA-3693
Sketch SKA-3695
Sketch SKA-3696
Sketch SKA-3697
Sketch SKA-3698
Detail 2/SKA-3538 (ASI 119 dated 6/20/14)

Per RFI Response P1-0114:
1. Sketch SKA-3693 does not show metal plates at the following Gridelines: C/2 and G/4.
2. Sketch SKA-3695 does not show metal plates at the following Gridelines: G/9.9, G/10.1, G/12, and F/9.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Correct, metal plates are not required at locations noted, only concrete protection slab as indicated on SKA-3693.

2) Correct, metal plates are not required at locations noted, only concrete protection slab as indicated on SKA-3695.

3) Correct, metal plate is not required at locations noted, only concrete protection slab as indicated on SKA-3696.

4) Correct, metal plates are not required at locations noted - these are interior locations,

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

3. Sketch SKA-3696 does not show a metal plate at Grideline G/16
4. Sketch SKA-3697 does not show metal plates at the following Gridlines: D/19.9, D/20.1, D/21, D22, D24, F/19.9, F/20.1, F/21, F/22, and F/24
5. Sketch SKA-3698 does not show metal plates at any location.

However, Sketches SKA-3693, SKA-3695, SKA-3696, and SKA-3697 show metal plates are to be installed at signigicant amounts of similar conditions.

Please note Detail 2/SKA-3538 of ASI 119 shows metal plates at GL G/10.1 but steel plates are omitted on Sketch-3695 at this location

Please confirm that only locations identified as having metal plates on Sketches SKA-3693, SKA-3695, SKA-3696, and SKA-3697 require metal plates.

Protection Slab plans refer to perimeter and exterior conditions only.

5) Incorrect - SKA-3698 shows a metal plate all along GL 34.8 and 35, from A through J.

Note: Details are typical and protection slab drawings show extent of metal plate and concrete protection slab at the ground level based on depth of landscape finishes or roadways. Locations as identified on the sketches noted indicate where metal protection plates are required.

P1-0115 **Electrical Continuity and Grounding** **Closed** **06/11/2014** **06/21/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 05 50 00

05 50 00 1.1 A4 indicates that electrical continuity and grounding for metal fabrications is included in 05 50 00, but give no further information on what is required. Please confirm no grounding of metal fabrications is required, or provide the grounding requirements.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Grounding of metal fabrications is required for systems as follows:

1) System includes internal elements that require bonding (such as the dispenser bollards). Refer to product installation requirements.

2) System includes equipment which are called out to be bonded on the drawings (i.e. metal in the utility vaults). Refer to notes on the drawings.

3) Bonding is required by code to a specific application/use. Bond in accordance with applicable codes.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Specification Section 05 50 00 1.1 A4 shall be revised to state:

"Provide bonding where required by the specific equipment installation requirements or as required by other requirements of the project contract documents."

P1-0116 **Perm-A-Barrier VPS Contractors** **Closed** **06/11/2014** **06/21/2014** **07/01/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 07 13 14 2.3 B1

07 13 14 2.3 B1 specifies Grace "Perm-A-Barrier VPS" or approved equal for WPM-10A. In an attempt to prevent single sourcing, and assure bidders only bid approved materials, Webcor intends to require any alternate manufacture be approved via QBD prior to bid. If this is not acceptable, please provide alternate manufacturers/products which are acceptable to use.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Request for Substitution process established by TJPA and WOJV as outlined in the General Conditions specification section 00 04 40 is the process to be utilized for Bidder proposed substitutions to the Basis of Design. In the Substitution Request, the bidder shall provide the information that outlines how the product is equivalent for the JPA representative's review. The QBD process is not the correct process, because it will leave the burden for researching how the product is equivalent on the TJPA team rather than the bidder and manufacture who are the experts on their proposed products.

P1-0116.1 **Product/Manufacturer Substitution for Self-Adhered Sheet Waterproofing** **Closed** **07/31/2014** **08/10/2014** **08/05/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0116, Specification Section 00 04 40

RFI Response P1-0116 states, "The Request for Substitution process established by TJPA and WOJV as outlined in the General Conditions specification section 00 04 40 is the process to be utilized for Bidder proposed

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Your understanding is not correct. TJPA will alter Specification section 00 40 40 to adjust the current process.

substitutions to the Basis of Design."

Specification Section 00 04 40 states, "Contractor will be provided a period of 10 days after the date of each Trade Package award for submission of data substantiating a request for a substitution with an "or equal" item."

The specification section referenced in RFI Response P1-0116 indicates that substitutions are addressed post-bid.

Per the meeting between TJPA, PCPA, Turner, and Webcor-Obayashi on 7/17/14, the response to RFI P1-0116 is to be revised to state that the QBD process is to be used for suggested alternate materials/manufacturers pre-bid.

RFI Response P1-0116 has not been revised.

Please confirm the QBD process is to be used to suggestion of alternate materials/manufacturers.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0117	Waterproofing Systems	Closed	06/11/2014	06/21/2014	07/01/2014	Potentially	☐

From: Webcor Construction LP Scott Shope
To: Turner Construction Compan PHIL MILITELLO
Answered By: Adamson Associates, Inc George Metzger
Co-Author:

REQUEST:

Reference: 07 13 54 2.1 A

07 13 54 2.1 A specifies Sika Sarnafil Waterproofing Systems, or other manufacturers that meet or exceed their physical property specifications for WPM-3. In an attempt to prevent single sourcing, and assure bidders only bid approved materials, Webcor intends to require any alternate manufactures be approved via QBD prior to bid. If this is not acceptable, please provide alternate manufacturers/products which are acceptable to use.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Request for Substitution process established by TJPA and WOJV, as outlined in the General Conditions specification section 00 04 40 is the process to be utilized for Bidder proposed substitutions to the Basis of Design. In the Substitution Request, the bidder shall provide the information that outlines how the product is equivalent for the JPA representative's review. The QBD process is not the correct process, because it will leave the burden for researching how the product is equivalent on the TJPA team rather than the bidder and manufacturer who are the experts on their proposed products.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0117.1	Product/Manufacturer for PVC Waterproofing	Closed	07/31/2014	08/10/2014	08/06/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0117, Specification Section 00 04 40

RFI Response P1-0117 states, "The Request for Substitution process established by TJPA and WOJV as outlined in the General Conditions specification section 00 04 40 is the process to be utilized for Bidder proposed substitutions to the Basis of Design."

Specification Section 00 04 40 states, "Contractor will be provided a period of 10 days after the date of each Trade Package award for submission of data substantiating a request for a substitution with an "or equal" item."

The specification section referenced in RFI Response P1-0117 indicates that substitutions are addressed post-bid.

Per the meeting between TJPA, PCPA, Turner, and Webcor-Obayashi on 7/17/14, the response to RFI P1-0117 is to be revised to state that the QBD process is to be used for suggested alternate materials/manuffacturers pre-bid.

RFI Response P1-0117 has not been revised.

Please confirm the QBD process is to be used to suggestion of alternate materials/manufacturers.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Your understanding is not correct. TJPA will alter Specification section 00 40 40 to adjust the current process.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0118	Thermoplastic Water Tank Liner Manufacturer	Closed	06/11/2014	06/21/2014	07/01/2014	Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 07 13 55 2.1

07 13 55 2.1 does not provide a specific manufacturer for thermoplastic water tank liners. Webcor intends to require all manufactures be approved via QBD prior to bid. If this is not acceptable, please provide specific manufacturers and products which are acceptable to use.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Manufactures that meet the Performance requirements specified in the referenced specification section are acceptable. The successful bidder shall submit the product the meets the specification requirements as a shop drawing submission.

The QBD process is not the correct process for determining quality of products. If WOJV wants to vet products during the bid process, than utilize the

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Request for Substitution process established by TJPA and WOJV as outlined in the General Conditions specification section 00 04 40.

P1-0118.1 **Product/Manufacturer for Thermoplastic Water Tank Liners** **Closed** **07/31/2014** **08/10/2014** **08/05/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0118, Specification Section 00 04 40

RFI Response P1-0118 states, "The Request for Substitution process established by TJPA and WOJV as outlined in the General Conditions specification section 00 04 40 is the process to be utilized for Bidder proposed substitutions to the Basis of Design."

Specification Section 00 04 40 states, "Contractor will be provided a period of 10 days after the date of each Trade Package award for submission of data substantiating a request for a substitution with an "or equal" item."

The specification section referenced in RFI Response P1-0118 indicates that substitutions are addressed post-bid.

Per the meeting between TJPA, PCPA, Turner, and Webcor-Obayashi on 7/17/14, the response to RFI P1-0118 is to be revised to state that the QBD process is to be used for suggested alternate materials/manufacturers pre-bid.

RFI Response P1-0118 has not been revised.

Please confirm the QBD process is to be used to suggestion of alternate materials/manufacturers.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Your understanding is not correct. TJPA will alter Specification section 00 40 40 to adjust the current process.

P1-0119 **GFRC Shown at W-13** **Closed** **06/11/2014** **06/21/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:
Reference: 1/A1-8479

Is the future GFRC shown in 1/A1-8479 provided as part of phase 1? Will it remain GFRC or be changed to a different material?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
The future GFRC cover panel shown on 1/A1-8479 is not part of Phase 1 work.

P1-0120 **Light Sculpture and Laminated Glass** **Closed** **06/11/2014** **06/21/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:
Reference: A1-9375

The W-13 glass light sculpture is shown on detail 1/A1-9375. Is this light sculpture to be deleted from the drawings or will it be part of our scope of work?

Laminated glass is shown on detail 2/A1-9375. Is this laminated glass to be deleted from the drawings or will it be part of our scope of work?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
The light sculpture and all of its component parts, as shown on A1-9375 and W-13 system drawings and specifications, have NOT been deleted and remain part of the work.

P1-0121 **Mock-up Locations in A Drawings** **Closed** **06/11/2014** **06/21/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:
Reference: 08 88 53

Provide location in Architectural drawings for extent of mock-ups. Section 1.9.O does not list a valid location for extent. Section 1.9.O shows 084426A references for mock-up extent.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
For W-12 mock-up, see 2/A1-8451. For W-13 mock-up, see 1/A1-8476.

The question is noted in the attachment, but not included above.

P1-0122 **Contractor's Proprietary System Language for Glass Floors** **Closed** **06/11/2014** **06/21/2014** **07/01/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference: 08 88 53 and 08 44 33 (TG08.2/TG08.10 - Design/Build Glazing Systems dated 5/16/2014)

Add design build language similar to that of 08 44 33 Section 1.1.A.25 to allow for contractor's proprietary system.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Design Build language extracted from Spec Section 08 44 33 paragraph 1.1.A.25 has been added to Spec Section 08 88 53 paragraph 1.1.A.21 and will be issued in the forthcoming ASI for the VE round of Design Build package submission.

P1-0123 **Location of Bearing Supports** **Closed** **06/11/2014** **06/21/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 8/S1-6010, 1 and 2/S1-6020

Confirm location of the bearing supports. The table on 8/S1-6010 and details 1 and 2/S1-6020 do not match. Clarify.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The location of the bearing supports is clearly indicated on the drawings. We have updated the details 1 and 2 to add missing information. If there is any specific information missing, please let us know.

P1-0123.1 **Updated Detail for Bearing Plate** **Closed** **07/03/2014** **07/13/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: RFI P1-0123, 8/S1-6010, 1, and 2/S1-6020

As stated in RFI Response P1-0123: "The location of the bearing supports is clearly indicated on the drawings. We have updated the details 1 and 2 to add missing information. If there is any specific information missing, please let us know."

Please provide updated details to clearly show the size and dimensions of the bearing plate on 1 & 2/S1-6020.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Updated drawings will be submitted with ASI 0120 dated July 11, 2014.

P1-0124 **Column Contact Point 7/S1-6010** **Closed** **06/11/2014** **06/11/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference: 7/S1-6010

Detail 7/S1-6010 shows 1 point of contact per column. Confirm the 1 contact point is sufficient to keep the collar framing around the light column from rotating.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Two contact points are required at each column in order to keep the collar framing around the light column from rotating. These details will be updated in a future Addendum.

P1-0124.1 **Column Contact Detail** **Closed** **07/03/2014** **07/13/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: RFI P1-0124, 7/S1-601

RFI P1-0124 Response: "Two contact points are required at each column in order to keep the collar framing around the light column from rotating. These details will be updated in a future Addendum."

Response to P1-0124 refers to a revised detail to be issued in a future bid package. The detail is required to accurately bid the associated trade package. Please provide the revised detail referenced in the RFI response.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Updated drawings will be submitted with ASI 0120 dated July 11, 2014.

P1-0125 **W-12 Anchoring** **Closed** **06/11/2014** **06/21/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 4 and 6/S1-6034 and 4/A1-8454

Detail 4 and 6/S1-6034 show the W-12 bolting to the box beam while detail 4/A1-8454 show the glass floor attached to the box beam with an angle. Clarify W-12 connection to box beam.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Details 4 and 6 on S1-6034 are correct. Architectural details will be revised in a future package.

P1-0125.1 **W-12 Anchoring Detail** **Open** **07/03/2014** **07/13/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Reference: RFI P1-0125, 4 and 6/S1-6034, and 4/A1-8454

RFI P1-0125 Response: "Details 4 and 6 on S1-6034 are correct. Architectural details will be revised in a future package."

Response to P1-0124 refers to a revised detail to be issued in a future bid package. The detail is required to accurately bid the associated trade package. Please provide the revised detail referenced in the RFI response.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See SKA-3823 attached. The revised sheet will be issued with the DB Glazing ASI 0120 dated July 11, 2014.

P1-0126 **Horizontal Life Line Stanchion** **Closed** **06/11/2014** **06/21/2014** **06/30/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 1 and 2/WW1-5001 and 4/A1-8860

Details 1 and 2/WW1-5001 shows typical details for a prefabricated horizontal life line support however Architectural floor plans refer to 4/A1-8860 for typical horizontal life line stanchion detail.

1. Clarify which stanchion is to be used to support the horizontal life line system

2. Clarify the means of connection to the WF beam. Detail 4/A1-8860 shows a bolted connection and 1/WW1-5001 calls for a welded connection.

3. Provide waterproofing and flashing details for the stanchion.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Detail 1/WW1-5001 shows the life line condition, detail 2 is for standalone point tie-back. Please note that the ends of the life line assembly are the same as the tie-back.

2. Refer to structural for structural connections, not architectural or façade maintenance, if an additional detail is required please indicate.

3. Detail 4/A1-8860 indicates typical waterproofing.

P1-0126.1 **Fall Arrest Stanchions.** **Closed** **08/05/2014** **08/15/2014** **08/20/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Reference 2/WW1-5001 and 4/A1-8860

Per response to RFI P1-0126 detail 4/A1-8860 is to be used for typical waterproofing. Detail 4 shows the fall arrest stanchion waterproofed on top and both sides with flashing. Should the fall arrest stanchion be completely flashed it may get damaged due to use of lanyard creating an entry point for water intrusion. Please confirm the fall arrest stanchions should have flashing on all sides

Confirmed, the fall arrest stanchions should have flashing on all sides.

P1-0127 **Davit Base Plate Connection** **Closed** **06/11/2014** **06/21/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 5/A1-8860 and 12/S1-7600

Detail 5/A1-8860 shows the davit base plate bolted to the WF however 12/S1-7600 shows the davit base plate welded to the WF. Please clarify method of attaching the davit base plate to the WF.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Follow Structural drawing, 12/S1-7600.

P1-0128 **Spec Section 11 24 23** **Closed** **06/11/2014** **06/21/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 11 24 23

For the referenced Specification Section, what does subsection 3.8 cover that subsection 3.6 does not?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The subsections are different. Upon further review it has been determined subsection 3.6 shall be deleted. Subsection 3.8 will remain with no changes.

P1-0129 **Seismic Joint Coordination Between A Drawings** **Closed** **06/11/2014** **06/21/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference: A1-8880, A1-2302, A1-7001

Per A1-8880, WJC8 and RJC1 are located between Stair 201 and the adjacent existing building. Per A1-2302 and A1-7001, there does not appear to be a seismic joint at this location. Please revise so that drawings match each other.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Expansion Joints have been deleted. See Attached Sketch SKA-3688.

P1-0130 **Carboline Protective Coatings Primer** **Closed** **06/11/2014** **06/21/2014** **07/01/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 07 81 00 3.1.B, A1-8662, A1-8663

Per the attached letter, Skanska will furnish and install Carboline Protective Coatings Primer on all steel to receive Intumescent Fireproofing. Bidders will be directed to assume the steel will be received with this coating, and they will use compatible coatings, or perform all necessary surface prep to use a different system.

Per 07 81 00 3.1 B fireproofing cannot begin prior to completion of roofing. This will not work with the construction schedule. Please confirm that FP-1 and RFLE do not exist, or provide spec and location (see A1-8662 & A1-8663)

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The construction schedule and sequence of construction is the responsibility of the CM/GC.

FP-1 and RFLE-3 indicated in the fireproofing Schedule of Sheet A1-8662 are clearly indicated in the description column of the schedule. FP-1 is a fireproofing method covered in RFLE#3 document approved by SFFD/DBI . RFLE-3 is a method of calculation also covered in RFLE#3 document also approved by SFFD/DBI.

P1-0131 **Fire Blankets Shown at Ceiling Locations** **Closed** **06/11/2014** **06/21/2014** **06/30/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-8890, 07 09 13

The contract documents show fire blankets within the ceiling space at several locations. Are these part of the rated seismic joint assemblies? The seismic joint assemblies note that the assembly must have a "fire

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Fire Blanket is part of the seismic joint assembly. The annotation has been revised to match the Specification. Refer To SKA-3692.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

barrier", but does not identify the barrier as a "fire blanket." If the "fire blanket" is the "fire barrier" identified in 07 09 13, please remove/revise the language on the drawings to match the specification. If this is an added material to be furnished and installed separately, please provide a spec., extent, and details for the fire blanket.

This affects TG16.1 Framing/Drywall and/or TG07.8 Expansion Joints. Please provide the requested information so as not to impact the bidding schedule.

P1-0132 **Installation Requirements for Insulation** **Closed** **06/11/2014** **06/21/2014** **07/02/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 09 80 00

1.9 A requires that all materials requiring "wetness, moisture or dampness" be completed prior to installation of insulation. This would mean that all drywall finish, thin set tile, and any other "wet applied" finishes be installed prior to acoustic insulation/sealant being installed within the wall cavities, or penetrations. Please rewrite this requirement to follow the manufacturer's written recommendations.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is a means and methods requirement that the CM/GC shall manage as stated in Division 01. Specification 09 80 00 sets forth the industry standard requirements for installation of the insulation materials an systems. Specification language does not change.

P1-0132.1 **Language Revision for Material Installation per Specification Section 09 80 00** **Closed** **07/09/2014** **07/19/2014** **08/27/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0132, Specification Section 09 80 00

As stated in RFI Response P1-0132, "This is a means and methods requirement that the CM/GC shall manage as stated in Division 01. Specification 09 80 00 sets forth the industry standard requirements for installation of the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Specification language on Section 09 80 00 / 1.9 A will be revised as recommended in this RFI. This revision will be included in ASI 127.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

insulation materials an systems. Specification language does not change."

RFI Response 0132 requires that insulation not be installed unless no further installation of materials requiring wetness, moisture or dampness is contemplated. Drywall mud, thin set for tile, terrazzo, paint and other finish materials create wetness, moisture, and damp condition within the building. Please revise the language to mandate material specified within Specification Section 09 80 00 shall be installed per the manufactuer's written installation instructions.

P1-0133 **Relative Humidity Requirement** **Closed** **06/11/2014** **06/21/2014** **07/02/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 09 80 00

1.9 B requires that relative humidity in the area of work does not exceed 55% humidity for the duration of the project. The average relative humidity for San Francisco is above 55% for +80% of the year (and those days below 55% are intermixed between days above 55%). By this standard, we would need to scaffold, shrink wrap, rent air conditioners/dehumidifiers and run them for several years until substantial completion. Please rewrite this requirement to follow the manufacturer's written recommendations.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Specification Section 09 80 00 1.9 B shall be revised to state: "Ensure manufacturer's written installation requirements for ambient conditions are met."

P1-0134 **Embeds for Superintendent Station** **Closed** **06/11/2014** **06/21/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-8181

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The embeds for the Bus Deck Superintendent's

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Per A1-8181, there are embeds within the curbs at the Superintendent Station at the bus deck level. The design of these embeds is not indicated. Please provide the size, location (i.e. continuous, etc.), and method of embedment (1/2" welded studs at 24" o.c.). This will impact TG07.3. Please provide the requested information so as not to impact the bidding schedule.

Station shown on sheet A1-8181 are not required. Sheet A1-8181 has been omitted in TG08.10. The Bus Deck Superintendent's Station will be a pre-fabricated booth per VE mitigation meetings. Documentation for pre-fabricated booths to be issued in a future package.

P1-0134.1 **Required Detailing for Superintendent's Station Concrete Platform** **Closed** **07/03/2014** **07/13/2014** **07/22/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0134

As stated in RFI Response P1-0134, "The embeds for the Bus Deck Superintendent's Station shown on sheet A1-8181 are not required. Sheet A1-8181 has been omitted in TG08.10. The Bus Deck Superintendent's Station will be a pre-fabricated booth per VE mitigation meetings. Documentation for pre-fabricated booths to be issued in a future package."

Per RFI Response P1-0134, detailing for the Superintendent's Station will be provided in a future package. The information related to the concrete platform is required to aquire pricing for topping slabs. Please provide the detailing for the Superintendent's Station Concrete Platform.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This information will be provided with the ASI that will be issued on the schedule agreed to with WOJV and TGPA. Design of the concrete platform cannot be completed without completing the redesign of the Superintendent's Station per the TJPA directed design change.

P1-0135 **Below Grade Waterproofing** **Closed** **06/11/2014** **06/21/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: 07 13 54

Per the contract documents, WPM-3 is to be used at the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Product data is not attached as noted in the question.

See Application specification section 07 13 54 / 3.3

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

roof park level below grade. Per 07 13 54, WPM-3 is Sika Sarnafil Waterproofing System PVC G476-20. Per the product data for Sarnafil PVC G476 (see attached), WPM-3 can be exposed for a maximum of 3 months. Based upon this limitation Webcor will be requiring the waterproofing subcontractor to protect the waterproofing until permanent overburden (foam fill, soil, rock, etc.) can be installed. This may lead to substantial added cost to the project. Please confirm that this is acceptable, or revise the contract documents to a product which can be exposed for an extended duration.

that states "The waterproofing sequence in general shall be as follows: install the first ply of the membrane to serve as temporary waterproofing until the building is ready to receive the overburden at Park level. Following installation of ..... Additional protection in areas where construction will occur above the membrane will be installed and removed by other contractors."

The Contractor is responsible for means and methods of construction and scheduling the interaction of trades to complete the work. The contractor shall determine the most cost effective means of water management during construction to reduce project costs. The suggested construction phase water management process outlined in specification section 07 13 54 can be altered as desired by the Contractor to reduce costs and coordinate with the Contractor's means and methods. The completed waterproofing system, testing, etc. shall comply with 07 13 54 and the drawings in the Contract Documents (e.g. waterproofing detail 7/A1-8851).

P1-0136 **Roofing Spec** **Closed** **06/11/2014** **06/21/2014** **07/02/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: 07 13 54 1.8 A 2

Per 07 13 54 1.8 A 2, the roofing subcontractor must be prepared to cover unfinished work with temporary covers in the event of an unexpected rainfall. Per 07 13 54 1.8 B, the roofing subcontractor must leave the building in a completely watertight condition at the end of each day, and make unfinished work watertight. Based upon these requirements, Webcor will be requiring the roofing subcontractor to protect the entire area of the roof until it is completely watertight. This may add substantial added costs to the project. Please confirm this is the desired requirements, or revise the contract documents.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The referenced specification section 07 13 54 / 1.8.A2 states "Be prepared to cover unfinished work with temporary covers in the event of an unexpected rainfall." The statement does not state that the entire area of the roof shall be covered every night. This is required to prevent damage to the incomplete ongoing waterproofing work, which might result from issues such as water entrapment within the system.

Specification section 07 13 54 / 1.8 B will be revised in a future ASI to delete the requirement that "At the end of each day, leave the building in a completely watertight condition." WOJV has bid manual instructions that appropriately describe the CM/GC

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

requirements on this issue.

P1-0137 **Waterproofing Membrane Curing time** **Closed** **06/11/2014** **06/21/2014** **07/02/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: 07 13 00 3.5 A

Spec Section 07 13 00 3.5 A 1 requires the waterproofing membrane to cure a minimum of 7 days at 70 degrees Fahrenheit. In San Francisco, the average daily high temperature does not get up to 70 degrees for 8 months out of the year, and the average low temperature is below 70 degrees year round. As such, acclimatization (scaffold, tenting, and heaters) will be required to maintain the 70 degrees the entire duration of the W/P activity. This may add substantial added costs to the project. Please confirm this is the desired requirements, or revise the contract documents.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The language has been revised. Refer to attached SKLA-306.

P1-0138 **Unfinished work watertight spec** **Closed** **06/11/2014** **06/21/2014** **07/02/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

07 14 13 1.8 B

Spec Section 07 14 13 1.8 B requires "at the end of each day, leave the building in a completely watertight condition. Make unfinished work watertight." This requirement will require the tenting of the entire building in order to make the building and unfinished work "watertight." This may add substantial added costs to the project. Please confirm this is the desired requirements, or revise the contract documents.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Spec Section 07 14 13 / 1.8 B shall be deleted.

☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0139	Unfinished work watertight spec	Closed	06/11/2014	06/21/2014	06/24/2014	Potentially	

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: 07 54 19 1.9 A 5

Spec Section 07 54 19 1.9 A 5 requires "at the end of each day, leave the building in a completely watertight condition. Make unfinished work watertight." This requirement will require the tenting of the entire building in order to make the building and unfinished work "watertight." This may add substantial added costs to the project. Please confirm this is the desired requirements, or revise the contract documents.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The following sentence; "...at the end of each day, leave the building in a completely watertight condition. Make unfinished work watertight." Will be deleted from Spec Section 07 54 19 1.9 A 5. You are correct, construction phase weather protection is a means and methods issue.

WOJV shall review this changed specification in relation to the Bid Manual and adjust the Bid Manual as required. The Bid Manual previously stated: "It shall be the responsibility of the Trade Subcontractor to take all measures to protect Work from inclement weather, including that determined by WOJV, until completion of the work and acceptance by the Owner." and "In the event that the building requires weather protection and rain water control, Trade Subcontractor shall furnish and install all weather protection as required for Work to continue unabated and will be liable for damage to other Work or costs for weather protection installation due to Trade Subcontractor's failure to timely or properly install weather protection." We also don't believe your text is intended to require each individual trade subcontractor to fully tent the building each day or even on a rainy day.

P1-0139.1	Direction For Revision of Specification Section 07 54 19 1.9 A 5	Void	07/03/2014	07/13/2014		Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-00139

As stated in RFI Response P1-00139, "The following sentence; "...at the end of each day, leave the building in a completely watertight condition. Make unfinished work watertight." Will be deleted from Spec Section 07 54 19 1.9 A 5. You are correct, construction phase weather protection is a means and methods issue.

WOJV shall review this changed specification in relation to the Bid Manual and adjust the Bid Manual as required. The Bid Manual previously stated: "It shall be the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

responsibility of the Trade Subcontractor to take all measures to protect Work from inclement weather, including that determined by WOJV, until completion of the work and acceptance by the Owner." and "In the event that the building requires weather protection and rain water control, Trade Subcontractor shall furnish and install all weather protection as required for Work to continue unabated and will be liable for damage to other Work or costs for weather protection installation due to Trade Subcontractor's failure to timely or properly install weather protection." We also don't believe your text is intended to require each individual trade subcontractor to fully tent the building each day or even on a rainy day."

RFI Response P1-00139 indicates that Specification Section 07 54 19 1.9 A 5 will be changed. No specification or specific direction to delete the language was provided. Please provide the revised language or direct the language to be stricken for Specification Section 07 54 19 1.9 A 5.

P1-0140 **Floor Coating Temperature Spec** **Closed** **06/11/2014** **06/21/2014** **07/22/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: 07 18 14 1.8 B

Spec Section 07 18 14 1.8 B indicates ¿ambient and surface temperatures shall be at least 60 degrees F for a minimum period of 48 hours before, during and after coating system application.¿ I would suggest language requiring environmental conditions be established as required by the product manufacturer. Otherwise, this may add substantial added costs to the project. Please confirm this is the desired requirements, or revise the contract documents.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The requirement of Spec Section 07 18 14 1.8 B shall be revised to: "Ambient and surface temperatures shall be maintained per manufacturer's requirements for the application of floor coatings."

P1-0141 **Coating Requirements** **Closed** **06/11/2014** **06/21/2014** **07/02/2014** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 07 18 14 3.6 A

Spec Section 07 18 14 3.6 A indicates "Ambient and surface temperatures shall be at least 50 degrees F for a minimum period of 48 hours before, during and after coating system application." This conflicts with 07 18 14 1.8 B. In addition, I would suggest language requiring environmental conditions be established as required by the product manufacturer. This may reduce acclimatization, and conflicts with the manufacturer's installation instructions. Otherwise, this may add substantial added costs to the project. Please confirm this is the desired requirements, or revise the contract documents.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Ambient and surface temperatures shall be maintained per manufacturer's requirements for the application of floor coatings.

P1-0142 **Thermoplastic Water Tank Liners** **Void** **06/11/2014** **06/21/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Reference: 07 13 55 2.1

07 13 55 2.1 does not provide a specific manufacturer for thermoplastic water tank liners. Webcor intends to require all manufactures be approved via QBD prior to bid. If this is not acceptable, please provide specific manufacturers and products which are acceptable to use.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

P1-0143 **TG08.7 Glass Floor Corrosion Expert** **Closed** **06/12/2014** **06/22/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 08 88 53

Specification section 1.9 G.1 requires that the design build contractor engage a California licensed Corrosion Engineer who is an expert in corrosion.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

As discussed with TJPA & WOJV, specification 08 88 53 has been changed to delete the California Licensed Corrosion Engineer Requirement and the confirmation letter from the corrosion engineer.

As agreed with the TJPA and WOJV in documentation

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It is further required that the design build contractor get a confirmation letter from the corrosion engineer as stated in section 2.11 B and that it must comply with the recommendations of a corrosion engineer approved by TJPA Representative.

These requirements will increase bid substantially and may limit the bidding pool.

Please confirm it is TJPA intent to leave these requirements in thereby increasing costs and potentially limiting the bidding pool.

review meeting, the contractor shall;

1. Conduct a component-by-component analysis of potential corrosion resulting from galvanic action between materials, for components of curtain wall and aluminum panels and prepare a report.

2. Submit Report to TJPA Representative, for review prior to submission of Shop Drawings.

P1-0144 **Maximum Pour Height for 10" Blocks** **Closed** **06/12/2014** **06/22/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 04 20 00 3.5 L 9

04 20 00 3.5 L 9 Specifies maximum pour height for 8" and 12" blocks, but does not identify one for 10" (CMU Wall Types 9 and 11). Please provide information.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The maximum pour height for 10 inch CMU block wall will be 14 feet. Specification section 04 20 00 3.5 L 9 shall be updated and issued in a future ASI.

P1-0144.1 **Revision to Specification Section 04 20 00 3.5 L 9** **Void** **07/03/2014** **07/13/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0144,

As stated in RFI Response P1-0144, "The maximum pour height for 10 inch CMU block wall will be 14 feet. Specification section 04 20 00 3.5 L 9 shall be updated and issued in a future ASI."

RFI Response P1-0144 references a specification to be issued. No revised specification was provided. Please

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

provide the revised langauge assoicated with Specification Section 04 20 00 3.5 L 9.

P1-0145 **Masonry Tolerances** **Closed** **06/13/2014** **06/23/2014** **07/02/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 04 20 00

04 20 00 3.6 identifies tolerances which appear to differ from industry standard (ACI 530.1). This may cause the masonry pricing to increase. Please confirm it is TJPA's desire that the CMU tolerances differ from industry standard, or delete tolerances within spec and reference industry standards for CMU placement.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Language on Specification 04 20 00 3.6 stands.

Specified masonry erection tolerances are generally similar to those in ACI 503.1. Whenever in conflict, Contractor is to meet the more restrictive tolerances.

P1-0146 **CMU Concrete Base Aggregate Exposure** **Closed** **06/13/2014** **06/23/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 04 20 00

04 20 00 3.7 A requires that prior to placing CMU, the aggregate within the concrete base is to be exposed. This may expose rebar within slabs/concrete curbs, require touch-up of adj. surfaces, and require additional protection of adj. surfaces. Please confirm that concrete material is to be removed to expose aggregate within the concrete base below CMU walls.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Specification 04 20 00 / 3.7A requires the contractor to clean the top of concrete, remove laitance and expose aggregate; not to expose the rebar. This is an industry standard for installing masonry and should not require additional protection on properly placed concrete elements.

P1-0147 **Concrete Curbs at CMU Walls** **Closed** **06/13/2014** **06/23/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference: 4/A1-0022

4/A1-0022 indicates that a "CC" accompanies the CMU wall symbol if a concrete curb is to be erected below the wall. 1/A-0025 indicates that typical CMU walls do not have curbs. 2/A-0025 indicates that if a CMU wall is on a sloped slab, a curb is typically required below the CMU wall. Enlarged floor plans in architectural plans do not typically show a concrete curb below CMU walls (i.e. no "CC" adj. to the symbol). Typical structural details (1 & 2/S1-9001) show concrete curbs at all CMU walls. Are all CMU walls supposed to receive concrete curbs or only the ones identified on architectural plans?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Not all CMU walls have concrete curbs. The CMU walls that have a concrete curb have annotation ¿CC¿ specified on their wall tag. These walls, with their wall tags, have been illustrated on the architectural zone plans.

S1-9001 illustrates curbs for CMU walls, where they exist.

P1-0148 **CMU Rated Walls** **Closed** **06/13/2014** **06/23/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 04 20 00

Per 04 20 00 2.2 F, preformed rubber is to be used in masonry expansion joints. Per 3 & 4/A-0024, mineral wool, backer rod, and fire/smoke stopping is to be used at rated walls. Per A-0022, all CMU walls are rated. Please revise spec or drawing to agree.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For fire rated CMU walls, use mineral wool, backer rod and fire / smoke stop, as has been illustrated on detail 3/ A1-0024. Specification section 04 20 00 2.2 F shall be revised to conform and shall be issued with a future ASI.

P1-0148.1 **Revision for Specification Section 04 20 00** **Void** **07/03/2014** **07/13/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0148, Specification Section 04 20 00 2.2 F

RFI Response P1-0148 states, "For fire rated CMU walls, use mineral wool, backer rod and fire / smoke stop, as has been illustrated on detail 3/ A1-0024. Specification section 04 20 00 2.2 F shall be revised to conform and shall be

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

issued with a future ASI.

RFI Response P1-0148 refers to a future ASI to revise Specification Section 04 20 00. No revised specification has been received. Please provide the revision for Specification Section 04 20 00.

P1-0149 **Train Box Construction Joints** **Closed** **06/13/2014** **06/23/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 3 & 4/A-0024

Per 3 & 4/A-0024 within the train box there are 2 different wall joint details depending if the wall is running north and south, or east and west. The details go on to reference structural for wall control joint information in each direction. Per S1-9000 - S1-9003 (Typical CMU Details) there is one standard detail for all construction joints. Please confirm there is only one construction joint detail desired for walls running in any direction, and coordinate arch. drawings to match.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This question is vague and cannot be answered. Joint widths vary along the E/W length of the building as well as vertically by level. Contractor to provide information on the joints in question by both gridlines (N/S & E/W) as well as building level (Platform, Lower Concourse etc.).

P1-0149.1 **Widths for Below Grade/Train Box CMU Control Joints** **Closed** **07/03/2014** **07/13/2014** **08/05/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0149, Details 3 & 4/A-0024, Details 7 & 10/S1-9000

As stated in RFI Response P1-0149, "This question is vague and cannot be answered. Joint widths vary along the E/W length of the building as well as vertically by level. Contractor to provide information on the joints in question by both gridlines (N/S & E/W) as well as building level (Platform, Lower Concourse etc.)"

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Joints laid out in the architectural drawings reduce continuous wall lengths for the purpose of crack control and/or permit the seismic displacement of elements braced to the floor above relative to those elements that are permitted to slip relative the floor above.

For joints oriented in the north-south direction, control and seismic functions are satisfied at a joint width of 3/8¿. This is due to the small magnitude of below

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- Per Detail 3/A-0024 the train box CMU control joints running in an east to west direction appears to be the width of a standard grout joint.
- Per Detail 4/A-0024 the train box CMU control joints running in a north to south direction are larger than the width of a standard grout joint.
- Details 3 & 4/A-0024 indicate that structural drawings are to be referenced for control joint information.
- Per Details 7 & 10/S1-9000 standard below grade CMU wall control joints are 3/8" reguardless of orientation.

Please confirm that all below grade/train box CMU wall control joints are to be 3/8" wide as required by structural, rather than differing widths based upon orientation as indicated on the architectural drawings.

grade seismic building drift in the east-west direction.

Joints oriented in the east-west direction for the purpose of providing seismic separation under north-south building drift shall be sized per General Note CD-6 of S-0005, requiring Operational Performance under GSL-2 Earthquake. The GSL-2 story drifts that control the joint widths are tabulated on S-0006. For partition walls at the Train Platform Level, the Lower Concourse drift demands apply. For partition walls at the Lower Concourse, the Ground Level drift demands apply. Drift demands are converted to displacements (joint sizes) by multiplying the percentage drift by the story height.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0149.2	CMU Wall Layout Requirements	Closed	08/14/2014	08/24/2014	09/05/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0149.1

RFI Response P1-0149.1 does not provide specific sizes and layout requirements for CMU walls.

Please provide specific sizes and layout requirements for CMU walls as Trade Package TG07.4 CMU is not design-build.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Dimensioned setting out for all concrete and CMU partition walls is referenced from the Architectural Zone Plans, located on related details and identified as CJs e.g. A1-3007 GL 7, E.6.

On the Architectural Zone Plans and details, the CMU wall tags refer to the Masonry Partition Schedule on Architectural drawing A-0022, which stipulates the CMU wall thicknesses and performance criteria.

The concrete and CMU partition walls require joints of a number of different sizes and orientations.

Please refer to the attached Structural Sketch SKS-0402, which clarifies the joint types based on orientation and joint sizes, relative to their Gridline location, at the Train Platform and Lower Concourse Levels. The control joint locations indicated on the Architectural drawings are also shown marked up on the Comprehensive Layout Submittals.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0150	CMU Wall Intersections at Loading Docks	Closed	06/13/2014	06/23/2014	06/24/2014	Potentially	☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 1 - 4/A1-3192

Per 1 - 4/A1-3192 UL Design 2079 is to be used at CMU wall intersections at the Loading Dock. The UL listed assembly may not work with the opening shown (see attached Hilti listing with UL 2079). Please confirm the fire rated listing to be used at these locations.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

UL design #2079 is to be used at CMU wall intersections at the loading dock. Joint WW-D-1011 manufactured by Hilti, is engineered to protect joints up to 6 inches in width. For applications, exceeding listed 3 ½ inches joint width, engineering judgment from the manufacturer (in this case Hilti) is required.

In addition, Emseal manufactured EMSHIELD WFR2 and WFR3 system goes up to 6 inches in width. The specification section 07 84 13 2.1 A shall be updated to include EMSEAL in the manufacturer¿s list and will be issued with a future ASI.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0150.1	Penetration Firestopping Testing Clarification	Closed	07/07/2014	07/17/2014	07/11/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0150, Specification Section 07 84 13 (IFC Drawings for Main Package dated 3/31/14)

As stated in RFI Response P1-0150, "For applications, exceeding listed 3 ½ inches joint width, engineering judgment from the manufacturer (in this case Hilti) is required."

Per RFI Response P1-150 an engineering judgement from Hilti will be accepted. There are several other specified manufacturers for penetration fireproofing, 07 84 13 1.7 C requires that penetration firestopping be UL/Intertek/FM Global tested assemblies, and tested by a qualified testing agency acceptable to the AHJ. Please confirm that an engineered judgment for penetration firestopping from any listed manufacturer will be acceptable in lieu of providing a tested assembly.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Yes, an engineering judgment that the manufacturer has obtained approval for by the AHJ, for penetration fire stopping exceeding 3 1/2", will be accepted from any listed manufacturer in lieu of providing a tested assembly.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0151	HD for CMU Wall Types	Closed	06/13/2014	06/23/2014	06/24/2014	Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 1/A1-3100

1/A1-3100 shows CMU wall types with the symbol "HD". 4/A-0022 does not define what this symbol indicates. A-0015 defines "HD" as "heavy duty" or "hot dipped", neither of which appears to apply. Please provide information on CMU marked as "HD".

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Detail 4 on drawing A1-0022 has been updated to reflect that ¿HD¿ stands for additional reinforcing. Drawing A1-0022 shall be issued with a future ASI and shall reflect this change.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0151.1	Information for HD Designated CMU walls	Closed	07/08/2014	07/18/2014	07/22/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REFERENCE: RFI Response P1-0151

As stated in RFI Response P1-0151, "Detail 4 on drawing A1-0022 has been updated to reflect that "HD" stands for additional reinforcing. Drawing A1-0022 shall be issued with a future ASI and shall reflect this change."

Per RFI Response P1-0151, the designation "HD" stands for "additional reinforcing". The response does not indicate what the additional reinforcement requirements are to be. Please provide the reinforcement requirements.

Refer to Structural drawing S1-9000 for reinforcement requirements.

P1-0152 **Concrete Curing** **Closed** **06/13/2014** **06/23/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 04 22 00 3.2.B.1

04 22 00 3.2 B 1 Requires that concrete cure for 28 days above 70 degrees Fahrenheit prior to installation of setting materials. This will require heating blankets be placed and maintained for 28 days prior to setting the block, adding cost to the topping slab. Please confirm this requirement is necessary, and the added costs acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Omit "...28 days at 70 degrees Fahrenheit (21 degrees Celsius)..."

See attached SKLA-309.

P1-0153 **CMU Drawings Differing from Industry Standard** **Closed** **06/13/2014** **06/23/2014** **07/02/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 04 22 00 3.3.I.1

04 22 00 3.3.I.1 identifies tolerances which appear to differ from industry standard (ACI 530.1). This may cause the masonry pricing to increase. Please confirm it is TJPA's desire that the CMU tolerances differ from industry standard, or delete tolerances within spec and reference industry standards for CMU placement.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See response to RFI P1-0145.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0154	CMU at Roof Park	Closed	06/13/2014	06/23/2014	07/11/2014	Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 04 22 00 3.2 B 1, L1-7610 - L1-7613

04 22 00 3.2 B 1 and L1-7610 - L1-7613 indicates that CMU footings at the roof park are shown on the architectural drawings. The architectural drawings do not appear to layout the footings shown on L1-7610 ¿ L1-7613. Please provide the layout for all CMU wall footings at the roof park level.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See architectural Roof Level Protection Slab Plans, Sheets A1-2913 through A1-2917.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0154.1	Footing Details per Sheets L1-7612 and L1-7613	Closed	07/22/2014	08/01/2014	08/20/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Webcor Construction LP Tram Nguyen

Co-Author:

REQUEST:

REFERENCE:
RFI Response P1-0154
A1-2913 through A1-2917 (IFC Drawings for Main Package dated 3/31/14)
L1-7612 and L1-7613 (IFC Drawings for Main Package dated 3/31/14)

RFI Response P1-0154 references Sheets A1-2913 through A1-2917 for the location of CMU wall foundations.

The CMU wall footings depicted on Sheets L1-7612 and L1-7613 (walls adjacent to seismic joints) are not depicted on Sheets A1-2913 through A1-2917.

Please provide layout information for the footings shown on Sheets L1-7612 and L1-7613.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to attached sketches SKA-3910 and SKA-3911 noting footing layout along walls adjacent to the seismic joints and as coordinated with Landscape details.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0155	Hardware for B1401B	Closed	06/13/2014	06/23/2014	06/24/2014	Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-9703 and locate door B1401B

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

A1-9703 is the Ground Level Door Schedule yet the

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

B1401B is a galvanized steel tube gate and is not assigned a hardware set. Please specify hardware for the gate.

door referenced uses Concourse Level door nomenclature. We believe the door in question is actually 01401B, if this is the case the gate does not need a hardware set. In a future ASI the following will be documented:

door number will be deleted from the zone plan (drawing A1-2304)
door 01401B will be deleted from the door schedule (drawing A1-9703)
Refer to sheet A1-7523 for gate detailing and requirements.

P1-0155.1 **Documentation for Changes to Door 01401B** **Void** **07/08/2014** **07/18/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0155

As stated in RFI Response P1-0155, "A1-9703 is the Ground Level Door Schedule yet the door referenced uses Concourse Level door nomenclature. We believe the door in question is actually 01401B, if this is the case the gate does not need a hardware set. In a future ASI the following will be documented:

door number will be deleted from the zone plan (drawing A1-2304)
door 01401B will be deleted from the door schedule (drawing A1-9703)
Refer to sheet A1-7523 for gate detailing and requirements."

The RFI Response P1-0155 references future documentation. The documentation referenced has not been received. Please provide the documentation referenced in the response to RFI P1-0155.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0156	Openings around Ground Level Columns	Closed	06/11/2014	06/21/2014	06/24/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: A1-2104

Per the architectural slab plans (see below for example) there are openings around the ground level columns with galvanized steel plate supporting the slab above. Structural drawings (see below for example) does not show these openings. Are these openings required? Please revise the documents to conform with each other.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The openings around the ground level columns, are block outs for the base plate. For locations and dimensions of these openings, refer to the architectural slab edge plans. Structural drawing A1-5052 illustrates the base plate detail and dimensions.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0157	Base Plate Detail at Ground Level	Closed	06/11/2014	06/21/2014	06/24/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: 2/A1-9311

Per architectural (see below) metal plates on curbs conceal the base plate for columns at transfer girders at ground level. The contract documents do not appear to detail the size or attachment of the metal plate or associated curb. Please provide detailing for the metal plate and associated curb.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The metal plate on the curbs, shall be 3/8 inches thick galvanized metal and shall be anchored to the curb with 3/8 inch diameter anchor's. Detail 3 on drawing "A1-9311" has been updated to reflect the same and shall be issued with a future ASI.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0158	Tubular Lighting	Void	06/11/2014	06/21/2014		Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

reference: 3/S1-2305

Per the contract amendment for TG07.2, the tubular lighting devices have been deleted. However, the details for the tubular daylight devices still appear on the plans (see below for example). Please revise the contract documents to delete the associated detailing.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0159	Bus Bridge and Bus Deck	Closed	06/11/2014	06/21/2014	06/24/2014	Potentially	☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: S-2063, S1-2502, A1-2502

Per the Bus Ramp Drawing S-2063, the elevation at T.O. AC is 56.10 (56' - 1-3/16") where the bridge connects to the transit center. Per S1-2502 T.O. Steel at H line (1' - 7" away from the bus bridge connection) is 56' - 4" (2-13/16" higher than the bus ramp AC). Per A1-2502, drive aisle high point along GL-H is 57' - 11-1/4" (1' - 10-1/16" higher than the T.O. Bus Bridge AC). Please review the grades at this location to confirm the bus bridge aligns with the top of bus deck.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per S1-2502, 56'-4" top of steel elevation at GL-H is correct. Per A1-2502, 57'-11 1/4" drive aisle high point along GL-H is correct.

P1-0159.1 **Revision to Detail 2/A1-8378 to Match RFI Responses** **Closed** **07/08/2014** **07/18/2014** **07/22/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0159, RFI Response B-0008, Detail 2/A1-8378

As stated in RFI Response P1-0159, "Per S1-2502, 56'-4" top of steel elevation at GL-H is correct. Per A1-2502, 57'-11 1/4" drive aisle high point along GL-H is correct."

Per RFI Response P1-0159, the Bus Deck Drive Aisle high point at the bus bridge is 57'-11 1/4". Per RFI Response B-0008, the top of bus bridge paving is 57'-11 3/4". Per Detail 2/A1-8378, the transition from the Bus Bridge to the Bus Deck Drive Aisle is at 57'-11 1/4". Please revise Detail 2/A1-8378 to reflect the elevations confirmed in RFI Responses P1-0159 and B-0008.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The response to RFI P1-0159 is correct. Arup will be revising their response to RFI B-0008 to conform to the information contained in RFI P1-0159.

P1-0160 **Structural Slab Detail** **Closed** **06/11/2014** **06/21/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: S1-2502, A1-2892, A1-9532

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Topping extents revised per attached SKA-3723 based on sheet A1-9532. Refer also to details 2 &

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Per S1-2502 and A1-2892, the structural slab extends 1'-7" south past GL H to meet the bus bridge. Per A1-9532 the bus deck topping slab stops 3'-4" north of GL H. This will leave a 4'-11" area with no topping slab between the bus deck and bus bridge. Please revise the drawing to show the desired condition.

3/A1-8378 previously issued, for extent of slab and bus bridge interface.

P1-0161 **Topping slab at bus deck** **Closed** **06/11/2014** **06/21/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: A1-6102

There does not appear to be a detail depicting the edge of topping slab and associated waterproofing where the bus deck meets the bus bridge. Per A1-6102 the connection between bus bridge is under study. Please provide the details for the connection between the bus bridge and bus deck. This will affect bid documents for TG07.6 Topping Slabs and TG13.2 Waterproofing.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For topping slab at Bus Deck to Bus Ramp, see detail 2 & 3 on A1-8378.

P1-0162 **Expansion Material** **Closed** **06/11/2014** **06/21/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

attached: S-6113

Per the bus bridge plans S-6113, a 2¿ wide piece of expansion material is to be inserted between the bus bridge and bus deck. This does not appear to be a waterproof assembly, and may leak onto the building/people below. Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See detail 3 on A1-8378 for the waterproof joint assembly at the Bus Deck to Bus Ramp transition. Waterproofing details will typically be found in the architectural drawings and not on structural drawings.

P1-0163 **Expansion material Detail** **Closed** **06/10/2014** **06/20/2014** **07/01/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

reference: S-6113, S1-5000

Per the bus bridge plans S-6113, there is a 2" wide piece of expansion material sitting on a ledge at the bus deck edge of deck. Per S1-5000, there is no ledge at the typical edge of structural slab detail. Please revise the details to match.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Architectural detail 3/A1-8378 has been revised. Refer to the attached SKA-3691. S1-5000 does not require any revision.

P1-0164 **Structural Slab notch** **Closed** **06/10/2014** **06/20/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: S1-2502, A1-2892

Per S1-2502 there is a notch at the structural slab at the cast node between the bus ramp ends. A1-2892 does not show this notch. Please revise plans to match.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Agreed, drawing A1-2892 will be updated to reflect notch in slab and issued as part of a future ASI.

P1-0164.1 **VOID** **Void** **07/08/2014** **07/18/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

P1-0165 **Bus Deck Rails** **Closed** **06/10/2014** **06/10/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: A1-2502

The accessible path of travel to the Bus Deck Superintendent Station appears to be missing some ramp rails (I believe over 5% slope requires rails)

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Ramp rails information can be found on A1-8168 and A1-8169. However, sheets A1-8168 and A1-8169 have been omitted in TG08.10. Bus Deck Superintendent's Station will be a pre-fabricated booth per VE mitigation meetings. Documentation for pre-

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

fabricated booths to be issued in a future package.

P1-0165.1 **Rail Requirements for the Path of Travel to the Superintendent Station** **Closed** **07/25/2014** **08/04/2014** **09/03/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0165, Sheet A1-8168, Sheet A1-8169, CBC Section 1003.5, CBC Section 1010.19

As stated in RFI Response P1-0165, "Ramp rails information can be found on A1-8168 and A1-8169. However, sheets A1-8168 and A1-8169 have been omitted in TG08.10. Bus Deck Superintendent's Station will be a pre-fabricated booth per VE mitigation meetings. Documentation for pre-fabricated booths to be issued in a future package."

A1-8168 and A1-8169 show rails for the ramp west of the superintendent station, but omits rails at the 8.1% ramp/curb cut south of the superintendent station and across the drive aisle from it.

- Per CBC Section 1003.5, slopes along the path of egress which exceed 5% must comply with CBC Section 1010.

- Per CBC Section 1010.9 requires ramps with a rise greater than 6" to have handrails on both sides.

- Per CBC Section 1003.5 contrasting finish surfaces in lieu of handrails are only acceptable where the difference in elevation is 6" or less (in this case the vertical travel is appox. 9").

Please confirm that portions of the path of travel to the Superintendent Station which exceed 5%, and have a vertical travel greater than 6" do not require rails.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to attached sketches SKA-4044, SKA-4046 and SKA-4047 for updated layout of ramps with required rails.

Webcor/Obayashi Joint Venture

PROJECT MANAGEMENT - REQUEST AND ANSWERS LOG

30100 - Transbay Transit Center Project

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0166	Tactile Warning Surfaces at Superintendent Station	Closed	06/09/2014	06/19/2014	06/24/2014	Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-2502

The accessible path of travel to the Bus Deck Superintendent Station appears to be missing tactile warning surfaces at the ramps

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Bus Deck Superintendent's Station will be a pre-fabricated booth per VE mitigation meetings. Documentation for pre-fabricated booths to be issued in a future package.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0166.1	Drawings for Concrete Work at Bus Deck Level	Closed	07/08/2014	07/18/2014	08/22/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0166

As stated in RFI Response P1-0166, "The Bus Deck Superintendent's Station will be a pre-fabricated booth per VE mitigation meetings. Documentation for pre-fabricated booths to be issued in a future package."

RFI Response P1-0166 indicates that documentation for pre-fabricated booths will be issued in a future package. The work around the pre-fabricated booths is not included in the same bid package as the pre-fabricated booth. Please provide the information regarding tactile warnings at the ramps adjacent to the pre-fabricated booths.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to attached sketches SKA-4046 and SKA-4047 for updated information on tactile warnings at the Bus Deck level Supervisor's Booth.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0167	Ramps on Architectural Drawings	Closed	06/09/2014	06/19/2014	06/24/2014	Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-2502, A1-8168

Ramps as shown on A1-2502 do not match A1-8168. Please revise the drawings to agree with each other.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Sheet A1-8168 has been omitted in TG08.10. Bus Deck Superintendent's Station will be a pre-fabricated booth per VE mitigation meetings. Documentation for pre-fabricated booths to be issued in a future package.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0167.1	Revised Drawings for Concrete Work at Bus Deck Level	Closed	07/08/2014	07/18/2014	08/22/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0167

As stated in RFI Response P1-0167, "Sheet A1-8168 has been omitted in TG08.10. Bus Deck Superintendent's Station will be a pre-fabricated booth per VE mitigation meetings. Documentation for pre-fabricated booths to be issued in a future package."

RFI Response P1-0167 indicates that documentation for pre-fabricated booths will be issued in a future package. The work around the pre-fabricated booths is not included in the same bid package as the pre-fabricated booth. Please provide the information regarding slopes at the ramps adjacent to the pre-fabricated booths.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to attached SKA-4044, SKA-4046 and SKA-4047 for updated information regarding slopes of the ramps adjacent to the Bus Deck Level Supervisor Booth.

P1-0168 **Stem Wall at Bus Deck Superintendent Station** **Closed** **06/09/2014** **06/19/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference:A1-8168

A1-8168 shows concrete stem walls supporting the Bus Deck Superintendent Station and adjacent ramp. There do not appear to be details showing these walls (wall thickness, reinforcement, connection to superstructure, waterproofing, etc.). Please provide details for this area.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Sheet A1-8168 has been omitted in TG08.10. Bus Deck Superintendent's Station will be a pre-fabricated booth per VE mitigation meetings. Documentation for pre-fabricated booths to be issued in a future package.

P1-0168.1 **Revised Stem Wall Drawings for Concrete Work at Bus Deck Level** **Closed** **07/09/2014** **07/19/2014** **09/05/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0168

As stated in RFI Response P1-0168, "Sheet A1-8168 has been omitted in TG08.10. Bus Deck Superintendent's Station will be a pre-fabricated booth per VE mitigation meetings. Documentation for pre-fabricated booths to be

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached sketches SKA-3902-R1 and SKS-0407 showing structural details at the base of the superintendent¿s pre-fab booth at bus deck level. SKA-3902-R1 shows the curbs that support the booth in plan and SKS-0407 shows rebar details in the curbs.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

issued in a future package."

RFI Response P1-0166 indicates that documentation for pre-fabricated booths will be issued in a future package. The work around the pre-fabricated booths is not included in the same bid package as the pre-fabricated booth. Please provide the information regarding structures supporting the pre-fabricated booths.

P1-0169 **Coating for Metal Surfaces** **Closed** **06/09/2014** **06/19/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 05 15 21

Per 05 15 21 Steel Castings (see attached), steel castings (most notably the cast nodes) are to be furnished as bare metal. This was confirmed in the construction issues meeting held on 04/17/14 (see attached), with the indication that coating of the bare metal is to be included in TG16.5 Painting. 09 97 16 High Performance Coatings ¿ Superstructure Package (see attached) identifies a coating system for exterior exposed factory-primed metal surfaces, and a coating system for galvanized steel, but not a coating system for exterior exposed unprimed/non-galvanized metal surfaces. Please provide the coating system for all unprimed/non-galvanized metal surfaces.

Revised: IFC Set 09 97 15 2.5 B calls out for "Shop Primer" in the "Coating System for Exposed Unprimed and Non-Galvanized Steel Surfaces." Based on this information the painter (who in not under contract yet) would need to go to the steel erector's shop to prime the steel (which is currently in production) with the materials called out in 05 10 00 and 05 12 13. Based on the current schedule, the unprimed/non-galvanized steel will be erected before the painter is under contract. In addition, adding priming of these surfaces to the steel scope of work would negatively impact the delivery and erection schedule of steel. Please revise the spec to provide priming of unprimed and non-galvanized metal in the field,

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per specification section 09 97 16, part 1, 1.1, A.1; all AESS are to receive high performance coatings. Per specification section 05 10 00 part 2, 2.2, A and 2.2, C indicate all structural steel is to be either primed of galvanized; there is no exception for the cast steel items. Shop Primer is required as specified.

The specifications are intended to be read as a whole and as such, specification section 05 15 21 only speaks to the fabrication of steel castings, a sub-set of structural steel which is governed by section 05 10 00.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

or confirm that it is acceptable for steel erection to be delayed.

P1-0169.1 **Clarification for the Preparation of Cast Nodes** **Closed** **07/08/2014** **07/18/2014** **08/20/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: (All Attached)
- RFI Response P1-0169
- Specification Section 05 10 00 (IFC Drawings for Main Package dated 3/31/14)
- Sheet S1-1023
- Submittal TG0701-99C.1

Per RFI Response P1-0169 (Attached), cast nodes are governed by Specification Section 05 10 00 (Attached), and shall be shop primed.

- Per Specification Section 05 10 00 3.2 P 1 (See attached Specification Section 05 10 00), "Unless otherwise specified in Section 3.2.P.3, shop prime all structural steel..."
- Per Specification Section 05 10 00 3.2 P 3 d (See attached Specification Section 05 10 00), "Surfaces requiring preheat are not to be primed until preheat has been performed."
- Per structural drawings (Example Sheet S1-1023 attached) cast nodes are to be field welded to the adjacent tube columns.

In order to weld the cast nodes to the adjacent tube columns, the cast node must be preheated as confirmed in the reviewed welding procedure from Submittal TG0701-99C.1 (Attached). Since surfaces to be preheated are not to be shop primed, base contract documents explicitly mandate that cast nodes are not to be primed until after welded in the field.

Please confirm TJPA intends to add shop priming of cast

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

WOJV, Turner, and TJPA shall address the questions related to scope of work in the current construction Contract.

The cast nodes are to exhibit a final finish that is completely primed when the welding, grinding and installation is complete with no schedule or cost impacts. The finish is to adhere to the final finish standards for the cast nodes that were established during a series of meetings between the Design Team and Bradken, less the shop prime coat.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

nodes (Note: Adding shop priming of cast nodes will negatively impact the budget and schedule). If the addition of shop priming is not desired, please provide a specification for the field priming of unprimed and non-galvanized metal as requested in RFI P1-0169 (See attached RFI Response P1-0169).

P1-0170 **Bin Cart Lift Unit** **Closed** **06/09/2014** **06/19/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: 11 13 00

1.1.A.7 & 2.2.G & 3.3 - Bin Cart Lift Unit - Is this something that is bid out, or is it obtained from Recology? If it needs to be bid out provide details for bin cart lifter and installation and operation requirements.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Bin Cart Lift Unit is an item that shall be bid. It has been specified, under specification section 11 13 00 2.2 G. The location of the bin cart unit in the loading dock area is shown on drawing A1-3100 IFC ¿Rev 0¿. The installation and operation of the unit shall be as per manufacturer¿s standard and manual.

P1-0170.1 **Additional Information For Bin Cart Lift Unit** **Open** **07/02/2014** **07/12/2014** **08/27/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: RFI Response P1-0070 spec 11 13 00

RFI Response: "The Bin Cart Lift Unit is an item that shall be bid. It has been specified, under specification section 11 13 00 2.2 G. The location of the bin cart unit in the loading dock area is shown on drawing A1-3100 IFC 'Rev 0'. The installation and operation of the unit shall be as per manufacturer's standard and manual."

Provide details, including embeds and attachments, for Bin Cart Lifter and Bin Cart Lifter Control Box mounting

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The specification is a performance specification and these items will be engineered by the trade subcontractor in the shop drawing phase. Similar to many trades on the project that WOJV coordinates with during the shop drawing phase and this requirement is clear in the specifications. Bin Cart Lift Unit is secured to floor through use of expansion anchors and bolted into place, no embeds are required. The Bin Cart Lift Control Box is directly mounted to the railing system that is part of the unit.

Webcor/Obayashi Joint Venture

PROJECT MANAGEMENT - REQUEST AND ANSWERS LOG

30100 - Transbay Transit Center Project

Number	*Subject*	*Status*	*Date Created*	*Date Required*	*Date Answered*	*Cost Impact*	*Proceed*
P1-0171	**Loading Dock Equipment Attachment**	**Closed**	**06/09/2014**	**06/19/2014**	**07/11/2014**	**Potentially**	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: 11 13 00

1.4.C - This states that the subcontractor is determining the method of attachment to the structure. Clarify the method of attachment to the structure. Are there any requirements from the Structural Engineer?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Seismic design criteria for non-structural components are provided in Specification 01 18 50. Also, as indicated in Specification 11 13 00 Section 1.4.C, the method of attachment to the structure shall be clearly indicated in the shop drawings.

P1-0172	**Repeated Statement**	**Closed**	**06/09/2014**	**06/19/2014**	**07/11/2014**	**Potentially**	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 11 13 00

1.4.G.H - Remove 1.4.G. It is already stated in 1.4.H.2.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Specification statements referenced in the question in the Issued for Construction documents do not conflict with each other. The specification will not be altered and reissued.

P1-0173	**Quality Control Spec**	**Closed**	**06/09/2014**	**06/19/2014**	**07/11/2014**	**Potentially**	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 11 13 00

1.6.C.1 - During the qualification process TJPA stated they would have this requirement changed. Anvil Builders is prequalified and has not been in business for five years. They were incorporated in 2011.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Regarding the item in this RFI, TJPA stated the specification requirement should not be changed.

P1-0173.1	**Minimum Experience Spec**	**Open**	**07/25/2014**	**08/04/2014**	**08/21/2014**	**Potentially**	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Transbay PMPC Elissa Flandro

Co-Author:

REQUEST:

Reference:11 13 00

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Revise the spec to be a "minimum of 3 years' experience in application of products, systems and

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

RFI P1-0173 response: "Regarding the item in this RFI, TJPA stated the specification requirement should not be changed."

1.6.C.1 states "Firm with minimum of 5 years¿ experience in application of products, systems and assemblies specified and with approval and training of product manufacturers." During the qualification process TJPA stated they would have this requirement changed. There is a prequalified bidder that cannot comply with this requirement.

assemblies specified and with approval and training of product manufacturers."

P1-0174 **Quality Control Spec** **Closed** **06/09/2014** **06/19/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: 11 13 00

1.6.C.2 - During the qualification process TJPA stated they would have this requirement removed since two hours travel time from the building site limits the amount of firms able to qualify and bid on this package. Revise accordingly.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Regarding the item in this RFI, TJPA stated the specification requirement should not be changed.

P1-0174.1 **Max Travel Distance Spec** **Open** **07/25/2014** **08/04/2014** **08/20/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Transbay PMPC Elissa Flandro

Co-Author:

REQUEST:

Reference: 11 13 00

RFI P1-0174 response: "Regarding the item in this RFI, TJPA stated the specification requirement should not be changed"

1.6.C.2 states "Firm shall be located no more than 2 hours normal travel time from building site" During the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Delete the "2 hours normal travel time" requirement from the spec.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

qualification process TJPA stated they would have this requirement removed since two hours travel time from the building site limits the amount of firms able to qualify and bid on this package. Revise accordingly.

P1-0175 **Warranty Defects** **Closed** **06/09/2014** **06/19/2014** **07/02/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: 11 13 00
1.8.C - Clarify why the warranty is expected to cover defects in design. Shouldn't this be covered under the design team? This is not a design build scope.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Specification Section 11 13 00 "Truck Dock Equipment" / 1.8.C is a warranty for the truck Dock Equipment. The "defects in design" statement is refering to the Truck Dock Equipment designed and manufactured by a company such as Advance Lifts noted under possible product manufacturers.

No, the Truck Dock Equipement is not designed by the PCPA design team and should not be covered under the design team.

P1-0176 **Recessed dock levelers** **Closed** **06/10/2014** **06/20/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference 11 13 00

2.2.B.2.a - Clarify how high is "sufficient height to enable lip to extend and clear truck bed fefore contact."

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The statement on specification section 11 13 00 2.2.B.a, on ¿sufficient height clearance¿ shall be edited and removed (see attached pdf of the updated specification). The dock leveler unit should have an operational range of 12 inches and 12 inches below the dock platform.

P1-0177 **Bin Lifters** **Closed** **06/10/2014** **06/20/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference: A1-3100

Provide details for Bin Lifters.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Bin Cart Lift Unit is an equipments that is to be bid. Please refer to the specification section 11 30 00 2.2 G, for model number, capacity and other specifications. The installation and operation of the unit shall be as per manufacturer¿s standard and manual.

See RFI P1-170.

P1-0177.1 **Additional Information Bin Lifters** **Closed** **07/02/2014** **07/12/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: RFI P1-0177, A1-3100
RFI Response P1-0177: "The Bin Cart Lift Unit is an equipments that is to be bid. Please refer to the specification section 11 30 00 2.2 G, for model number, capacity and other specifications. The installation and operation of the unit shall be as per manufacturer's standard and manual. See RFI P1-170."

Provide details, including embeds and attachments, for Bin Cart Lifter and Bin Cart Lifter Control Box mounting.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Attachment requirements (including embeds) will vary depending on the equipment that the CMGC purchases in the bidding process. The CMGC shall coordinate the requirements for the attachments between the trade subcontractors the CMGC hires and submit shop drawings for review.

P1-0178 **Loading Dock Equipment** **Closed** **06/10/2014** **06/20/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: 11 13 00

Construction section 2.2.B.7 states "Fabricate dock-leveler frame from structural- and formed-steel shapes" while section 1.6.B states "Provide all assemblies as complete unit produced by a single manufacturer, including necessary accessories, fittings and anchorages." Clarify the intent of the construction section 2.2.B.7 and if the intent is to either fabricate pieces or to have all assemblies

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Paragraph 1.6.B instructs Bidder to provide a fully assembled dock leveler.

Paragraph 2.2.B.7 instructs the manufacturer of the dock equipment to utilize certain types of materials to provide a fully assembled dock leveler.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

provided by a single producer. If the intent is to fabricate pieces provide all details and criteria for fabrication.

P1-0179 **Communication System Details** **Closed** **06/10/2014** **06/20/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

11 13 00

2.2.C.6 - Provide details of all warning signs, signal lights, alarms.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The warning signs, signal lights and alarms are all a part of the truck restrain system, specified under specification section 11 13 00 2.2 C. For details on installation and operation, please refer to manufacturer's manual.

Additionally, details 4 and 6 on drawing A1-3191, IFC 'Rev 0'; illustrate the signage, signal lights and alarms required.

P1-0180 **Dock Lights Detail** **Closed** **06/10/2014** **06/20/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: 11 13 00

2.2.E - Provide details for Cool Head Incandescent Dock Light - double arm light with min 60 inch reach.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Detail 6 on drawing A1-3191 will be updated to illustrate the cool head incandescent dock light. This drawing will be issued with a future ASI and will reflect this change.

P1-0180.1 **Dock Light Details** **Closed** **07/11/2014** **07/21/2014** **07/21/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference 11 13 00 2.2E, RFI P1-0180, A1-3191

Response to RFI P1-0180 states: Detail 6 on drawing A1-

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to detail 6 on sheet A1-3191 issued in ASI No.0121 package on 07/18/14.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

3191 will be updated to illustrate the cool head incandescent
dock light. This drawing will be issued with a future ASI and will reflect this change.

Provide updated detail.

P1-0181 **Preset Anchor Bolts** **Closed** **06/10/2014** **06/20/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: 11 13 00

3.3.C - States "If preset anchor bolts, cast-in-place inserts, or threaded studs welded to embedded plates or angles are not provided, attach dock bumpers by drilling and anchoring with expansion anchors and bolts." Who would be providing preset anchor bolts? Where are these detailed?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is a means and methods question. Specification 11 13 00 3.3.C gives the contractor options for anchoring and bolting the dock bumpers. Depending on the selected manufacturer and installer, shop drawings shall be prepared and the contractor shall coordinate installation.

P1-0182 **Self-Forming Pit** **Closed** **06/10/2014** **06/20/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: 11 13 00

Provide details of Self-Forming pit system.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to A1-3191 for architectural details. Delete the words, "self-forming" from specification section 11 13 00 /3.3 D.2.

Basis of Design is the Rite-Hite Corp. dock leveler as noted in specification section 11 13 00 / 2.1 and 2.2 B. Dock leveler pit system referred to in specification section 11 13 00 / 3.3 D.2 is described in the attached manufacturer's installation instructions and other manufacturer's materials.

Number	*Subject*	*Status*	*Date Created*	*Date Required*	*Date Answered*	*Cost Impact*	*Proceed*
P1-0183	**TG08.3 Skylight Fall Protection**	**Closed**	**06/10/2014**	**06/20/2014**	**06/24/2014**	**Potentially**	☐

From: Webcor Construction LP Jonathan Flaming **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: WW1-1706 and A1-8401

Do the Skylights at GL 11 and GL 28 have fall protection integral to the frame work? WW1-1706 show safety tie-back around perimeter but A1-8401 does not show fall protection. Clarify extent of fall protection if any to be used at GL 11 and GL 28 Skylights.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

No, tie-offs are to be integral to the skylight's perimeter railing (shown in landscape drawings). Cleaning of the skylights at grids 11 & 28 can be done from the ground adjacent the skylight.

P1-0183.1	**TG08.3 Skylight Fall Protection Tie-offs**	**Closed**	**07/07/2014**	**07/17/2014**	**07/11/2014**	**Potentially**	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: P1-0183, IFC Main Set WW1-1706 and addendum 11 A1-8401
The response to P1-0183 states that tie-offs are to be integral to the skylight's perimeter rail, and that cleaning of the skylights at grids 11 & 28 can be done from the ground adjacent the skylights. Please confirm that tie-offs are needed if the skylights can be cleaned from the ground. Additionally, Cal OSHA regulations for Personal Fall Arrest Systems states "Anchorages to which personal fall arrest equipment is attached shall be capable of supporting at least 5,000 lbs per employee attached..." and California Building Code states that the rails must be designed to support 200 lbs. If there are to be tie-offs integral to the perimeter rail surrounding skylights at GL 11 and 28, please confirm that the rail is designed to support a point load of 5000 lbs.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The design team believes the tie-offs are required. The loading requirement for the fall arrest is required at the anchorage locations. The entire railing system does not need to meet the fall arrest anchorage load requirement. The fall protection applies only to the indicated single tie off anchor labeled on WW1-1703 & WW1-1706.

P1-0183.2	**Additional Information TG08.3 Skylight Fall Protection Tie offs**	**Closed**	**07/28/2014**	**08/07/2014**	**08/05/2014**	**Potentially**	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference WW1-1703 and WW1-1706

Provide connection details and locations for each the tie-off anchor required for Skylights at GL 11 and 28.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Tie-off anchors are NOT required for Skylights at Gridlines 11 and 28. Refer to attached sketches SKA-3908 and SKA-3909.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Coordinate Window Washing, Architectural and Structural drawings. Are the tie-off anchors around Skylights at GL 11 and 28 integral to the skylight or are they stand alone.

P1-0184 **TG08.7 Bearing Support for W-13 Glass Floor** **Closed** **06/10/2014** **06/20/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Jonathan Flaming **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: S1-6010 and S1-6020

Bearing support shown in detail 8/S1-6010 is not the same as that shown in detail 1 and 2/S1-6020. Please clarify bearing support to be used.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Detail 8/S1-6010 does not show a bearing support, the detail shows a cross section of the structural steel.

The detail has been updated to add more dimension lines to clearly indicate that 8/S1-6010 does indeed match the details 1/S1-6020 and 2/S1/6020. This will be issued in a future Addendum.

The bearing itself is described in great detail in the specification section on drawing S1-6020.

P1-0184.1 **TG08.7 Bearing Support for W-13 Glass Floor Detail** **Open** **07/03/2014** **07/13/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: P1-0184, 8/S1-6010, and 1 and 2/S1-6020

RFI P1-0184 Response: "Detail 8/S1-6010 does not show a bearing support, the detail shows a cross section of the structural steel.
The detail has been updated to add more dimension lines to clearly indicate that 8/S1-6010 does indeed match the details 1/S1-6020 and 2/S1/6020. This will be issued in a future Addendum.
The bearing itself is described in great detail in the specification section on drawing S1-6020. "

P1-0184.1: Response to P1-0184 refers to a revised detail

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Updated drawings will be submitted with ASI 0120 dated July 11, 2014.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

to be issued in a future bid package. The detail is required to accurately bid the associated trade package. Please provide the revised detail referenced in the RFI response.

P1-0185 **TG08.7 Glass Floor Support** **Closed** **06/10/2014** **06/20/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Jonathan Flaming **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference S1-6020

What is the round piece of steel sitting on top of the bearing support shown in detail 2/S1-6020? Provide dimension and clarify type 2 support.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to detail 1/S1-6020 and 3/S1-6020 for this information.

P1-0186 **TG08.7 SS Sliding Plate for W-13 Glass Floor** **Closed** **06/10/2014** **06/20/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Jonathan Flaming **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference 3/S1-6020

How does the Stainless Steel sliding plate attach to the structural steel sliding plate? Please clarify.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The sliding bearing is a design-build item. It can be welded, bolted, glued or any other form of attachment method. It will be up to the contractor to select a bearing and with that define a way to attached it to the supporting steel framing.

P1-0187 **TG08.7 W-13 Glass Floor Detail Reference** **Closed** **06/11/2014** **06/21/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Jonathan Flaming **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference 1/S1-6010, 2/S1-6010, and 2/S1-6020

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Correct, it should reference to 2/S1-6020. The detail will be updated to reflect the correct reference and

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Detail 1/S1-6010 references a 2/S1-6010 which does not exist. Should it refer to detail 2/S1-6020?

issued in a future ASI

P1-0188 **Top Coat Material and Color** **Closed** **06/17/2014** **06/27/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: IFC Set 07 81 23 2.4 C

Per IFC Set 07 81 23 2.4 C, the decorative top coat for intumescent paint is as specified in 09 97 15, and the custom color is to be selected by TJPA. There does not appear to be a system for top coating intumescent paint specified in 09 97 15, nor a color shown for the finish. Please specify the top coat material, and color.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Specification 07 81 23 2.4 C is correct. The topcoat or finish coat of steel members fireproofed per 07 81 23 shall adhere to the paint systems specified on 09 97 15.

The specified epoxy intumescent coating system is compatible with a wide variety of paint system top coats. Additionally, the contractor shall comply with 09 97 15 1.3 B and 2.3 A and 2.3 B.

The colors will be indicated in the drawings in upcoming ASI.

P1-0188.1 **Top Coat and Color for Intumescent Coated Steel** **Closed** **07/22/2014** **08/01/2014** **08/20/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: (IFC Drawings for Main Package dated 3/31/14)
Specification Section 07 81 23 2.4 C
Specification Section 09 97 15

Specification Section 07 81 23 2.4 C indicates that the top coat is to be an aliphantic urethane as specified in Specification Section 09 97 15.

Specification Section 09 97 15 does not have a coating system for steel coated in intumescent fireproofing.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Specification section 07 81 23 1.1 C.2 states that the finish coat is to comply with division 09 for the decorative top coat. Specification section 09 97 16 2.3, 2.4 and 2.5 provides the top/finish coat; this is the same coating system for steel elements coated in intumescent fireproofing.

Please refer the enclosed sketches for colors.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please provide the requested top coat and color.

P1-0189 **Paint Finish Schedule** **Closed** **06/18/2014** **06/28/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: 09 91 00 2.4 A, 2.4 B and A1-9601 - A1-9606

09 91 00 2.4 A indicates that paint colors are indicated on the finish and material schedule. 09 91 00 2.4 B indicates that the number of colors to be used will be determined by the TJPA Representative. Room finish schedules (A1-9601 - A1-9606), nor the paint finish schedule (09 91 00 3.7) appear to provide the paint colors. There does not appear to be a specification or drawings titled "Finish and Material Schedule". Please provide the paint colors and layout.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Both specification statements are correct: Paint colors are indicated on the finish and material schedule - this is found on Sheets A1-9191 to A1-9606; The number of colors has been selected by the TJPA Representative and it is indicated in the Materials Legend on Sheet A1-9606, which includes the rooms where colors occur.

There is no need for paint layout.

The paint finish schedule on 09 91 00 3.7 indicates the paint system according to the surface or substrate.

P1-0190 **Intumescent Paint** **Closed** **06/18/2014** **06/28/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

- 09 91 00 3.7 indicates there is an intumescent paint for plywood backing panels. Architectural, electrical, and telecommunication drawings call out for ¾" pressure treated, fire retardant plywood backing. Finish schedules show the interior walls of electrical and low voltage rooms are to be painted. Specified coatings may not be compatible with the pressure treated, fire retardant plywood. Please confirm intumescent paint is required on the pressure treated, fire retardant plywood backing. If intumescent paint is required, please confirm the pressure treated, fire retardant plywood is compatible with the specified intumescent coatings. NOTE: This may be a good VE item.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Reference to painting of plywood backing panels has been deleted from Section 09 90 00. Updated specification shall be delivered with subsequent ASI.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0191	Plywood installation	Closed	06/18/2014	06/28/2014	08/05/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: contract documents and 06 10 53
The contract documents call out for call out for plate steel to be installed over concrete or CMU walls (2/A1-9144 for example). The finish schedule, electrical, and telecom drawings call out for ¾" plywood to be installed over the walls in these locations. 06 10 53 does not provide information on fasteners/ spacing of fasteners, and there do not appear to be details for fastening plywood through steel plated concrete/CMU walls. Please provide information on installation of plywood panels to steel plated conc./CMU walls.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See specification section 06 10 53 / 3.3.

Per specification section 01 10 40 / 1.6 C.2.f "The TJPA will reject requests for interpretations or clarification of the Contract Document which can reasonably be derived from a review of the Contract Documents."

Turner shall void this RFI and delete it.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0192	Required Mockups	Open	06/18/2014	06/28/2014	08/20/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: A1-8164 addendum 11 IFC main set

Indicate on the drawing what is intended to be mocked up now that the redline drawings (issued on May 16, 2014) have deleted the chamber mockups.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Addendum #11 is not the latest documents for W-2 System, please refer to ASI-120. Lab mockup on Sheet A1-8164 has been deleted and factory visual mockup is indicated in Sheet A1-8152 and revised Specifications.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0193	LEED Requirements Specific to Glazing	Open	06/18/2014	06/28/2014	07/11/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: 08 71 13

Please confirm that this specification does not have any LEED requirements. Additionally 08 71 13 was specific to TG08.1 Design Build Glazing however that trade package has been deleted, if it is needed for TG08.10 revise title accordingly.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Specification Section 08 71 13 does not have any LEED requirements.

To reflect WOJV's revised bidding plan, in a future ASI the title in footer and header for Specification Section 08 71 13 shall be revised to delete the WOJV TG08.1 package number.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0194	Glass Type	Closed	06/18/2014	06/28/2014	06/24/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: A/A1-8166

Please clarify the type of glass above the sill as indicated in this detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

evised sheet A1-8166 and Glass Types Specification 08 80 03 to be issued in future TG08.10 ASI.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0194.1	Glass Type Detail	Open	07/03/2014	07/13/2014	08/05/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: RFI P1-0194, A/A1-8166

RFI P1-0194 Response: "Revised sheet A1-8166 and Glass Types Specification 08 80 03 to be issued in future TG08.10 ASI."

P1-0194.1: Response to P1-0194 refers to revised details to be issued in a future bid package. The details are required to accurately bid the associated trade package. Please provide the revised details referenced in the RFI response

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

RFI P1-0194 Response is correct - as stated, Sheet A1-8166 and Specification Section 08 80 03 were included in ASI 0120 issued July 11, 2014, so there is absolutely no issue on this regard with the Bidding documentation. This RFI (RFI P1-0194.1) is not valid, as the CM/GC has the current schedule of submission of packages. Turner should void and delete this RFI.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0195	Glass Type	Closed	06/18/2014	06/28/2014	06/24/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: C/A1-8166

Please clarify the type of glass above the sill as indicated in this detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Revised sheet A1-8166 and Glass Types Specification 08 80 03 to be issued in future TG08.10 ASI.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0195.1	Glass Type	Closed	07/07/2014	07/17/2014	07/11/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference: RFI P1-0195, TG08.2/TG08.10 - Design/Build Glazing Systems addendum #11 C/A1-8166
Response to P1-0195 refers to revised details to be issued in a future bid package. The details are required to accurately bid the associated trade package. Please provide the revised details referenced in the RFI response.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

As WOJV was previously informed and as WOJV agreed to, the DB Glazing ASI 0120 is being issued July 11, 2014 to respond to review comments and RFI's for packages TG08.3 (W-10), TG08.7 (W-12, W-13) and TG08.10 (W-2, W-3, W-4, W-6 & W-8).

P1-0196 **Door Schedule** **Open** **06/18/2014** **06/28/2014** **07/02/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: A1-9711

Please complete the door schedule to include motor sizes to power the overhead coiling doors.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See specification section 08 33 23 / 2.5.D for performance requirements for motor size. Motor size shall be determined by the equipment manufacturer.

P1-0197 **W-6 at Superintendents Station** **Closed** **06/18/2014** **06/28/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 08 44 25 3.10 H
Please confirm that the W-6 Sliding Windows At Bus Deck Superintendents Station is no longer required as part of the W-6.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Bus Deck Superintendent's Station will be a pre-fabricated booth per VE mitigation meetings. Documentation for pre-fabricated booths to be issued in a future package.

P1-0198 **Operator Booths** **Closed** **06/18/2014** **06/28/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: A1-8275, Detail 6

Please clarify that the two operator booths are no longer

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed. The Muni Bus Plaza GGT Supervisor Booth and SFMTA Booth will be pre-fabricated booths per VE mitigation meetings. Documentation for pre-

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

part of W-6.

fabricated booths to be issued in a future package.

P1-0199 **Details for Pop out framed within W-2** **Open** **06/18/2014** **06/28/2014** **07/01/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: A1-8174 and detail 1
Please provide details for pop outs framed with the standard W-2 aluminum mullion system.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per June 10 and 11, 2014 TG08.10 drawing markup review meetings with WOJV and TJPA, as noted on sheets A1-8174 and A1-8189, revised W-2 pop-out framing to be provided according to typical details on A1-8170, A1-8171, A1-8175 and A1-8185. Revised A1-8174 and A1-8189 sheets are to be issued in upcoming TG08.10 Issue for Bid Package.

P1-0200 **PVC Detail** **Closed** **06/18/2014** **06/28/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 5/A1-8883

Per 5/A1-8883 2 ea. 2" dia. PVC pipes penetrate the train box wall for draining FJC2 at ground level. Per 5/A1-8883, concrete is to be poured tight to the PVC pipe, and no sealant/link seal/waterproofing is shown around the pipes within the wall. This may lead to the PVC pipe breaking at the wall if the concrete shifts, and a point for water intrusion at the train box wall. Please confirm this is the desired detail at this location.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The PVC pipes are provided with flexible couplers that are attached to flexible membrane and SS secondary gutters to allow both the gutter and PVC drains to move if the concrete shifts. Refer to annotations on details 4 and 5 of A1-8883 issued with the Main Package IFC dated March 31, 2014.

These PVC drain pipes receive 2 plies WPM-1A spiral wrap on the outside face of the foundation and SJ concrete end wall to prevent water intrusion. Refer to annotations on details 4 and 5 of A1-8883 issued with the Main Package IFC dated March 31, 2014.

WOJV shall review the details that interface with the Trainbox waterproofing with the WOJV waterproofing system subcontractor/designer (Best/Grace) and submit shop drawings for each waterproofing condition.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0201	Bus Crash Rail CIP detail	Closed	06/19/2014	06/29/2014	07/22/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

It has been indicated that the bus crash rail is to be changed to CIP concrete. The bus crash rails pass across seismic joints within the building. Please provide the seismic joint specification and details for this work.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to details 1, 2 & 3 on attached sketch SKA-3860 for seismic joint cover plate detailing.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0201.1	Fastening Requirements for 1/8" Thick SS Bent Metal Plates	Closed	07/23/2014	08/02/2014	08/20/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Sketch SKA-3680 of RFI Response P1-0201

Per Sketch SKA-3680 provided in RFI Response P1-0201, 1/8" thick SS bent metal plates are to be installed at the Bus Deck Level Crashrail.

Design requirements for attaching the SS bent metal plates referenced in SKA-3680 are not provided.

Please provide fastening requirements (anchor size & spacing, or engineering requirements) for 1/8" thick SS bent metal plates fastened on one side to be installed at the bus crash rail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Provide ½" dia. stainless steel drop in anchors with cap nut at 6" o.c.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0202	Call outs Marked "FUTURE"	Closed	06/19/2014	06/29/2014	07/02/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: Details 1,2,3,4, 5 of sheet A1-7589A. Multiple call outs are marked "(FUTURE)". Please confirm there is no scope of work related to these call-outs for Phase 1 work.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0203	Terrazo marked "FUTURE"	Closed	06/19/2014	06/29/2014	07/02/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Reference: Detail 4 of sheet A1-7589A. Detail 4 calls out to "INFILL FRAME WITH TERRAZZO FINISH (FUTURE)". Please confirm that this infill of terrazzo will not be part of phase 1.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

P1-0204 **Future Loading of W-5 Cladding** **Open** **06/19/2014** **06/29/2014** **07/02/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: Detail 1 / A1-7844. Detail 1 shows a future W5 Wall Cladding (as part of Phase 2) which will be attached to a train platform partition (partition type 31 as part of Phase 1). Specification 09 22 19 requires that the metal framing of the partition be designed by the Trade Contractor. Is the trade contractor to include the loading of the future W-5 cladding in his design calculations for the metal framing? If so please provide the loading of the future W-5 cladding to be used in the design calculations.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. The trade contractor is responsible to include the loading of the future W-5 cladding in his design for the metal framing.

2. For loading requirements of the future W-5 cladding system to be used in the design calculations for metal framing, refer to specification section 08 44 39 under 2.3 Design Criteria.

P1-0205 **FJC3A spec and Drawing information** **Closed** **06/19/2014** **06/29/2014** **07/28/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Per 1/A1-8894 FJC3A is to be installed at the bus deck level guardrail, and to refer to specification. 07 09 15 indicates that FJC3A is specified in 07 09 13. 07 09 13 does not indicate the manufacturer, type, gutter, or integration into FJC3. There does not appear to be details showing extent of FJC3A, or tie-in to adjacent expansion joints. Please provide omitted specification and drawing information.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See specification section 07 09 13 / 3.4 C & D: "Moisture Barrier: Manufacturer's standard modified as shown on drawings."

P1-0206 **Galv. Metal Plate at Fireproofed Beam** **Closed** **06/20/2014** **06/30/2014** **07/22/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference: 3/A1-8894 and 3/A1-8897

Per 3/A1-8894 dated 03/31/14 and 3/A1-8897 dated 03/31/14, galv. metal plate is covering a fireproofed beam is to be furnished and installed at the edge of the bus deck and roof park levels. Structural does not appear to show these plates. Please provide size, location, attachment requirements, and fireproofing details for these plates.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to attached sketch SKA-3860. Detail 4 has been added to clarify FJC3A seismic joint assembly and components.

Note: there is no galv. metal plate noted nor required for the seismic joint assembly at Roof Park Level (3/A1-8897).

P1-0206.1 **Design Requirements for Galvanized Metal Plate per Detail 3/A1-8897** **Closed** **07/23/2014** **08/02/2014** **08/20/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0206, Detail 3/A1-8897 (IFC Drawings for Main Package dated 3/31/14)

Per RFI Response P1-0206, there is no galv. metal plate noted nor required for the seisimic joint assembly at Roof Park Level (3/A1-8897).

Per Detail 3/A1-8897 (see attached) there is a "galv. metal plate covering fireproofed structural beam" which is not detailed within the documents (it is unknown if it is required for a seismic joint assembly).

Please provide the design requirements (size, extent, attachment, fireproofing, etc.) for the galvanized metal plate covering fireproofed structural beam depicted on Detail 3/A1-8897.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The response to previous RFI (P1-0206) is correct, there is no galv metal plate required at the fireproofed structural beams. Per VE Item #36, the GFRC system will be eliminated. Please see enclosed SKA-3818R1 and ASK-3963 with revised Roof Park and Bus Deck level fascia drawings, including the seismic joint details.

P1-0207 **Bus Crash Rail Leave Out Areas** **Closed** **06/20/2014** **06/30/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: SKS-358 (S1-8000)

Per SKS-358 (S1-8000) dated 06/18/14, the continuous

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

bus crash rail is to have #5 rebar stubbed out of the structural slab. Areas of the bus crash rail are to be left out in order to accommodate material landing areas. Please confirm it is acceptable to use form savers at the leave out areas of the bus crash rails.

P1-0208 **Alum. Checker Plate** **Closed** **06/20/2014** **06/30/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-7504, A1-7506, A1-7507

Per the VE, Alternate Second Mitigation issued on 5/16/14 Alum. Checker Plate was removed from the stairwell walls however sheets A1-7504, A1-7506, & A1-7507 still show Alum. Checker Plate. Please confirm keep these locations or delete them.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Checker plate has been removed from all Stairwells. Refer to SKA-3726, 3727, & 3728.

P1-0209 **Topping Slab Reinforcement** **Closed** **06/20/2014** **06/30/2014** **07/22/2014** **Potentially** ☐

From: Webcor Construction LP Scott Shope **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-9520

Per the topping slab notes (A1-9520 for instance), reinforcement is called out. No details are referenced for special requirements within the slab (penetrations, column leave outs, construction joints, etc.). Please confirm no additional reinforcement (trimmers at openings, keyways at construction joints, expansion joints at walls, etc.) is needed within the topping slabs other than what is required by the topping slab notes.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Provide rebar in the architectural topping slab around openings, column block-outs and at construction joints per attached sketch SKS-0370. For pipe and conduit penetrations through the topping slab, detail 4/S1-3500 shall apply.

P1-0210 **Galvanized Plate Detail** **Closed** **06/23/2014** **07/03/2014** **07/22/2014** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: A & B/A1-8890

A & B/A1-8890 note "Extent of Galvanized Plate" along GL 10 and 20 between GL H to GL F, and GL D to GL B. The plans, section, and details of these areas do not appear to show galvanized steel plate in these locations. Please provide plans, sections, and details for the referenced galvanized steel plates, or remove the notes if they are not applicable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to attached sketch SKA-3885 for corrected annotation related to sheet A1-8890. Also refer to response for RFI P1-206 for requested detailing related to FJC3A seismic joint assembly.

P1-0211 **IFRM Layout** **Closed** **06/23/2014** **07/03/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: Per A/A1-8662

Per A/A1-8662, IFRM-2 is located on the tubular portion of the light column, stopping below the cast node. Per E/A1-8662, IFRM-1 is to be applied to the tubular portion of the light column below the cast node, and IFRM-2 is to be applied to the cast node. Please revise the details to match the desired IFRM layout.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Detail E/A1-8662 has been revised per the attached SKA-3795 to conform with detail A/A1-8662

P1-0212 **Hot dipped galvanized Plates** **Closed** **06/23/2014** **07/03/2014** **07/22/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Per 1/A1-8894

Per 1/A1-8894 there are hot dipped galvanized plates below the Bus Deck expansion joints (see below), and to refer to structural. Per 1/S1-5005 (see below) these plates are not shown. Please provide the size, dimensions, and attachment for these plates.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to response for RFI P1-0206.

☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0213	Clarification on Recoating of Damaged Surfaces	Closed	06/25/2014	07/05/2014	07/11/2014	Potentially	

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Specification 07 81 23 3.7 B (IFC Drawings for Main Package dated 3/31/14)

Per Specification 07 81 23 3.7 B, the subcontractor is to "repair areas cut-out or damaged as result of testing. Make repair area invisible under normal lighting conditions at the site from a distance of 2 feet." This requirement may exceed industry standard and result in recoating the entire surface in order to make the required repairs.

Please confirm TJPA intends to have surfaces damaged due to testing entirely recoated to meet the invisibility at 2 feet requirement.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Follow the Contract Document specification.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0214	Request for FJC2 Joint Specification at Ground Level	Closed	06/25/2014	07/05/2014	07/11/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Drawing A1-8880, Specification 07 09 13 (IFC Drawings for Main Package dated 3/31/14)

Per drawing A1-8880, there are 2 ea. FJC2 expansion joints. One of the FJC2 joints is located at the W-12 exterior glass system (GL 20), and one on the Ground Level adjacent to Beale Street (GL 35). FJC2 as specified in 07 09 13 appears to be for the W-12 system, and 07 09 15 does not appear to specify a seismic joint for FJC2.

Please provide a specification for the FJC2 joint located at the Ground Level.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The enclosed SKA-3735, SKA-3736 Drawings and Specification pages with 07 09 13 markup clarify seismic joint assemblies FJC1 and FJC2 accordingly.

Revised construction documents will be submitted in forthcoming ASI.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0215	Panel Noise and Vibration	Closed	07/01/2014	07/11/2014	07/11/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Reference 2014/06/16 W-1 Re-issued for Bid 08 44 27 2.2N
Noise and/or vibration due to wind are listed as an unacceptable conditions. There is the possibility that wind will create noise and/or vibration in properly installed panels because of factors such as (but not limited to) perforations and gaps between panels. If provisions remains in the specifications, they may result in additional cost in the bids and/or limit the bidding pool. Confirm that noise and/or vibration caused by wind within properly installed panels will be acceptable.

JV, TJPA, PMPC, and the design team discussed this extensively. The specification as written is the agreed upon Contract Document. Noise and/or vibration caused by wind are not acceptable and are assumed, until determined otherwise, to be an indication that the panels are not installed properly.

P1-0215.1 **Exterior Awning Noise Due to Wind** **Void** **08/13/2014** **08/23/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Reference Specification Section 08 44 27 Section 2.2N (TG08.2 Issued for Rebid Documents)

Please confirm that noise due to wind moving through the patterns cut out in the Aluminum Panels of the Exterior Awning and through the gaps between the panels Exterior Awing and noise due to wind moving above and below the entire system is not to be considered an unacceptable condition. The contractor is providing the pattern per the contract documents and they will have no control over any noise due to wind moving through the predetermined pattern, gaps between each panel and wind moving above and below the entire system. The contractor should only be responsible for noise due to vibration caused by poor workmanship and should not be responsible for any noise due to the inherent design of the W-1 Exterior Awning.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

P1-0216 **Touch up Specification** **Closed** **07/01/2014** **07/11/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference 08 44 27 3.10 F.1.b
Specification Section 08 44 27 calls for touchup so that repair is invisible from a distance of 2 ft. According to PDCA P1-04 TOUCH-UP PAINTING AND DAMAGE REPAIR (see attached), Section 2.3 states: "...In order to determine whether a surface has been "properly painted" it shall be examined without magnification at a distance of thirty-nine (39) inches or one (1) meter, or more, under finished lighting conditions and from a normal viewing position."

Based on PDCA recommendations, anything less than 39¿ may result an unnecessary increase in cost to the bids. Additionally, the nearest normal viewing position of the final constructed awning will be several meters. Please confirm that the 2 ft. requirement is to remain.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed, follow the Contract Documents.

P1-0217 **Multiple Seismic Joint Assembly Manufacturers per Specification Section 07 09 1** **Closed** **07/02/2014** **07/12/2014** **07/22/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Transbay PMPC Ray Quesada

Co-Author:

REQUEST:

REFERENCE: Specification Section 07 09 13 2.2 A 1 (IFC Drawings for Main Package dated 3/31/14)

Per Specification Section 07 09 13 2.2 A 1, Construction Specialties, Inc. is the basis of design for the seismic joint assemblies. As such, the details associated with the seismic joints which were bid out to Shimmick and Skanska were based upon Construction Specialties, Inc. Specification 07 09 13 2.2 A goes on to list another 3 manufacturers which can be used. Since each manufacturer may require different block-outs, embeds, attachment to structure, etc., there could be some added unforeseen costs if a bidder uses a product which is not the basis of design.

Would TJPA like us to direct the bidders to cover any costs associated with any changes required due to the use of a product which is not the basis of design, or would TJPA like to carry the risk/costs associated with this?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Let the bidders know that Construction Specialties is the basis of design and that the bidder will need to cover any costs associated with using one of the other listed manufacturers.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0218	Inconsistent Specification and Drawing References for Joint Sizes and Movement	Closed	07/02/2014	07/12/2014	07/11/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Specification Section 07 09 13 2.4 B, Detail 2/A-8880, Detail 1/A1-8880 (IFC Drawings for Main Package dated 3/31/14)

Per Specification Section 07 09 13 2.4 B, there is a chart indicating joint sizes and movement requirements on Detail 2/A-8880. The chart is on Detail 1/A1-8880. Please revise the specification section to agree with the drawing.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Specification Section 07 09 13 2.4 B has been revised to state:

"B. Refer to Drawing 1/A-8880 for chart indicating joint sizes and movement requirements."

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0219	Seismic Joint Type FJC1 Within the Roof Park Landscaping/Paving	Closed	07/02/2014	07/12/2014	07/11/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Sheet A1-8880 (IFC Drawings for Main Package dated 3/31/14)

Per Sheet A1-8880, Seismic Joint Type FJC1 is located within the roof park landscape/paving. Is Seismic Joint Type FJC1 to be deferred with the rest of the roof park?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Seismic Joint Type FJC1 is a Base Building component that is required to enclosed and waterproof the building and therefore it is not deferred with the park.

The seismic joint cover infill material may be installed per construction scheduled activities determined by the contractor.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0220	Park Deferral Waterproofing	Open	07/02/2014	07/02/2014	07/11/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: Addendum #11 Dated 05-16-14 A1-8404 detail 1
Due to the deferral of the roof park landscaping items that would have been covered, the waterproofing and drainage gutter assembly for the W-10 Skylight, be exposed to UV and weather for a prolonged period of time. Please provide any provisions necessary to mitigate this changed condition.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This RFI refers to a question previously answered in RFI P1-135. The components of detail 1/A1-8404 are not impacted by the issues on RFI P1-0135.

☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0221	Inconsistent Drawing and Specification Titles for Expansion/Seismic Joints	Closed	07/02/2014	07/02/2014	07/11/2014	Potentially	

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Sheet A1-8880 , Specification Section 07 09 13 (IFC Drawings for Main Package dated 3/31/14)

Sheet A1-8880 is titled "Expansion Joint Schedule". Specification Section 07 09 13 is titled "Seismic Joint Assemblies". Please change one of the titles to match the other.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Sheet A1-8880 is titled "Expansion Joint Schedule", because it provides in a listing form graphical aspects of all expansion joints; it includes other expansion joints not found on Specification Section 07 09 13. Specification Section 07 09 13 is titled "Seismic Joint Assemblies" and puts forth the technical specification of seismic joint assemblies. The two documents do not provide the same information, thus titles are not the same.

P1-0222	Revision to Adjoining Material for Joint Types CJC1 and CJC2	Closed	07/02/2014	07/12/2014	07/11/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Sheet A1-8880 (IFC Drawings for Main Package dated 3/31/14)

Per Sheet A1-8880, the adjoining material for Joint Type CJC1 and Joint Type CJC3 is GFRC. Please revise the table to reflect the actual adjacent material to be used.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached SKA-3736.1 with revised adjoining material for Joint Type CJC1 and Joint Type CJC3. Sheet A1-8880 will be issued in a future ASI.

P1-0223	Finish Clarification for Joint Type FJC6	Closed	07/02/2014	07/12/2014	07/11/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Sheet A1-8880 , Specification Section 07 09 13 3.4 G (IFC Drawings for Main Package dated 3/31/14)

Per Sheet A1-8880, the finish for Joint Type FJC6 and adjacent materials are to be selected by Tennant, while Specification Section 07 09 13 3.4 G indicates it is to be recessed to receive terrazzo. Please provide the desired finish.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached SKA-3736.2 and Spec Section markup with revised infill material for seismic joint cover FJC6.

☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0224	Absence of Joint Type FJC7 at Bus Ramp Per Sheet A1-8880	Closed	07/02/2014	07/12/2014	07/11/2014	Potentially	

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Sheet A1-8880 (IFC Drawings for Main Package dated 3/31/14)

Per Sheet A1-8880, Joint Type FJC7 is located where the bus ramp abuts the building. Sheet A1-8880 does not appear to show an expansion joint at this location. Please revise Sheet A1-8880 to show the location of Joint Type FJC7 or provide details on the location of Joint Type FJC7.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Sheet A1-8880 is correct. FJC7 is detailed on sheet A1-8378.

Per specification section 01 10 40 / 1.6 C.2.f "The TJPA will reject requests for interpretations or clarification of the Contract Document which can reasonably be derived from a review of the Contract Documents."

Turner shall void this RFI and delete it.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0225	Joint Type CJC4 Locations per Sheet A1-8880 on the Ground Level and Second Le	Closed	07/02/2014	07/12/2014	07/22/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Sheet A1-8880, Sheet A1-4303, Sheet A1-4403 (IFC Drawings for Main Package dated 3/31/14)

Per Sheet A1-8880, Joint Type CJC4 is within GWB ceilings at GL 10 on the Ground Level and the Second Level. Sheet A1-4303 at GL 10 on the Ground Level shows W-16A, but does not call out a seismic joint or details. Sheet A1-4403 at GL 10 on the Second Level does not call out a seismic joint or details. Please revise the drawings and schedule to match.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please refer to following Sketches: SKA-3736.3, SKA-3820, SKA-3821 & SKA-3822 that clarify seismic joint cover CJC4 to be issued a subsequent ASI.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0226	Materials for Seismic Joint Assemblies per Specification Section 07 09 13	Closed	07/02/2014	07/12/2014	07/11/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE:
Specification Section 07 09 13 2.5
Specification Section 07 09 13 2.6
Specification Section 07 09 13 2.7
Specification Section 07 09 15

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Specification Section 07 09 13 / 2.5 and 07 09 13 / 2.6 are correct as stated. At the request of the CM/GC in different review meetings, the TJPA directed the Design Team to delete the requirement for a Corrosion Engineer in all the Glazing and Cladding specifications.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Spec Section 07 09 13 2.5 indicates the materials and coatings to be used. Spec Section 07 09 13 2.6 indicates that the joint assembly design to be based upon the design shown. Spec Section 07 09 13 2.7, indicates that an engineer is to design the materials for use in the seismic joints. Are the subcontractors to follow Spec Section 07 09 13 2.5 as per Spec Section 07 09 13 2.6, or redesign the materials per Spec Section 07 09 13 2.7? This is similar to Spec Section 07 09 15.

Specification Section 07 09 13 /2.7 is not incorrect as currently issued. However, to further reduce costs on the Project, Specification Section 07 09 13 / 2.7. will also be revised to deleted the requirement of a Corrosion Engineer and will state the following:

"Conduct a component-by-component analysis of potential corrosion resulting from galvanic action between materials, for components of the work of this section and provide report."

This revision will also be applied to specification Section 07 09 15. These two Specifications will be re-issued in subsequent ASI.

P1-0227 **Omitted Information for Joint Type FJC8** **Closed** **07/02/2014** **07/12/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Specification Section 07 09 13 3.4 I, Sheet A1-8880 (IFC Drawings for Main Package dated 3/31/14)

Specification Section 07 09 13 3.4 I calls out Joint Type FJC8. Sheet A1-8880 does not show that there is a Joint Type FJC8. Please provide the location and information for Joint Type FJC8 on Sheet A1-8880, or delete from the specification section.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Specification Section 07 09 13 / 3.4 I is correct. Joint Type FJC8 is found on sheet A1-8478. Joint FJC8 has been added to Sheet A1-8880 see enclosed sketch.

A1-8880 will be issued in subsequent ASI.

P1-0228 **Specification for Joint Type RJC1 per Sheet A1-8880** **Closed** **07/02/2014** **07/12/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Sheet A1-8880, Specification 07 09 13 (IFC Drawings for Main Package dated 3/31/14)

Sheet A1-8880 calls out Joint Type RJC1. Specification

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Joint Type RJC1 was deleted, see enclosed sketch. Sheet A1-8880 will be issued in subsequent ASI.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Section 07 09 13 does not appear to specify this seismic joint. Please provide the specifications for this product.

P1-0229 **Adjacent Material for Joint Type WJC7** **Closed** **07/02/2014** **07/12/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Sheet A1-8880, Detail 3/A1-8897 (IFC Drawings for Main Package dated 3/31/14)

Per Sheet A1-8880, Joint Type WJC7 is within the park level exterior fascia, and bus deck exterior fascia. Sheet A1-8880 calls for concrete and metal panel as the adjacent materials. Detail 3/A1-8897, calls for W-18 as the adjacent material. Please confirm these are the correct adjacent materials, or revise drawings and schedule.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

WOJV has received the VE construction document revision schedule and is aware through documents issued by TJPA of the information requested in this RFI. Turner should reject this RFI and Void it.

The work of the Roof Park Level and Bus Deck Level fascias will be included in ASI for VE Round 4 to be issued August 18, 2014.

P1-0230 **Information for Specification Section 03 30 03 per Sheet A1-9522** **Closed** **07/02/2014** **07/12/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Sheet A1-9522 (Attached), Specification Section 03 30 03 (IFC Drawings for Main Package dated 3/31/14)

Per the notes on Sheet A1-9522, the concrete topping slab in the following locations are to be provided with the required thickness and as described by the structural engineer in Specification Section 03 30 03:

- Train Platform & Lower Concourse Level
- Vehicle and Bicycle Ramp
- Bus Deck Level Topping & Curbs
- All Other Concrete Toppings

No documentation is provided for Specification Section 03

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The notes on the drawings have been revised from "section 03 30 03" to read "section 03 30 02". Refer to the attached SKA-3750 which reflects updated Trainbox topping slab notes. This amendment is applicable to drawing sheets# A1-9520, A1-9521, and A1-9523 to A1-9537.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

30 03. Please provide the specifications for section 03 30 03.

P1-0230.1 **Details and Specifications for Concrete Sloping to Zero Thickness** **Closed** **07/15/2014** **07/25/2014** **07/22/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0230

Per RFI Response P1-0230, topping slab concrete is to be as specified in Specification Section 03 30 02. Per Specification Section 03 30 02, all concrete mixes, excluding the concrete fill at basket columns, have a 3/4" aggregate.

In several locations (Train Platform Level GL 2 - 4 and GL A - F for example) show the topping slabs sloping to zero thickness. This condition will not allow the use of aggregate or reinforcing as noted on the revised sheets in the response to RFI Response P1-0230.

Please provide details and specifications for sloping of concrete to zero thickness.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For typical detail for concrete at the small ramps, refer to Structural detail 5/S1-5003.

P1-0230.2 **Concrete Ramp Details for Structual Slabs Poured per Slab Plans** **Closed** **07/22/2014** **08/01/2014** **08/05/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0230.1, Detail 5/S1-5003 (IFC Drawings for Main Package dated 3/31/14)

RFI Response P1-0230.1 references Detail 5/S1-5003 for the installation of small ramps. Per Detail 5/S1-5003, there is a minimum slab thickness of 2" at the ramp, to saw cut the concrete at the nose of the ramp, and to

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The referenced structural detail calls for saw cut and roughening of the slab to ¼¿ amplitude. The architectural slab edge drawings are not intended to show areas of slab roughening.

The small ramps have been shown on the architectural zone plans and on the structural details

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

roughen the surface of the structural slab to receive the ramp.

Architectural slab edge plans do not show depressions within the structural slabs where these ramps exist (topping slab ramps or housekeeping pad/mechanical pad ramps). As such, a 2"x40" swath of concrete would need to be removed where concrete has been poured per the slab plans (note - mat slab rebar is 1.5" clr. from the t.o. slab, 1 way slab and composite deck rebar is 3/4" clr. from the t.o. slab).

Please provide revised concrete ramp details where structural slabs have been poured per the slab plans.

since well before the Below Grade Package TG07 Issue for Construction. Execution of this a contractors means and methods item and the drawings do not need to be revised as requested in this RFI.

P1-0230.3 **Rebar Depressions and Fixes at 2" Depressions** **Closed** **08/14/2014** **08/24/2014** **08/27/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Detail 5/S1-5003 (IFC Drawings for Main Package dated 3/31/14)

Detail 5/S1-5003 requires a minimum 2" thickness of concrete for the ramp. In order to maintain a minimum 2" thickness, a depression in the slab will need to be provided at the ramps. Depressions are shown on the slab edge plans.

Train platform, lower concourse decks, and associated reinforcement are part of TG06, not TG07.2.

Please revise the plans to show depressions and fixes for rebar at the 2" depressions, or provide a different material to form the ramps which can be tapered to the thickness required (for instance Ardex).

Alternatively, all ramps, with exception to one, can be removed at the ADA path of travel and a painted step can create a warning stripe.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is not necessary to provide depressions in the slab for the small concrete ramps. As suggested in the RFI, a different material can be provide the taper of the small ramps.

Specification section 09 30 00 to be revised as follows:

09 30 00 2.7.H Leveling Topping: One of the following or equal.

1. Mapei "Planicrete 50" (basis of design)
2. Mapei "Mapecem"
3. Ardex "ERM"

For small ramp taper detail refer to SKA-4033.

Revise sketch SKA-4033 note for sawcut to read, "Provide 3/4" wide by 1/2" deep blockout."

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0231	Details for Embedded Plate per Detail 2/A1-9228	Closed	07/08/2014	07/18/2014	07/22/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: RFI P1-0063 Response, Detail 2/A1-9228, Sheet SKA-3667 (IFC Drawings for Main Package dated 3/31/2014)

Per RFI P1-0063 response, "Detail 2/A1-9228 has been updated. Detail reference 4/A-0026 SIM has been removed.
Refer to the attached SKA-3667."

The revised detail shows an embedded plate at the B.O. Lower Concourse Deck. No information is provided for the embeded plate. Please provide information on embedded plate.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

AAI Response: For updated 2/A1-9228, refer to updated SKA-3667R1

TT Response: See detail 5/S1-9001 for top of CMU wall brace detail. Note, detail 5 allows for cast-in-place and post-installed options. Both are acceptable.

P1-0232	Details for Expansion Joint Located at the Bus Bridge, Bus Deck, and Building Co	Closed	07/11/2014	07/21/2014	08/05/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Details 2 & 3/A1-8378 (IFC Drawings for Main Package dated 3/31/14), Detail 4/SKA-3609 (ASI 119 dated 6/18/14)

Details 2 & 3/ A1-8378 depict an expansion joint to be placed where the bus bridge conjoins with the bus deck. The same expansion joint is not shown in Detail 4/SKA-3609 at the same location.

Please provide details and specifications showing how the expansion joint interacts with the bus deck, buildling, and both sides of the new concrete bus crash rail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Expansion joint has been added to sketch SKA-3609_R1, see attached.

Details 2 and 3 on A1-8378 have been revised in SKA-3661_R1, to clarify the interaction of the building elements at Bus Ramp expansion joint FJC7.

Joint WJC9 added to clarify the interaction of W-9 panels at the bottom and sides of the Bus Ramp expansion joint. This joint is also included in revised seismic joint specification 07 09 13 and schedule on A1-8880 per attached. Both of these documents are being issued as part of ASI 0123 but have been included for clarification in this response.

P1-0233	ASI Precedence	Open	07/11/2014	07/11/2014	08/05/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

reference: A1-3100 (SKA-3670)
There are discrepancies between ASI 118 (Addendum #4) and ASI 119 for this sheet. ASI 118 and 119 are both dated 06/20/2014. Confirm that ASI 119 is meant to take precedence. It does not appear to be the most current version.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per request of WOJV and PMPC, all VE items issued in ASI 0118 (MEP/TE/SE/VT Issued for Bid Addendum 4) which were not related to MEP package were provided in ASI 0119. ASI 0119 is a combination of "VE Round 2" and "MEP/TE/SE/VT Issued for Bid - Addendum #4". This sheet - A1-3100 (SKA-3670) is the same sheet in each package. This is noted on the revision narrative provided with ASI 0119.

Per specification section 01 10 40 / 1.6 C.2.d "RFIs shall not be used for the following: the TJPA will not reply and will reject the RFI: d. Questions on contract administration procedural matters, unless they required interpretation or clarification of the Contract Documents." This questions relates to a contract administration procedural matter that WOJV jointly determine and assisted in providing direction on how the documents were to be issued and labeled. WOJV has not coordinated knowledge of this matter between the internal parties. WOJV shall void this RFI and Turner shall reject the RFI

P1-0234 **Maximum Tree Weight** **Open** **07/11/2014** **07/21/2014** **07/22/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: Landscape General L-0006 and L-0007

While sizing the maximum load for the rooftop cranes it was communicated by PWP and TT that the maximum tree size will be no greater than 25,000 lbs. How is the design team going to ensure that no trees shall be greater than 25,000 lbs when they arrive on site? Provide appropriate limits in the specifications and drawings.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

On sheet L-0006 Legend, under header General Park Level Tree Planting Plans, add note "No single plant material shall exceed 25,000 lbs."

P1-0235 **Tree Growth Weight** **Open** **07/11/2014** **07/21/2014** **07/22/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Reference: L-0006 and L-0007

While sizing the maximum load for the rooftop cranes it was communicated by PWP and TT that the maximum tree size will be no greater than 25,000 lbs and that the roof is designed for a maximum of 26,000 lbs. Confirm that the structure will be able to accommodate the additional tree weight which will incur over the years as the trees grow.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

TT Response:

The roof structure was designed for the tree weights given to us by PWP during the course of the design. It was noted that the tree weights are the "average" weight of the mature tree. For seismic design, the "average" tree weight was used, because the floor slab diaphragm will distribute the weight of all trees to the seismic force-resisting system. For gravity design of steel beams carrying the tree, a factor of safety of 2 is applied to the "average" weight to account for the situation when a specific tree outgrows the "average" weight. The tree weight for the seismic design and gravity design is tabulated in the contract document Detail 2/S-1013.

PWP Response:

The "average" size of tree materials was determined by species and available soil volume (growing medium).

P1-0236 **Details for Expansion Joint Covers in Concrete Barrier** **Void** **07/11/2014** **07/21/2014** **08/05/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Detail 1/SKA-3616 (ASI 119 dated 6/18/2014)

Detail 1/SKA-3616 calls for a expansion joint cover within the new concrete barrier. There are no details, specifications, or information on this expansion joint cover.

Please provide the details and specifications for the referenced expansion joint cover.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to response for RFI P1-0201 for seismic joint cover plate detailing. Refer also to Specification section ¿05 75 00 ¿ Architectural Metal Fabrications, Item 1.1.D.1.

P1-0237 **Details on Expansion Joint Connection to W-18 Facia** **Closed** **07/11/2014** **07/21/2014** **08/05/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

REFERENCE: Detail 3/SKA-3616, Details 1 & 4/SKA-3610 (ASI 119 dated 6/18/2014)

Detail 3/SKA-3616 depicts a new concrete barrier equipped with an expansion joint in place of the crash guard rail and support. Details 1 & 4/SKA-3610 illustrate the same newly added concrete barrier, omitting any details or specifications regarding the interaction between the expansion joint at the concrete barrier, bus deck, crash rail, and the adjacent W-18 facia.

Please provide the details and specifications for the expansion joint and adjacent W-18 facia connection referenced in Detail 3/SKA-3616 and Details 1 & 4/SKA-3610.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to response to RFI P1-0201 for seismic joint cover plate detailing on the concrete barrier.

Refer to attached sketch SKA-3860 for clarification of W-18 fascia connection at the seismic joint. Note: the W-18 fascia is currently under redesign and is being changed to a W-16C metal panel as part of the VE exercise. Revised documentation/detailing will be issued as part of VE Round 4 markups being issued Aug. 18, 2014.

P1-0238 **Part B Documentation Absent from Contract Documents** **Closed** **07/11/2014** **07/21/2014** **07/22/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Specification 07 09 13 1.1 B

Specification Section 07 09 13 1.1 B states, "Refer to Part B Documents applicable to this Section."

"Part B" documents do not appear to be a part of the contract documents. Please provide the Part B Documents referenced in Specification Section 07 09 13 1.1 B.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Specification Section 07 09 13 will be revised to delete paragraph 1.1B and will be issued in subsequent ASI.

See enclosed markup of specification text.

P1-0239 **Updated Table of Contents** **Open** **07/14/2014** **07/14/2014** **08/05/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: ASI 119 and spec 00 01 10
Marked up Table of Contents dated 06/18/2014 and 07/02/2014 does not reflect the consolidation of

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Sections 12 93 30 and 12 93 30/APA have been deleted and will be marked as "deleted" on the next issuance of the Table of Contents - this will be

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

specifications outlined by the Narrative. Based on the description, 12 93 30 and 12 93 30/APA have been fully consolidated into 28 16 44 and 28 16 44/APA. They should show as being deleted or revised if they are still meant to be included. At the moment there is conflicting information without this update. The TOC does not reflect the date of the most current marked up specs either. Provide clarification and an updated TOC.

indicated on the TOC being issued with the next ASI which contains specifications. Dates on the TOC match the last revisions made to the sections, markup specifications do not include a date change on the TOC and will only be updated once the markups are actually implemented and reissued.

P1-0240 **Incorrect Specification Reference** **Open** **07/14/2014** **07/24/2014** **08/05/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: ASI 119 and 00 50 00
00 50 00 markup dated 06/18/2014 - Section 2.5.H needs to refer to section 28 16 44, not 12 93 30. Please correct or provide clarification as to what they need to refer to in 12 93 30.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Turner shall void this RFI. Specification section 00 50 00 does not exist. See the attached specification index issued with ASI 119.

P1-0241 **Blockout or Sleeve Locations** **Closed** **07/14/2014** **07/14/2014** **07/22/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: ASI 119 and A1-3100
Routing for lines from HPU to Pull Box are indicated. Clarify if blockouts or sleeves are being added for TG07.2 to accommodate this, as discussed at RFI meeting on 05/23/2014. If so, provide for every location. It is not clear on these drawings.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to Edge of Slab sheets in ASI-0121 issued on 07/18/2014. Design Team does not assign scope for Trade Groups.

P1-0241.1 **Blockout or Sleeve Locations** **Open** **07/29/2014** **08/08/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

SUGGESTION:

ANSWER:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Accept Suggestion: ☐

reference : ASI 121: A1-2870, A1-2862, A1-2864, A1-2866, and A1-2867

RFI P1-0241 response: "Refer to Edge of Slab sheets in ASI-0121 issued on 07/18/2014. Design Team does not assign scope for Trade Groups."

Edge of Slab sheets do not show block outs for bollard and barrier hydraulic and electrical lines to each of the HPUs as was discussed in RFI meeting on 05/23/2014.
- A1-2870 - Provide sleeves or blockouts for retractable bollards and barriers in the shoring wall area at vehicle ramp so that hydraulic and electrical lines may reach the HPU.
- A1-2862 - Provide sleeves or blockouts for retractable bollards and barriers at GL 1 and Natoma St. so that hydraulic and electrical lines may reach the HPU.
- A1-2864 - Provide blockout and/or sleeves for Natoma loading dock area so that hydraulic and electrical lines may reach the HPU.
- A1-2866 and A1-2867 - Confirm that 4"" SL's on GL 27 and 343.5 are for the wedge barrier hydraulic and electrical lines to reach the HPU below. If not, provide sleeves or blockouts so that hydraulic and electrical lines may connect to the HPU.

Refer to sheets A1-2852, A1-2862, A1-2864, A1-2866 and A1-2867 issued with ASI# 0123 on 08/06/2014. Also refer to attached SKA-3432 (based on sheet A1-2870).

P1-0242 **Blockout or Sleeve Locations** **Closed** **07/14/2014** **07/24/2014** **07/29/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: ASI 119 and A1-3105 (SKA-3584)
A1-3105 (SKA-3584) shows routing for retractable bollards from HPU. Clarify if blockouts or sleeves are being added for TG07.2 to accommodate this, as discussed at RFI meeting on 05/23/2014. If so, provide for every location. It is not clear on these drawings.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to Edge of Slab sheets in ASI-0121 issued on 07/18/2014. Design Team does not assign scope for Trade Groups.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0243	Blockout or Sleeve Locations	Closed	07/14/2014	07/24/2014	07/29/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: ASI 119 and SKA-3584 (A1-3105)
Routing for lines from HPU to Pull Box are indicated. Clarify if blockouts or sleeves are being added for TG07.2 to accommodate this, as discussed at RFI meeting on 05/23/2014. If so, provide for every location. It is not clear on these drawings.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to response provided to RFI P1-0241.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0244	HPU Routing Detail	Closed	07/14/2014	07/24/2014	07/22/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: ASI 119 and SKA-3584 (A1-3105)
Routing for lines from HPU to Pull Box and Retractable Bollards are drawn as red and blue. Define the difference between the red and blue lines. They are not labeled.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The routing of power and hydraulic lines is part of Retractable Bollard fabricator/bidder's scope. SKA-3584 (A1-3105) assumes one of many possible solutions to be provided by the Retractable Bollard fabricator/bidder. In SKA-3584 blue lines assume electrical conduits, while red lines assume hydraulic feed conduits.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0245	Information on Steel Plates for Utility Pads	Closed	07/14/2014	07/14/2014	08/05/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Sheet A1-3002 (IFC Drawings for Main Package dated 3/31/14)

As shown on Sheet A1-3002, steel plates have been added to the utility pads. No information is provided regarding the thickness of the steel plates, attachment details, or grounding details.

Please provide the thickness, attachment, and grounding details for the steel plates referenced on Sheet A1-3002.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

AAI Response:

For Steel plates thickness and size refer to SFPUC drawing sheets# ES-2213 to ES-2215.

TT Response:

Steel plates shall be embedded in the concrete pads with shear studs welded to the bottom of the plates as shown in detail 5/S1-3002.

WSP Response:

Typical for each steel plate at the SFPUC

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

transformers: Contractor to tap the grounding electrode conductor embedded in the vault slab. Extend tap conductor in the slab and bond to the steel plate. Additionally, contractor to bond the metal ladders in the vaults and sumps pits. Bond to building steel. See attached sketch SKE-036 and apply required scope revision for each vault.

P1-0246 **ASI 118 and 119 Discrepancy** **Open** **07/14/2014** **07/14/2014** **07/29/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: ASI 118, 119 and A1-7416 (SK-3524)
There are discrepancies between ASI 118 (Addendum #4) and ASI 119 for this sheet. ASI 118 and 119 are both dated 06/20/2014. Confirm that ASI 119 is meant to take precedence. It does not appear to be the most current version.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per request of WOJV and PMPC, all VE items issued in ASI 0118 (MEP/TE/SE/VT Issued for Bid Addendum 4) which were not related to MEP package were provided in ASI 0119. ASI 0119 is a combination of "VE Round 2" and "MEP/TE/SE/VT Issued for Bid - Addendum #4". This sheet - A1-7416 (SKA-3524) is the same sheet in each package. This is noted on the revision narrative provided with ASI 0119.

Per specification section 01 10 40 / 1.6 C.2.d "RFIs shall not be used for the following: the TJPA will not reply and will reject the RFI: d. Questions on contract administration procedural matters, unless they required interpretation or clarification of the Contract Documents." This questions relates to a contract administration procedural matter that WOJV jointly determine and assisted in providing direction on how the documents were to be issued and labeled. WOJV has not coordinated knowledge of this matter between the internal parties. WOJV shall void this RFI and Turner shall reject the RFI.

P1-0247 **ASI 118 and 119 Discrepancy** **Closed** **07/14/2014** **07/24/2014** **07/29/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Reference: ASI 118, 119 and A1-7418 (SKA-3526)
There are discrepancies between ASI 118 (Addendum #4) and ASI 119 for this sheet. ASI 118 and 119 are both dated 06/20/2014. Confirm that ASI 119 is meant to take precedence. It does not appear to be the most current version.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per request of WOJV and PMPC, all VE items issued in ASI 0118 (MEP/TE/SE/VT Issued for Bid Addendum 4) which were not related to MEP package were provided in ASI 0119. ASI 0119 is a combination of "VE Round 2" and "MEP/TE/SE/VT Issued for Bid - Addendum #4". This sheet - A1-7418 (SKA-3526) is the same sheet in each package. This is noted on the revision narrative provided with ASI 0119.

Per specification section 01 10 40 / 1.6 C.2.d "RFIs shall not be used for the following: the TJPA will not reply and will reject the RFI: d. Questions on contract administration procedural matters, unless they required interpretation or clarification of the Contract Documents." This questions relates to a contract administration procedural matter that WOJV jointly determine and assisted in providing direction on how the documents were to be issued and labeled. WOJV has not coordinated knowledge of this matter between the internal parties. WOJV shall void this RFI and Turner shall reject the RFI.

P1-0248 **Information on Checker Plate on Loading Dock CMU Walls** **Closed** **07/14/2014** **07/14/2014** **08/05/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Detail B/A1-3101 (IFC Drawings for Main Package dated 3/31/14)

Detail B/A1-3101 calls for checker plates to be fastened to the CMU walls in Loading Dock 01224. No details or design requirements have been provided for the attachment of the checker plates to the CMU Walls referenced on Detail B/A1-3101.

Please provide the details and design requirements for the depicted checker plates.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For design requirement of checker plate to CMU wall: ¿Attach, per CID A-A-1922A, 400 series stainless steel recessed fasteners through to stainless steel expanding sleeve in CMU wall. Flush countersunk fasteners maximum 2¿-0¿ o.c.¿. This requirement to be included in specification section ¿05 50 00 ¿ Metal Fabrications, item 2.5.N¿ in a future ASI.

Number	*Subject*	*Status*	*Date Created*	*Date Required*	*Date Answered*	*Cost Impact*	*Proceed*
P1-0249	**ASI 118 and 119 Discrepancy**	**Closed**	**07/14/2014**	**07/14/2014**	**07/29/2014**	**Potentially**	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: ASI 118, 119 and A1-7419 (SKA-3527)
There are discrepancies between ASI 118 (Addendum #4) and ASI 119 for this sheet. ASI 118 and 119 are both dated 06/20/2014. Confirm that ASI 119 is meant to take precedence. It does not appear to be the most current version.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per request of WOJV and PMPC, all VE items issued in ASI 0118 (MEP/TE/SE/VT Issued for Bid Addendum 4) which were not related to MEP package were provided in ASI 0119. ASI 0119 is a combination of "VE Round 2" and "MEP/TE/SE/VT Issued for Bid - Addendum #4". This sheet - A1-7419 (SKA-3527) is the same sheet in each package. This is noted on the revision narrative provided with ASI 0119.

Per specification section 01 10 40 / 1.6 C.2.d "RFIs shall not be used for the following: the TJPA will not reply and will reject the RFI: d. Questions on contract administration procedural matters, unless they required interpretation or clarification of the Contract Documents." This questions relates to a contract administration procedural matter that WOJV jointly determine and assisted in providing direction on how the documents were to be issued and labeled. WOJV has not coordinated knowledge of this matter between the internal parties. WOJV shall void this RFI and Turner shall reject the RFI.

P1-0250	**Reference for Corner Guards**	**Closed**	**07/14/2014**	**07/24/2014**	**08/05/2014**	**Potentially**	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Sheet A1-3105 (IFC Drawings for Main Package dated 3/31/14)

The "Corner Guards by Misc Metals" called out on Sheet A1-3105 are referencing Specification Section 05 51 00. Specification Section 05 51 00 is for Steel Stairs and Railing.

Please confirm that the "Corner Guards by Misc Metals" should be referencing Specification Section 05 50 00 for Metal Fabrications.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed, corner guards are referenced in Specification Section 05 50 00 ¿ Metal Fabrications.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0251	ASI 118 and 119 Discrepancy sheet A1-7420 (SKA-3528)	Open	07/14/2014	07/14/2014	08/05/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: ASI 118, 119 and A1-7420 (SKA-3528)
There are discrepancies between ASI 118 (Addendum #4) and ASI 119 for this sheet. ASI 118 and 119 are both dated 06/20/2014. Confirm that ASI 119 is meant to take precedence. It does not appear to be the most current version.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per request of WOJV and PMPC, all VE items issued in ASI 0118 (MEP/TE/SE/VT Issued for Bid Addendum 4) which were not related to MEP package were provided in ASI 0119. ASI 0119 is a combination of "VE Round 2" and "MEP/TE/SE/VT Issued for Bid - Addendum #4". This sheet - A1-7420 (SKA-3528) is the same sheet in each package. This is noted on the revision narrative provided with ASI 0119.

Per specification section 01 10 40 / 1.6 C.2.d "RFIs shall not be used for the following: the TJPA will not reply and will reject the RFI: d. Questions on contract administration procedural matters, unless they required interpretation or clarification of the Contract Documents." This questions relates to a contract administration procedural matter that WOJV jointly determine and assisted in providing direction on how the documents were to be issued and labeled. WOJV has not coordinated knowledge of this matter between the internal parties. WOJV shall void this RFI and Turner shall reject the RFI.

P1-0252	Indicator Light Pylons and Photo Electric Beam Pylons	Open	07/14/2014	07/24/2014	08/05/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: ASI 118 and 119 - A1-7420 (Detail C),
A1-7420 Detail C - Indicator light pylons and photo electric beam pylons are missing from either side of the retractable bollard sets based on A1-7418 and 28 16 44. Confirm that indicator light pylons and photo electric beam pylons are intended to be included in this detail and provide an updated detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed, indicator light and photo electric beam pylons are included. Refer to the attached sketches SKA-3903 and SKA-3904 showing indicator light pylons and photo electric beam sensors.

P1-0253	ASI 118 and 119 Discrepancy sheet A1-7421 (SKA-3529)	Closed	07/14/2014	07/24/2014	07/29/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference: A1-7421 (SKA-3529)
There are discrepancies between ASI 118 (Addendum #4) and ASI 119 for this sheet. ASI 118 and 119 are both dated 06/20/2014. Confirm that ASI 119 is meant to take precedence. It does not appear to be the most current version.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per request of WOJV and PMPC, all VE items issued in ASI 0118 (MEP/TE/SE/VT Issued for Bid Addendum 4) which were not related to MEP package were provided in ASI 0119. ASI 0119 is a combination of "VE Round 2" and "MEP/TE/SE/VT Issued for Bid - Addendum #4". This sheet - A1-7421 (SKA-3529) is the same sheet in each package. This is noted on the revision narrative provided with ASI 0119.

Per specification section 01 10 40 / 1.6 C.2.d "RFIs shall not be used for the following: the TJPA will not reply and will reject the RFI: d. Questions on contract administration procedural matters, unless they required interpretation or clarification of the Contract Documents." This questions relates to a contract administration procedural matter that WOJV jointly determine and assisted in providing direction on how the documents were to be issued and labeled. WOJV has not coordinated knowledge of this matter between the internal parties. WOJV shall void this RFI and Turner shall reject the RFI.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0254	Corner Guard Specification Details	Closed	07/14/2014	07/24/2014	08/05/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Specification Section 05 50 00 2.5M (IFC Drawings for Main Package dated 3/31/14)

Specification Section 05 50 00 2.5M states: "M. Corner Guards For Concrete Columns/Concrete Block Walls: as detailed, 4' x 4" x ½" fabricated aluminum angles, 4'-0" high minimum and as shown on drawings with anchor straps at 12" o.c."

The referenced details do not appear to be provided. Please provide the details called out in Specification Section 05 50 00 2.5M.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The corner guards are indicated in the Ground Floor Loading docks, refer to drawings A1-3100 and A1-3105 and at the B1 Level Oversized Equipment Storage Overhead Door, refer to drawings A1-7426 and A1-7427.

Per specification section 01 10 40 / 1.6 C.2.f "The TJPA will reject requests for interpretations or clarification of the Contract Document which can reasonably be derived from a review of the Contract Documents."

Turner shall void this RFI and delete it.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0254.1	VOID	Void	08/14/2014	08/24/2014		Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0255	ASI 118 and 119 Discrepancy sheet A1-7422 (SKA-3530)	Closed	07/14/2014	07/14/2014	07/29/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: ASi 118, 119 and A1-7422 (SKA-3530)
There are discrepancies between ASI 118 (Addendum #4) and ASI 119 for this sheet. ASI 118 and 119 are both dated 06/20/2014. Confirm that ASI 119 is meant to take precedence. It does not appear to be the most current version.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per request of WOJV and PMPC, all VE items issued in ASI 0118 (MEP/TE/SE/VT Issued for Bid Addendum 4) which were not related to MEP package were provided in ASI 0119. ASI 0119 is a combination of "VE Round 2" and "MEP/TE/SE/VT Issued for Bid - Addendum #4". This sheet - A1-7422 (SKA-3530) is the same sheet in each package. This is noted on the revision narrative provided with ASI 0119.

Per specification section 01 10 40 / 1.6 C.2.d "RFIs shall not be used for the following: the TJPA will not reply and will reject the RFI: d. Questions on contract

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

administration procedural matters, unless they required interpretation or clarification of the Contract Documents." This questions relates to a contract administration procedural matter that WOJV jointly determine and assisted in providing direction on how the documents were to be issued and labeled. WOJV has not coordinated knowledge of this matter between the internal parties. WOJV shall void this RFI and Turner shall reject the RFI.

P1-0256 **ASI 118 and 119 Discrepancy sheet A1-7423 (SKA-3531)** **Open** **07/14/2014** **07/24/2014** **08/05/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: ASI 118, 119 and A1-7423 (SKA-3531)
There are discrepancies between ASI 118 (Addendum #4) and ASI 119 for this sheet. ASI 118 and 119 are both dated 06/20/2014. Confirm that ASI 119 is meant to take precedence. It does not appear to be the most current version.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per request of WOJV and PMPC, all VE items issued in ASI 0118 (MEP/TE/SE/VT Issued for Bid Addendum 4) which were not related to MEP package were provided in ASI 0119. ASI 0119 is a combination of "VE Round 2" and "MEP/TE/SE/VT Issued for Bid - Addendum #4". This sheet - A1-7423 (SKA-3531) is the same sheet in each package. This is noted on the revision narrative provided with ASI 0119.

Per specification section 01 10 40 / 1.6 C.2.d "RFIs shall not be used for the following: the TJPA will not reply and will reject the RFI: d. Questions on contract administration procedural matters, unless they required interpretation or clarification of the Contract Documents." This questions relates to a contract administration procedural matter that WOJV jointly determine and assisted in providing direction on how the documents were to be issued and labeled. WOJV has not coordinated knowledge of this matter between the internal parties. WOJV shall void this RFI and Turner shall reject the RFI.

P1-0257 **ASI 118 and 119 Discrepancy sheet A1-7424 (SKA-3532)** **Open** **07/14/2014** **07/24/2014** **08/05/2014** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: ASI 118, 119 and A1-7424 (SKA-3532)

There are discrepancies between ASI 118 (Addendum #4) and ASI 119 for this sheet. ASI 118 and 119 are both dated 06/20/2014. Confirm that ASI 119 is meant to take precedence. It does not appear to be the most current version.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per request of WOJV and PMPC, all VE items issued in ASI 0118 (MEP/TE/SE/VT Issued for Bid Addendum 4) which were not related to MEP package were provided in ASI 0119. ASI 0119 is a combination of "VE Round 2" and "MEP/TE/SE/VT Issued for Bid - Addendum #4". This sheet - A1-7424 (SKA-3535) is the same sheet in each package.

Per specification section 01 10 40 / 1.6 C.2.d "RFIs shall not be used for the following: the TJPA will not reply and will reject the RFI: d. Questions on contract administration procedural matters, unless they required interpretation or clarification of the Contract Documents." This questions relates to a contract administration procedural matter that WOJV jointly determine and assisted in providing direction on how the documents were to be issued and labeled. WOJV has not coordinated knowledge of this matter between the internal parties. WOJV shall void this RFI and Turner shall reject the RFI.

P1-0258 **Manufacturers On-site for Bollard/Barrier Installation** **Open** **07/14/2014** **07/14/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 28 16 44 1.2.A ASI 119

1.2.A states that "Contractor is responsible for having the manufacturer of the product on site during the installation process to monitor the work associated with their product." Clarify how many hours the manufacturer needs to be on site. Is the Contractor required to have the manufacturer on site full time?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Manufacturer shall be the entity that determines how much time they require for their representative to review the work to certify the installation.

P1-0259 **ASI 118 and 119 Discrepancy sheet A1-8720 (SKA-3542)** **Open** **07/14/2014** **07/24/2014** **08/05/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference: ASI 118, 119 and A1-8720 (SKA-3542)

There are discrepancies between ASI 118 (Addendum #4) and ASI 119 for this sheet. ASI 118 and 119 are both dated 06/20/2014. Confirm that ASI 119 is meant to take precedence. It appears that neither ASI on its own is the most current for this sheet. Provide a revised sheet incorporating the most current information.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per request of W/O and PMPC, all VE items issued in ASI 0118 (MEP/TE/SE/VT Issued for Bid Addendum 4) which were not related to MEP package were provided in ASI 0119. ASI 0119 is a combination of "VE Round 2" and "MEP/TE/SE/VT Issued for Bid - Addendum #4". This sheet - A1-8720 (SKA-3542) is the same sheet in each package. This is noted on the revision narrative provided with ASI 0119.

Per specification section 01 10 40 / 1.6 C.2.d "RFIs shall not be used for the following: the TJPA will not reply and will reject the RFI: d. Questions on contract administration procedural matters, unless they required interpretation or clarification of the Contract Documents." This questions relates to a contract administration procedural matter that WOJV jointly determine and assisted in providing direction on how the documents were to be issued and labeled. WOJV has not coordinated knowledge of this matter between the internal parties. WOJV shall void this RFI and Turner shall reject the RFI.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0260	ASI 118 and 119 Discrepancy sheet A1-8721 (SKA-3543)	Open	07/14/2014	07/24/2014	08/05/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: ASI 118, 119 and A1-8721 (SKA-3543)
There are discrepancies between ASI 118 (Addendum #4) and ASI 119 for this sheet. ASI 118 and 119 are both dated 06/20/2014. Confirm that ASI 119 is meant to take precedence. It appears that neither ASI on its own is the most current for this sheet. Provide a revised sheet incorporating the most current information.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per request of WOJV and PMPC, all VE items issued in ASI 0118 (MEP/TE/SE/VT Issued for Bid Addendum 4) which were not related to MEP package were provided in ASI 0119. ASI 0119 is a combination of "VE Round 2" and "MEP/TE/SE/VT Issued for Bid - Addendum #4". This sheet - A1-8721 (SKA-3543) is the same sheet in each package.

Per specification section 01 10 40 / 1.6 C.2.d "RFIs shall not be used for the following: the TJPA will not reply and will reject the RFI: d. Questions on contract administration procedural matters, unless they required interpretation or clarification of the Contract Documents." This questions relates to a contract

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

administration procedural matter that WOJV jointly determine and assisted in providing direction on how the documents were to be issued and labeled. WOJV has not coordinated knowledge of this matter between the internal parties. WOJV shall void this RFI and Turner shall reject the RFI.

P1-0261 **Difference Between Bollards** **Open** **07/14/2014** **07/24/2014** **08/27/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 28 16 44 section 2.2
-Clarify the difference between Bollard Type 1 and Bollard Type 1A. They have the exact same requirements.
-Clarify the difference between Bollard Types 2, 2A, 2B and 2C. They have the exact same requirements.
-Clarify the difference between Bollard Types 3 and 3A. They have the exact same requirements.
-Clarify the difference between Bollard Type BOL-1 and BOL-2. They have the exact same requirements.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. For difference between bollard Type 1 and Type 1A refer to 28 16 44 2.2.B.3.

2. For difference between bollard Types 2, 2A, 2B and 2C refer to 28 16 44 2.2.D.3 / E.3 / F.3. Also refer to drawings for context and adjacencies.

3. For difference between bollard Type 3 and Type 3A refer to 28 16 44 2.2.G.3.

4. For difference between bollard Type BOL-1 and Type BOL-2 refer to drawings for context and adjacencies.

P1-0262 **Blockout or Sleeve Detail** **Open** **07/14/2014** **07/24/2014** **08/27/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: ASI 118 drawings A1-2206, A1-2203, A1-2207, and A1-2210

-Clarify if blockouts or sleeves are being added for TG07.2 to accommodate the HPU locations on the lower concourse, as discussed at RFI meeting on 05/23/2014. If

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to Edge of Slab sheets issued with ASI-0123, dated 08/06/2014.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

so, provide for every location. It is not clear on these drawings.

P1-0263 **Blockout or Sleeve Detail** **Open** **07/14/2014** **07/24/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST: **SUGGESTION:** **ANSWER:** **Accept Suggestion:** ☐

Reference: ASI 118 and A1-2203

Clarify if blockouts or sleeves are being added for TG07.2 to accommodate the HPU locations on the lower concourse, as discussed at RFI meeting on 05/23/2014. If so, provide for every location. It is not clear on these drawings.

P1-0264 **Difference between Type 2 Bollards** **Open** **07/14/2014** **07/24/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST: **SUGGESTION:** **ANSWER:** **Accept Suggestion:** ☐

Reference: 28 16 44 Section 2.2.C, 2.2.D, 2.2.E and 2.2.F:

Clarify the difference between Bollard Types 2, 2A, 2B and 2C. They have the exact same requirements.

P1-0265 **Difference between Bollards Type 3** **Open** **07/14/2014** **07/24/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST: **SUGGESTION:** **ANSWER:** **Accept Suggestion:** ☐

Reference: 28 16 44 Section 2.2.G and 2.2.H

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Clarify the difference between Bollard Types 3 and 3A.
They have the exact same requirements.

P1-0266 **Blockout or Sleeve Detail** **Open** **07/14/2014** **07/24/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST: **SUGGESTION:** **ANSWER:** **Accept Suggestion:** ☐

Reference: ASI 118 and A1-2207
Clarify if blockouts or sleeves are being added for TG07.2 to accommodate the HPU locations on the lower concourse, as discussed at RFI meeting on 05/23/2014. If so, provide for every location. It is not clear on these drawings.

P1-0267 **Blockout or Sleeve Detail** **Open** **07/14/2014** **07/24/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST: **SUGGESTION:** **ANSWER:** **Accept Suggestion:** ☐

Reference: ASI 118 and A1-2210
Clarify if blockouts or sleeves are being added for TG07.2 to accommodate the HPU locations on the lower concourse, as discussed at RFI meeting on 05/23/2014. If so, provide for every location. It is not clear on these drawings.

P1-0268 **Difference between BOL-1 and BOL-2** **Open** **07/15/2014** **07/25/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST: **SUGGESTION:** **ANSWER:** **Accept Suggestion:** ☐

Reference: 28 16 44 2.2.J and 2.2.K ASI 119

Clarify the difference between Bollard Type BOL-1 and BOL-2. They have the exact same requirements.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0269	Vehicle Pulse	Open	07/15/2014	07/25/2014	08/05/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: ASI 119 and 28 16 44
2.6.B.3 - Clarify how "b. Pulse on vehicle arrival" and "c. Pulse on vehicle departure" are different from "d. Pulse on arrival and departure."

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

"Pulse on arrival" and "pulse on departure" differs from "pulse on arrival and departure" because "pulse on arrival" and "pulse on departure" and distinct single event actions and is common associated with a single vehicle. "Pulse on arrival and departure" refers to two events occurring near simultaneously by two vehicles (e.g. one car departing the road loop while a second car enters its detection field).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0270	API or SDK Interface	Open	07/15/2014	07/25/2014	08/27/2014	Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 28 16 44 2.8.B.4 ASI 119

2.8.B.4 states that "Any features not available through the API or SDK interface shall be described as an exception by the Contractor as a part of the Contractor's bid." Since exceptions are not allowed in any bids for this project and would render the bid invalid, the statement needs to be removed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The last sentence in Specification Section 28 16 44, paragraph 2.8.B.4 the reads: "Any features not available through the API or SDK interface shall be described as an exception by the Contractor as part of the Contractor's bid." shall be deleted.

A revised specification section will be issued in ASI 127.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0271	Bid Exceptions	Open	07/15/2014	07/25/2014	08/27/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Transbay PMPC Ray Quesada

Co-Author:

REQUEST:

Reference: ASI 119 and 28 16 44

2.8.D.2 states "Any features not able to operate in a virtualized server environment shall be described as an exception by the Contractor as a part of the Contractor's bid." Since exceptions are not allowed in any bids for this project and would render the bid invalid, the statement needs to be removed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The last sentence in Specification Section 28 16 44, paragraph 2.8.B.4 the reads: "Any features not available through the API or SDK interface shall be described as an exception by the Contractor as part of the Contractor's bid." shall be deleted.

A revised specification section will be issued in ASI 127.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0272	Construction Manager	Open	07/15/2014	07/25/2014	08/20/2014	Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 28 16 44 2.8.B.6 ASI 119

2.8.B.6 states that "The Contractor shall furnish the API or SDK to the Construction Manager at the time of system procurement. Any updates to the API or SDK shall be provided to the Construction manager at the time of release throughout the lifecycle of the project."
"Construction Manager" needs to be replaced by "TJPA".

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The term "Construction Manager" shall be revised to "TJPA Representative."

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0273	Secondary Controllers	Open	07/15/2014	07/25/2014	08/05/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: ASI 119 and 28 16 44/APA

1.3.A.5 - Confirm that Secondary Controllers are not required at the Minna Loading, Natoma Loading, Natoma Pedestrian Area East and Natoma Pedestrian Area West based on the table provided. Without Secondary Controllers these areas are unable to comply with section 3.5.G Single Layer Anti-Ram Barrier Entry Sequence and

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. A secondary controller is required for Minna Loading [01364]

2. A secondary controller is required for Natoma Loading [01480]

3. A secondary controller is not required for Natoma Pedestrian Area East and Natoma Pedestrian Area

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

3.5.H. Single Layer Anti-Ram Barrier Exit Sequence.

West. These two locations will require local control via a key switch, where the key switch is located adjacent to the operable bollards on a custom pylon and the key is secured within a knox box.

P1-0274 **Sally Port Exit Sequence** **Open** **07/15/2014** **07/25/2014** **08/05/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 28 16 44/APA 3.5.E.5 ASI 119

Sally Port Configuration Exit Sequence: Vehicle Operator Initiated via Sensors (Howard Street Exit Only) - Confirm that a card reader is not required upon exit of the Sally Port, as it is upon entry, and that the barrier opens automatically upon exit of any vehicle as outlined in this sequence.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Sally Port Configuration Exit Sequence: Vehicle Operator Initiated via Sensors (Howard Street Exit Only) does not require the use of a card reader for exiting. The barriers are to operate automatically, initiated by the detection of an exiting vehicle through the use of a road loop sensor.

P1-0275 **Anti Ram Barrier Card Reader** **Open** **07/15/2014** **07/25/2014** **08/20/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: ASI 119 and 28 16 44/APA

3.5.G and 3.5.H - Based on the sequence of operations outlined for single layer anti-ram barriers in section 3.5.G and 3.5.H confirm that card readers are not required for any of the single layer anti-ram barriers upon entry or exit and that they will all be controlled manually by an operator.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed. The card readers are not required for any of the single layer anti-ram barriers upon entry/exit. They will be controlled by an operator.

P1-0276 **Sequence of Operation Anti-Ram Barriers** **Open** **07/15/2014** **07/25/2014** **08/25/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference: 28 16 44/APA ASI 119

Provide sequence of operation for Bus Plaza Anti-Ram Barriers and their integration with the traffic control system, including but not limited to, types of output required (when does the traffic light change color, which traffic light changes color for each barrier, what stage of barrier operation aligns with each output) and extent of interaction with traffic lights. For example, do lights at Howard and Mission street change color depending on status of lights at the Bus Plaza Anti-Ram Barriers?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Control system to provide an output to the traffic control system in Section 34 41 13 to indicate barrier deployment.

2. The barrier control system will trigger a relay associated with the specific lane/barrier that the operator is controlling for an outbound bus.

3. The traffic lights controlling the flow of traffic on the public street is to begin their sequence to stop traffic (e.g. turn red).

4. After the traffic light has indicated vehicles on the public street are to stop, the light associated with the lane of the exiting bus shall change state to indicate to the bus operator that they can proceed.

5. After the bus clears the barrier, the barrier operator will trigger the system via the control to change the bus exit light to red.

6. Once the exit light is red, the barrier is to rise to the secure position and the traffic light associated with the vehicles traveling on the public roadway is to reset to indicate that vehicles can proceed.

7. Final sequence operations to be coordinated with the Owner's security concept of operations and with the traffic light control system contractor.

P1-0277 **Vehicle Barrier Timing** **Open** **07/15/2014** **07/25/2014** **08/20/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: ASI 119 and 28 16 44/APA

3.5.L. - Provide time period required before vehicle barrier should automatically rise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

A vehicle barrier shall automatically raise if the barrier up loop has not been activated within fifteen (15) seconds. This shall be a base design parameter and is to be field coordinated during operational testing.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0278	Specifications for Stone Threshold References	Closed	07/15/2014	07/25/2014	08/20/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Details 2 & 5/A1-9001, Details 2 & 5/A1-9002 (IFC Drawings for Main Package dated 3/31/14)

Details throughout the plans (for example, Details 2 & 5/A1-9001 and Details 2 & 5/A1-9001) call for "Stone Thresholds" to be used. The specifications do not reference "Stone Thresholds".

Please confirm that thresholds called out to be "Stone Thresholds" are to be furnished and installed as specified in Specification Section 09 30 00 2.5 "Marble Thresholds".

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed. Note: Stone thresholds are identified as included in this section in item 1.1.A of the specification.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0279	Details for Threaded Insert Drainage	Closed	07/15/2014	07/25/2014	08/20/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Detail 6/A1-9321 (IFC Drawings for Main Package dated 3/31/14)

Detail 6/A1-9321 references drain holes at the bottom of the threaded insert, but does not depict the relationship of the drain hole to the substrate.

Please provide details for draining of the threaded insert.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Drain hole in threaded insert to be ½¿dia to allow for natural drainage through substrate below.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0280	Confirmation for Corrosion Expert Requirement	Closed	07/15/2014	07/25/2014	08/05/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE:
Specification Section 07 09 15 1.6 H (IFC Drawings for Main Package dated 3/31/14)
Specification Section 07 09 15 2.8 C (IFC Drawings for Main Package dated 3/31/14)

Specification Section 07 09 15 1.6 H states, "Engage a California-licensed Corrosion Engineer who is an expert in

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

corrosion, to conduct a component-by-component analysis of potential corrosion resulting from galvanic action between materials, for components of curtain wall and aluminum panels and provide report."

Specification Section 07 09 15 2.8 C states, "Comply with recommendations of the corrosion engineer approved by the TPJA Representative, as specified above."

As agreed upon between TJPA, PMPC, and Webcor-Obayashi, the language "Conduct a component-by-component analysis of potential corrosion resulting from galvanic action between materials, for components of the work of this section and provide report" will be used in lieu of the language in Specification Sections 07 09 15 1.6 H and 07 09 15 2.8 C

Please confirm that the language, "Conduct a component-by-component analysis of potential corrosion resulting from galvanic action between materials, for components of the work of this section and provide report." is to be used in lieu of the language currently required by 07 09 15 1.6 H and 07 09 15 2.8 C.

P1-0281 **Specification for Joint Type FJC8 at Vehicle/Bike Ramp** **Open** **07/15/2014** **07/25/2014** **08/27/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0227, Sketch SKA-3736.4, Detail 2/A1-8885 (ASI 118 dated 6/20/2014)

Per RFI Response P1-0227 received on 07/10/14, FJC8 is to be furnished and installed between the W-13 and terrazzo flooring at Ground Level GL 23 (see SKA-3736.4).

Per ASI 118, Detail 2/A1-8885 received 07/07/14, FJC8 is located at the vehicle/bicycle ramp.

Please clarify the type and specification of FJC8 located at the vehicle/bicycle ramp.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Seismic joint type FJC8 at the Vehicle Ramp has been renamed FJC9, see enclosed SKA-3926. Joint Schedule in A1-8880 and Specification 07 09 13 seismic joint assemblies will reflect the added joint type. This will be issued in ASI 127.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0282	1" Moving Joint at Vehicular & Bicycle Ramp	Closed	07/16/2014	07/26/2014	08/20/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Sheet A1-7402 (ASI 117 dated 4/23/14)

Per Sheet A1-7402 of ASI 117, there is a ¿1¿ movement joint¿ at the top of the vehicular and bicycle ramps, but no details or specifications are provided showing the construction of this joint.

Please provide details and specifications for the ¿1¿ movement joint¿ at the vehicle and bicycle ramps.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The 1" movement joints at the top of the vehicle and bicycle ramps were updated from 1" to 2" thru-out. Refer to SKA-3925. Floor joint cover designation was updated from FJC8 to FJC9. The Floor Joint Cover detail is typical/similar to what is shown on SKA-3926.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0283	R1 Requirements for Wall Type 3	Closed	07/16/2014	07/26/2014	08/20/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Detail 11/A1-9208 (ASI 118 dated 6/20/14), A-0024 (IFC Drawings for Main Package dated 3/31/14)

Per Detail 11/A1-9208 of ASI 118, and associated zone plans, concrete columns are to be framed in with wall type 3-R1. Per Sheet A-0024, there is no Comment R1 for Wall Type 3.

Please provide the R1 requirements for Wall Type 3.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please refer to SKA-3913 and SKA-3914 for the R1 (modifier) requirement of Wall type 3.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0284	Category 3 Stairs, Platforms, and Rails for Phase 1	Closed	07/16/2014	07/16/2014	08/20/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Sheet SKA-3076 (dated 3/13/14)

TJPA did not accept TG07.5R Bid Additive Alternate No. 01 to furnish and install Category 3 stairs, platforms, and rails as shown on SKA-3076 (Attached).

Category 3 metal stairs, platforms, and rails still show on the contract documents, however TJPA has indicated they do not intend for the Category 3 metal stairs, platforms,

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

and rails to be installed as shown.

Please confirm stairs, platforms, and rails are not to be provided as part of Phase 1 at Category 3 locations, or provide direction for the desired access at these locations.

P1-0285 **Concrete Curbs at Lower Concourse, Zone 4** **Closed** **07/16/2014** **07/26/2014** **08/20/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Sheet A1-2207 (ASI 118 dated 6/20/14)

Sheet A1-2224 of ASI 118 calls out concrete curb types at the following locations:

GL 14/G, GL 19/C, GL 24/H, GL 31/F.7, GL 32/C, and GL 32/G

The concrete curbs at the above locations are depicted with dashed lines. Are concrete curbs called out but shown dashed to be furnished and installed as part of Phase 1?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The concrete curbs at locations mentioned and depicted with dashed lines are furnished and installed in Phase 2. These dashed lines are for setting out of splice couplers for future phase 2 washrooms walls with concrete curbs.

P1-0286 **Specification for Chain Linked Fences** **Closed** **07/16/2014** **07/26/2014** **08/20/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: A1-2104 (ASI 119 dated 6/20/14)

ASI 119 calls out for a chain link fence at several locations (A1-2104 for instance), but no chain link fence specification exists.

Please provide a specification for chain link fences.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Heath, WOJV indicate they do not require a specification for Chain Linked Fences as requested by this RFI. Therefore this RFI should be withdrawn.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0287	Directional Notes for Changes on Sheets A1-2202 Through A1-2207 of ASI 119	Closed	07/16/2014	07/26/2014	08/20/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Sheets A1-2202 through A1-2207 (ASI 119 dated 6/20/14)

Sheets A1-2202 through A1-2207 of ASI 119 show clouds around openings, however notes outlining the changes are not provided (see attached A1-2205 for example).

Please provide information for clouded openings with no directional notes.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

All lower concourse floor openings are provided with guardrails (see typical details on A1-7027). All guardrails are to be removed and replaced with chain link fence as outlined in VE item ID_44 and attached ASI-119 Revision narratives

---

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0288	Facade Access Equipment Exhibit A	Closed	07/16/2014	07/26/2014	08/05/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please confirm per the attached email correspondence with Ed Sum that Webcor/Obayashi Joint Venture is to direct bidders to ignore specification 11 24 23 section 3.8.b in the Exhibit A of the TG15.2 Façade Access Equipment scope of work. Language will remain in the specification but is not a requirement of the TG15.2 subcontractor.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0289	1-3/4" Step in Loading Dock 01222	Closed	07/18/2014	07/28/2014	08/27/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Sheet A1-2302, Sheet A1-6012 (IFC Drawings for Main Package dated 3/31/14)

Per Sheet A1-2302 and Sheet A1-6012, there is a 1-3/4" step in the loading dock topping slab, 1'-10" east of GL 5 between GL C and GL D.

This step is in the drive area of the loading dock, and may be a long term maintenance item (spalling concrete due to trucks and dumpsters rolling over the step).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Provide 4"x 4"x 3/8" continuous cast in HD galvanized steel angle to topping slab along slab edge step (approximately grid 5 and grid 6).

Refer to sheet A1-3100 for slab elevations. The steps in the slab noted, along approximately grids 5 and 6, actually vary due to the slope in the Lower Loading Dock slab.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please confirm a 1-3/4" step is desired rather than sloping the concrete at this condition.

P1-0290 **Painted Galvanized Flashing per ASI 119 and Specification Section 07 62 00 2.3 A** **Closed** **07/18/2014** **07/28/2014** **08/20/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: ASI 119 (dated 6/20/14), Specification Section 07 62 00 2.3A (IFC Drawings for Main Package dated 3/31/14)

ASI 119 calls for painted galvanized flashing to be used in several locations (for instance, Detail B/A1-7407 of ASI 119). Specification Section 07 62 00 2.3 A states, "Galvanized Steel: Do not use."

Please provide a specification for the painted galvanized flashing.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See the attached Specification Section 07 62 00 / 2.3.A that has been revised to include the galvanized steel flashing language.

P1-0291 **Engineering Requirements for Spray On Fireproofing per Specification Section 01** **Closed** **07/18/2014** **07/28/2014** **08/05/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: (IFC Drawings for Main Package dated 3/31/14)
Specification Section 01 80 50 1.1 B
Specification Section 01 80 50 1.2 A
Specification Section 07 81 00
Specification Section 07 81 23

Per Specification Section 01 80 50 1.1 B, "the requirements of this Section apply when to all non-structural components, unless otherwise noted."

Per Specification Section 01 80 50 1.2 A:
"Non-structural building components are components that

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The work of Specification Section 07 81 00 Sprayed Fire Resistive Material and Specification Section 07 81 23 Intumescent Fire Resistive Material do not have seismic requirements.

Specification Section 01 80 50 will be revised to list applicable Specification Sections and Specification Sections requiring seismic criteria will reference Section 01 80 50.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

are not part of the building structural system whether inside or outside the building enclosure, above and below grade. Nonstructural components of the Transbay Transit Center include, but not necessarily limited, to the following:
1. Ceilings, glazing, awnings, and similar components and assemblies.
2. Electrical: Power and lighting components and systems; substations; switchgear and switchboards; auxiliary engine-generator sets; transfer switches; motor control centers; motor generators; selector and controller panels; fire protection and alarm components and systems; and telephone and communication components and systems.
3. Mechanical: Heating, ventilating, and air-conditioning components and systems; plumbing components and systems; fire sprinkler components and systems.
4. Vertical Transportation: Mechanical, electrical and supporting elements for transport systems, including elevators and escalators. "

Specification Section 07 81 00 Sprayed Fire Resistive Material and Specification Section 07 81 23 Intumescent Fire Resistive Material do not include items specifically noted in the non-structural list, however, Specification Section 01 80 50 1.2 A explicitly states the list is not all inclusive. In addition, 07 81 00 and 07 81 23 do not specifically exclude the requirements assoicated with 01 80 50.

Please confirm material furnished and installed under Specification Sections 07 81 00 and 07 81 23 are not required to have engineering as required by Specification Section 01 80 50. If engineering is required for items furnished and installed under Specification Sections 07 81 00 and 07 81 23, please specifically identify which elements are to be engineered.

P1-0292	**Grout Placement Beneath Drain Hole at Rail Embed**	**Closed**	**07/18/2014**	**07/28/2014**	**08/20/2014**	**Potentially**	☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Detail 6/A1-9306 (ASI 119 dated 6/18/14)

Per Detail 6/A1-9306, the HD galvanized rail embed shows a drain hole in the bottom of the embed. The detail goes on to show the bottom of the embed seated in grout which will prevent water from draining out of the drain hole.

Please confirm plugging the rail embed drain hole as shown in 6/A1-9306 is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Provide ½¿ diameter drain hole in embed; drill 3/8¿ diameter hole through mortar to allow for drainage down to substrate.

P1-0293 **Bus Bridge Crash Rail Material Confirmation** **Closed** **07/18/2014** **07/28/2014** **08/20/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Detail 2/A1-8378 (ASI 119 dated 6/18/14)

Per the current Bus Bridge Contract Documents, the Bus Bridge Crash Rail is metal as it approaches the Bus Deck.

Per Detail 2/A1-8378 of ASI 119, the Bus Bridge Crash Rail is changing to match the concrete crash rail of the Bus Deck.

Please confirm the Bus Bridge Crash Rail design, and coordinate drawings to match.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed. The Bus Bridge crash rail is metal per the Bus Bridge contract documents. Per VE item # 32, the Transit Center Building crash rail at the Bus Deck level is concrete. Locations of the respective crash rails at the Bridge/Building joint have been coordinated in the attached sketch, SKA-3661-R2.

P1-0294 **Method of Construction for Concrete Column Steel Jacket Base** **Closed** **07/18/2014** **07/28/2014** **08/20/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Detail 1/A1-9208 (ASI 118 dated 6/20/14), Detail 6/S1-3503 (IFC Drawings for Main Package dated 3/31/14)

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Arup response:

Confirmed that post-installed expansion anchors at

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Per Detail 1/A1-9208 of ASI 118, the concrete column steel jacket base are welded studs/post installed expansion anchors, and to refer to structural for sizing.

Per Detail 6/S1-3503, welded studs are to be used at the lower concourse, post-installed anchors are to be used at the mat slab (train box), and jacket base plate is poured integrally to the slab whether welded studs or post-installed anchors are used.

Based upon the current construction and bid schedules, steel jackets will not be procured prior to pouring mat slab and lower concourse deck.

Please confirm post applied anchors can be furnished and installed at all locations column steel jacketing is required, and that the jacket base plate can be placed on top of the slab/deck where the slab/deck has been poured prior to column steel jacket installation.

mat-slab(train platform level) and lower concourse level can be furnished and the jacket base plate can be placed on top of slab where the slab has been poured prior to column steel jacket installation.

TT response:

Drilling of the holes for the post-installed expansion anchors shall not damage the slab reinforcement rebars. Fabrication of the base plate shall be done based on the field locations of the anchors

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P1-0295 **Thickness of AESS Closure Elements** **Closed** **07/21/2014** **07/31/2014** **08/20/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: (IFC Drawings for Main Package dated 3/31/14)
Sheet A1-8690
Sheets A1-8692 through A1-8695

Sheet A1-8690 and Sheets A1-8692 through A1-8695 call out for AESS closure elements to be welded per structural, and finished per the AESS specification.

However, the details for the AESS closure elements do not call out the thickness of the material.

Please provide the thickness of the AESS closure element material.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The plate thickness is 3/8" thick, per drawings: 8/S1-4351, S1-4350, S1-4352 and S1-4353.

Also, RFI T-1517 acknowledged 3/8" thick plate.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0296	Utilization of Sheet A1-8378 for Joint Type FJC7	Closed	07/23/2014	08/02/2014	08/20/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0224, Sheet A1-8378 (IFC Drawings for Main Package dated 3/31/14)

Per RFI Response P1-0224, details for FJC7 are located on Sheet A1-8378 ¿ Formed Aluminum Panel System (W-9) Sheet Typical Details. The answer to RFI P1-224 was then voided.

The plans do not provide a path to direct expansion joint bidders to this sheet (no detail references are given on the plan sheets, and FJC7 is not part of the W-9 system).

Please confirm details on Sheet A1-8378 are to be used in relation to bidding, furnishing, and installing FJC7.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The work of seismic joint cover FJC7 is documented in Sheet A1-8378 and Specification Section 07 09 13 Seismic Joint Assemblies.

Note that several other RFI's that have been responded to, covered this subject also.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0297	Liquidated Damages	Closed	07/23/2014	08/02/2014	08/26/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: Specification 34 41 13 Paragraph 3.9.E

Liquidated Damages are mentioned within Specification 34 41 13 para. 3.9.E. and should be deleted. If LD¿s are to be incurred they should be addressed within the contract terms under Division 00/01 specifications. Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached specification section 34 41 13 revised as requested.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0298	Corrosion Engineer	Closed	07/23/2014	08/02/2014	08/05/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference:
Specification 05 12 13 1.7 I (IFC Drawings for Main Package dated 3/31/14)
Specification 05 12 13 2.4 C (IFC Drawings for Main Package dated 3/31/14)

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Specification Section 05 12 13 1.7 I states, "Engage a California-licensed Corrosion Engineer who is an expert in corrosion, to conduct a component-by-component analysis of potential corrosion resulting from galvanic action between materials, for components of curtain wall and aluminum panels and provide report."

Specification Section 05 12 13 2.4 C states, "Comply with recommendations of the corrosion engineer approved by the TPJA Representative, as specified above."

As agreed upon between TJPA, PMPC, and Webcor-Obayashi, the language "Conduct a component-by-component analysis of potential corrosion resulting from galvanic action between materials, for components of the work of this section and provide report" will be used in lieu of the language in Specification Sections 05 12 13 1.7 I and 05 12 13 2.4 C

Please confirm that the language, "Conduct a component-by-component analysis of potential corrosion resulting from galvanic action between materials, for components of the work of this section and provide report." is to be used in lieu of the language currently required by 05 12 13 1.7 I and 05 12 13 2.4 C.

P1-0299 **Waterproofing at Escalator Closure per Detail 3/A1-7552** **Closed** **07/23/2014** **08/02/2014** **08/20/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Detail 3/A1-7552 (IFC Drawings for Main Package dated 3/31/14), RFI Response P1-0089

Per Detail 3/A1-7552, WPM-6 is to be installed at the escalator closure at the glass guardrail.

- Per RFI Response P1-0089, WPM-6 has been removed
- The area between the sheathing and escalator as depicted in Detail 3/A1-7522 is inaccessible for

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

WPM-10 has replaced WPM-6 at referenced Detail 3/A1-7552.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

waterproofing

Please confirm that WPM-6 will be removed from the location referenced in Detail 3/A1-7552.

P1-0300 **Design Requirements for Galvanized Metal Plate per Detail 3/A1-8894** **Closed** **07/23/2014** **07/23/2014** **09/03/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Detail 3/A1-8894 (ASI 119 dated 6/18/14)

Per Detail 3/A1-8894 of ASI 119 there is a "galv. metal plate covering fireproofed beam" which is not detailed within the documents (it is unknown if it is required for a seismic joint assembly).

Please provide the design requirements (size, extent, attachment, fireproofing, etc.) for the galvanized metal plate covering fireproofed structural beam depicted on Detail 3/A1-8894.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

There is no galvanized metal plate required at the fireproofed structural beams. Per VE Item #36, the GFRC system was eliminated and this detail revised. See attached SKA-3616-R1 (A1-8894).

P1-0301 **BOL-3 Conflict wth spec** **Open** **07/25/2014** **08/04/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: ASI 119-A1-7027 (SKA-3495), 28 16 44

Detail 6, 7 and 8 indicate that BOL-3 is ""6"" o x 1/4"" THK HD GALV STL CONC FILLED PIPE TYP"". This is in conflict with what is specified for BOL-3 in 28 16 44. Clarify which is meant to be correct.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to RFI P1-0044.1 response, along with sketch SKA-3912.

P1-0302 **Conflicting Detail with Description** **Open** **07/25/2014** **08/04/2014** **08/20/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:
reference: ASI 119 and IFC ¿ L1-7360 and 28 16 44

Details on L1-7360 are in conflict with the outlined bollard descriptions, including but not limited to, presence of sleeve, diameter of sleeve, diameter of bollard. Clarify which is meant to be correct.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
Refer to attached SKLA-317.

P1-0303 **Bollard Type Depicted** **Open** **07/25/2014** **08/04/2014** **08/20/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:
reference: ASI 119 and IFC - L1-7360
Clarify which bollard type is depicted in the details on L1-7360. There is no type indicated.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
Refer to attached SKLA-316.

P1-0304 **Leed Requirments** **Open** **07/25/2014** **08/04/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:
reference: 28 16 44
Confirm there are no LEED requirements for 28 16 44, such as VOC requirements for example.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
firmed, there are no LEED requirements for Specification 28 16 44.

P1-0305 **Bollard "Special Footing"** **Open** **07/25/2014** **08/04/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:
reference: L-0002, 28 16 44, 28 16 44/APA
On Legend L-0002 a ""Special Footing"" is called out for Bollard types 1A, 1B, 1C, 2A, 2B, 2C, and 3A. Please provide specifications and details as for each ""special

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
Special footing is described as item 3 of bollard descriptions in 28 16 44.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

footing"" required on each bollard type. No detail about ""special footing"" is provided in spec 28 16 44 or 28 16 44/APA.

P1-0306 **Maintenance Requirement** **Open** **07/25/2014** **08/04/2014** **08/27/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: 28 16 44
Section 3.7 - Confirm TJPA wants 5 years of maintenance included in the bid for TG07.9 Bollards and Barriers.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

WOJV to exclude maintenance scope in their Exhibit A document.

P1-0307 **Seismic Design Criteria For Bollards** **Open** **07/25/2014** **08/04/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: 01 80 50
Confirm that spec section 01 80 50 Seismic Design Criteria for Nonstructural Components does not apply to TG07.9 Bollards and Barriers since it is not referenced in 28 16 44.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Specification 01 80 50 Seismic Design Criteria for Nonstructural Components does not apply to TG07.9 Bollards and Barriers.

P1-0308 **Bollard Pull Box's** **Open** **07/25/2014** **08/04/2014** **09/03/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: ASI 119 - A1-2302 through A1-2310, A1-3100, A1-3105 (SKA-3584)
Pull Boxes are located at each of the operable barriers, for example at gridline 5. Provide requirements and details

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The pull boxes, should they be utilized, shall be provided by the Bollard manufacturer/installer as part of their system design. Pull boxes shall be rated for outdoor use and the covers of the pull boxes shall be

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

for all pull boxes related to the operable barriers. How are they covered? How do they lock? What type of security do they require? How will the security of the pull boxes be integrated into the overall building security?

mechanically fastened with a tamper resistant security lock intended for securing covers of pull boxes

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P1-0309 **Knox Box** **Open** **07/25/2014** **08/04/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

ASI 119 A1-2303, A1-2302, 28 16 44
There is one Knox box located on each of the referenced drawings. Confirm these are the only two Knox boxes for the entire project and none are located in the building. Confirm that these have been coordinated with the Fire Marshal and Security. Confirm these Knox boxes are key control only and that no other requirements are needed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Correct, there is only one knox box located on each of the referenced drawings.

2. Confirmed, these are the only two knox boxes.

3. Not an RFI issue and the question should be withdrawn.

4. Refer to specification 28 16 44 / 2.8 for knox box requirements.

P1-0310 **Bollard and Wedge Barrier Finish Requirements** **Open** **07/25/2014** **08/04/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: 28 16 44
Provide finish requirements for the bollards and wedge barriers. For example, provide finish type, paint color, and any other requirements. They are not included.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Barriers should be painted. Color to match Extrusion White 85±5 by TIGER Drylac 38/10090.

P1-0311 **Probe Detector Locations** **Open** **07/25/2014** **08/04/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:
reference: 28 16 44 - section 2.6.C
Clarify and provide details for location of Probe Detectors. Clarify if the probe detectors are for the wedge barriers or retractable bollards. Provide details, specifications, operation and output requirements for the probe detectors.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
Road loop detectors are to be used for all the barriers. Probe detectors can be used as an alternative, which the contractor can propose if deemed a value engineering item to be considered.

P1-0312 **System integration Requirements** **Closed** **07/25/2014** **08/04/2014** **08/26/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:
28 16 44 - section 3.8.D
""All software and IP devices of this system shall be integrated as a part of and shall be fully compatible with operating in the Converged IP-based Network to be installed at the Transbay Transit Center."" Confirm that all requirements to comply with the future system integration are stated in this section.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
Contractor will be required to coordinate with the network designer of the converged IP-based network.

P1-0313 **ASI 118 and 119 Discrepancies** **Open** **07/25/2014** **08/04/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Transbay PMPC Ray Quesada

Co-Author:

REQUEST:
See attached sheets, A1-7416, A1-7416 (SKA-3524), A1-7418, A1-7418 (SKA-3526), A1-7419, A1-7419 (SKA-3527), A1-7420, A1-7420 (SKA-3528), A1-7421, A1-7421 (SKA-3529), A1-7422, A1-7422 (SKA-3530), A1-7423, A1-7423 (SKA-3531), A1-7424, A1-7424 (SKA-3532), A1-8720, A1-8720 (SKA-3542), A1-8721, A1-8721 (SKA-3543).
There are discrepancies between ASI 118 (Addendum #4) and ASI 119 for these sheets. ASI 118 and 119 are both dated 06/20/2014. Confirm that ASI 119 is meant to take precedence. It does not appear to be the most current version.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
ASI #119 was issued to relay specific scopes of work that are either deleted or modified to reflect scope reduction. Be advised that the backgrounds and dates in the revision box of ASI #119 documents are older versions of sheet issuances and do not reflect the most updated backgrounds or revision dates. These documents are only to be used to determine whether items identified with edit clouds and included in the Narrative, provided with ASI #119, are either scope reductions or deletions.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0314	Lithocrete Sole Source	Closed	07/28/2014	07/28/2014	08/21/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: 03 33 13 1.1 A
Specification section 03 33 13 1.1 A - requires the contractor to sole source Lithocrete a product that is protected by various US Patents
a. Provide performance criteria for the design basis along with acceptable alternatives

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to attached SKLA-318.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0315	Structural Information on OCS Trough Support	Closed	07/28/2014	08/07/2014	08/05/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Detail 3/A1-8551 (IFC Drawings for Main Package dated 3/31/14)

Detail 3/A1-8551 indicates that information on the OCS Trough Support is located on structural drawings.

S1-9010 does not provide information on this member.

Please provide structural information on the OCS Trough Support.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The structural drawings provide information for the OCS HSS vertical supports. Detail 3/A1-8551 shows a suggested field method of fastening the OCS assembly to the vertical HSS structural supports by way of an HSS sleeve. Contractor may modify this detail as they see fit to install OCS assembly with coordination with SFMTA.

Moreover, RFI T-1417.3 response has already recommended the CM/GC schedule a meeting with all the stake holders to resolve all OCS questions.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0315.1	Design Requirements for OCS Trough Support	Open	08/14/2014	08/24/2014		Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

REFERENCE: RFI Response P1-0315

Per RFI Response P1-0315, "The structural drawings provide information for the OCS HSS vertical supports. Detail 3/A1-8551 shows a suggested field method of fastening the OCS assembly to the vertical HSS structural supports by way of an HSS sleeve. Contractor may

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

modify this detail as they see fit to install OCS assembly with coordination with SFMTA. Moreover, RFI T-1417.3 response has already recommended the CM/GC schedule a meeting with all the stake holders to resolve all OCS questions."

The above response does not provide design requirements for the OCS Trough Support.

Please provide the design requirements for the OCS Trough Support to be administered to the Bidders.

P1-0316 **SFMTA Design & Construction Documents for Muni Bus Plaza Ceiling & OCS Syst** **Open** **07/28/2014** **08/07/2014** **08/20/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Transbay PMPC Elissa Flandro

Co-Author:

REQUEST:

REFERENCE: Description 3 A of Muni Bus Plaza Ceiling and OCS System Description/A1-8551 (IFC Drawings for Main Package dated 3/31/14)

Muni Bus Plaza Ceiling and OCS System Description 3 A on Sheet A1-8551 states, "Refer to SFMTA design and construction documents for work all OCS assembly components and installation."

No SFMTA design and construction documents have been provided.

Please provide the referenced SFMTA design and construction documents.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The OCS documents will be issued as a separate package later during the month of August.

P1-0317 **OV Series Sheets for OCS System** **Open** **07/28/2014** **08/07/2014** **09/12/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Transbay PMPC Elissa Flandro

Co-Author:

REQUEST:

REFERENCE: Sheets A1-8550 through A1-8552 (IFC Drawings for Main Package dated 3/31/14)

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The OV drawings were issued to W/O on 9/11/2014 as Field Order T-00033 for TG12.2 OCS.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Sheets A1-8550 through A1-8552 indicate that coordination of the OCS system must be performed with the ¿OV Series¿ sheets (see 4/A1-8551 for an example).

OV sheets have not been issued.

Please provide the OV sheets.

P1-0318 **Part B Documentation per Specification Section 07 81 00** **Closed** **07/28/2014** **08/07/2014** **08/20/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Specification Section 07 81 00 1.1 B (IFC Drawings for Main Package dated 3/31/14)

Specification Section 07 81 00 1.1 B states, "Refer to Part B Documents applicable to the Section."

Part B Documents are not included in this specification section.

Please provide the "Part B Documents" referenced in Specification Section 07 81 00 1.1 B.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Specification Section 07 81 00 paragraph 1.1 B will be deleted. There are no Part B documents.

P1-0319 **AESS Category for Light Columns** **Closed** **07/28/2014** **08/07/2014** **08/20/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: AESS Matrix/A1-8660, Detail E/A1-8660 (IFC Drawings for Main Package dated 3/31/14)

The AESS Matrix on Sheet A1-8660 calls for AESS Category 1 finish on the light column.

However, Detail E/A1-8660 calls for AESS Category 2 finish on the upper portion of the light column.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please refer to revised architectural Sheet A1-8660 showing the revised AESS zones to match the Matrix submitted in ASI-0123.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please confirm the desired AESS Category requirements for the light column.

P1-0320 **Lithocrete Alternatives** **Closed** **07/28/2014** **08/07/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Specification section 03 33 13 1.2 (4) - lists US Patents that must be complied with that are restricted to installation of the Lithocrete.
a. Provide performance criteria that will be acceptable along with a listing of alternatives to the US Patents

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See response to P1-0314.

P1-0321 **Testing Requirments** **Closed** **07/28/2014** **08/07/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Specification Section 03 33 13 1.3 C Testing:
a. Confirm that Trade Group will provide all on-site testing, method of procedure for testing submittals, and all reports

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This RFI is administrative and should be rejected.

P1-0322 **Acceptable Manufactures** **Closed** **07/28/2014** **08/07/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Specification section 03 33 13 1.5 - Manufactures, Suppliers, and Sub-Contractors
a. Provide a list of acceptable suppliers to Lithocrete Quarried Stone

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See response to P1-0314.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

b. Provide a list of acceptable alternative project references that are not limited to Lithocrete Quarried Stone
c. Provide a list of acceptable components that are not limited to Lithocrete Quarried Stone

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P1-0323 **Quality Control** **Closed** **07/28/2014** **08/07/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Specification Section 03 33 13 1.6 - Quality Control
a. Provide a list of acceptable performance criteria to Lithocrete Quarried Stone
b. Provide a list of acceptable alternative project personnel experiences that are not limited to Lithocrete Quarried Stone

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See response to P1-0314.

P1-0324 **Material Sourced within 500-miles** **Closed** **07/28/2014** **08/07/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Specification Section 03 33 13 2.1 - LEED Requirements
a. Provide an acceptable criteria, or listing of materials that can be sourced within the 500-mile radius as specified: Lithocrete does not meet this credit requirement

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The specification has been modified. See attached SKLA-318.

P1-0325 **Lithocrete Surface Seeded Aggregate** **Closed** **07/29/2014** **08/08/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Specification Section 03 33 13 2.5 C Lithocrete Surface Seeded Aggregate
a. Provide the Artist's sample # 07-133J for Trade Group to match
b. Provide an acceptable list of samples and/or alternative to Lithocrete samples

See response to P1-0314.

P1-0326 **Integral concrete coloring** **Closed** **07/29/2014** **08/08/2014** **08/26/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Specification Section 03 33 13 2.7 A Integral Concrete Coloring
a. Provide color that is referenced - drawings do not contain a specified color callout for Shaw Alley

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See response to P1-0314.

P1-0327 **Lithocrete Surface Seeded Aggregate Alternatives** **Closed** **07/29/2014** **08/08/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Specification Section 03 33 13 3.4 Lithocrete Surface Seeded Aggregate Installation
a. Provide a list of acceptable alternatives that are not single source protected by US Patents
b. Provide a list of acceptable manufactures that are not single source protected by US Patents
c. Provide a list of acceptable products that are not single source protected by US Patents

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See response to P1-0314.

P1-0328 **Curing Product Alternatives** **Closed** **07/29/2014** **08/08/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:
Specification Section 03 33 13 3.6 - Curing

a. Provide criteria for curing for acceptable products in addition to Lithocrete ®

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
See response to P1-0314.

P1-0329 **Sealing Alternatives** **Closed** **07/29/2014** **08/08/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:
Specification Section 03 33 13 3.7 - Sealing
a. Provide a list of acceptable alternative products that are not single source protected by US Patents
b. Provide a criteria and acceptable means of application that is not single source protected by US Patents

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
Refer to P1-0314.

P1-0330 **Waterproofing System with Skylight** **Open** **07/29/2014** **08/08/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:
Reference A1-8404D ASI 120
Reference 08 63 03 ASI 120

A1-8404D shows a WPM-3 waterproofing system around the perimeter of the W-10 skylight systems at GL 11 and 28. Specification 08 63 03 gives requirements for a WMP-10 type waterproofing system. As the skylights are on the roof and will need to tie into the roof waterproofing system confirm which type of waterproofing to be provided. This needs to be answered immediately.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
WPM-10 will be deleted from Specification 08 63 03; WPM-3 will extend up and tie-in to the W-10 System as shown on detail A1-8404D.

P1-0331 **Door Type Clarification** **Open** **07/29/2014** **08/08/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Reference: A1-3100 & A1-3100 (SKA-3670) in ASI 119

Both A1-3100 and A1-3100 (SKA-3670) were issued in ASI 119. A1-3100 (SKA-3670) shows a W-2 overhead coiling door while A1-3100 shows a prefinished aluminum overhead coiling door on Grid Line C between 5 and 6. Please clarify what type of door is to be furnish and installed at this location.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For the door type at this location refer to Overhead Door Schedule A1-9711(SKA-3859) issued as part of ASI 0120. Reference Door number 01224B.

P1-0332 **Prefinished Aluminum Overhead Door Detail** **Open** **07/29/2014** **08/08/2014** **08/05/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-3100, A1-8153 & A1-8180 in ASI 119

A1-3100 calls for a prefinished aluminum overhead coiling door, and refers to 3/A1-8153 for details. Detail 3/A1-8153 references A1-8180, which shows an overhead glass folding door. Please revise details to show requirements for the prefinished aluminum overhead coiling door.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Revised sheets A1-8153 (SKA-3827) and A1-8180 were issued with ASI 120 on 7/11/2014.

P1-0333 **AS-Built** **Closed** **07/29/2014** **07/29/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference 08 44 33
Section 1.1 24.j calls to strike requirement for AS-Built drawings. However section 1.14 states that this specification is to comply with Article 3.09 of the General Conditions and Sections 01 17 20 apply to this section. Confirm whether AS-Built drawings are required for this specification.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

As-Builts are required; Section 01 17 20 governs.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0334	Installer Experience	Closed	07/29/2014	08/08/2014	08/21/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference 08 44 33
Section 1.09 F 4 and 5 references installers experience. Confirm "companies" will be used in lieu of "installers" agreed upon between TJPA, PMPC, and Webcor-Obayashi.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0335	Confirmation for Corrosion Expert Requirement	Open	07/29/2014	08/08/2014	08/05/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference 08 44 23
Specification Section 08 44 23 2.11 C states, "Comply with recommendations of the corrosion engineer approved by the TPJA Representative, as specified above."

As agreed upon between TJPA, PMPC, and Webcor-Obayashi, the language "Conduct a component-by-component analysis of potential corrosion resulting from galvanic action between materials, for components of the work of this section and provide report" will be used in lieu of the language in Specification Sections 08 44 23 2.11 C

Please confirm that the language, "Conduct a component-by-component analysis of potential corrosion resulting from galvanic action between materials, for components of the work of this section and provide report." is to be used in lieu of the language currently required by 08 44 23 2.11 C.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See the current Contract Documents. The item noted in this RFI was resolved in ASI 120.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0336	Detail Reference per Detail 9/A1-9580	Closed	07/31/2014	08/10/2014	08/21/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Webcor Construction LP Andrew Kitchen

Co-Author:

REQUEST:

REFERENCE: Detail 9/A1-9580, Detail 7/A1-9321 (IFC Drawings for Main Package dated 3/31/14)

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The correct callout is 8/A1-9585, for detail 9/A1-9580.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Detail 9/A1-9580 calls out Detail 7/A1-9321.

Detail 7/A1-9321 is not shown on Sheet A1-9321.

Please provide the correct call out for the on Detail 9/A1-9580.

P1-0337 **Detail Reference for Typical Driveway Aisle Assembly** **Closed** **07/31/2014** **08/10/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Webcor Construction LP Andrew Kitchen

Co-Author:

REQUEST:

REFERENCE: Detail 8/A1-9585, Detail 1/A1-9585 (IFC Drawings for Main Package dated 3/31/14)

Detail 8/A1-9585 references Detail 1/A1-9585 for the typical driveway aisle assembly.

Detail 1/A1-9585 is a section at terrazzo floor with radiant heating (Grand Hall).

Please provide the correct call out for the driveway aisle assembly on Detail 8/A1-9585.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The correct call out for the bus deck driveway aisle assembly on Detail 8/A1-9585 is 1/A1-8675.

P1-0338 **Roof Park Building Protection Slab and Waterproofing Details** **Closed** **07/31/2014** **08/10/2014** **09/11/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Transbay PMPC Ray Quesada

Co-Author:

REQUEST:

REFERENCE: A1-2603 (ASI 122 dated 7/23/14)

Sheet A1-2603 shows a Roof Park Building located at GL 6 between GL D and GL G.

Sheet A1-2913 shows no protection slab in this area and details for waterproofing are not provided for this area.

Please confirm this area is not to receive a protection slab

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Provide waterproofing in this area that can be exposed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

and provide the waterproofing details for this area.

P1-0339 **Base Bid Item Confirmation for Alternate No. 27 - Delete Roof Park Level Café** **Closed** **07/31/2014** **08/10/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Specification Section 01 10 30 APE E.1.15, Sheet A1-2605 (ASI 122 dated 7/23/14)

Specification Section 01 10 30APE E.1.15 - Alternate No. 27 states, "Provide lid over structural foundation complete with waterproof membrane." then references Sheet A1-2605.

Sheet A1-2605 of ASI 122 notes, "Defer W-20 glass cafe. Retain circular foundation wall with topping slab. All utilities should be stubbed up below the topping slab."

In accordance with Sheet A1-2605 of ASI 112, please confirm that Specification Section 01 10 30APE E.1.15 - Alternate No. 27 is accepted as a base bid item.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

No, it has not yet been confirmed by TJPA that item E.1.15 ¿ Alternate No. 27 of Specification Section 01 10 30APE has been accepted as a base bid item.

We suggest that WOJV discuss scope of work to be bid and status of TJPA direction on these items directly with TJPA when possible.

P1-0340 **Waterproofing Membrane for Roof Park Level per Alternate No. 27** **Closed** **07/31/2014** **08/10/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Specification Section 01 10 30 APE E.1.15

Specification Section 01 10 30APE E.1.15 - Alternate No. 27 states, "Provide lid over structural foundation complete with waterproof membrane. Extend main plaza paving system over café foundation with required substrate as indicated on Landscape drawings."

Should Alternate No. 27 be accepted as a base bid item for the Roof Park Level, the waterproofing membrane specified (Sika Sarnafil PVC G476-20) is not UV rated and

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See A1-8630A and L1-2633A that describe Alternate 27. As noted in your question, if the Alternate to delete the Cafe is implemented the CDs require the specified waterproofing with paving above. The waterproofing specification has been updated to provide three alternate products.

See RFI P1-0135 response regarding requirement for Contractor to organize their means and methods as required for temporary protection of work to accommodate the Contractor's schedule of trade

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

per the manufacturer cannot be exposed for more than 3 months.

Please confirm that the waterproofing membrane specified above is to be used at the Roof Park Level per Alternate No. 27.

work. If a waterproofing product included in the bid requires temporary UV protection during the construction process, the temporary UV protection shall be included in the cost of work.

P1-0341 **Manhole Access Openings in Future Café PK560** **Closed** **07/31/2014** **08/10/2014** **09/04/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Details 1 and A/A1-8630A (IFC Drawings for Main Package dated 3/31/14)

Detail 1/A1-2605 depicts two 30" diameter manhole access openings with steel plate covers to be installed in Future Café PK560. The manhole access openings will create access points for water to enter the crawl space depicted in Detail A/A1-2605.

The crawl space beneath Future Cafe PK560 illustrated in Detail A/A1-2605 is not equipped with drainage or waterproofing to combat water entry.

Please confirm that this is acceptable or provide waterproofing details for the crawl space beneath Future Cafe PK560.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The two 30" access manholes shown on A1-8630A are deleted. Refer to attached SKS-0395 and SKA-4076 for area where slab may be saw-cut in the future to access crawl space.

Run waterproofing system as shown continuously above the structure over the crawl space and over the future saw-cut access opening.

Waterproofing is not required in the crawl space beneath Future Cafe PK560.

P1-0342 **Concrete Slab and Adjacent Wall Connection Details** **Closed** **07/31/2014** **08/10/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Detail A/A1-8630A, Detail 1/S1-3281A (IFC Drawings for Main Package dated 3/31/14)

Detail A/A1-8630A depicts the concrete slab in Future Café PK560 to be level with the top of the adjacent

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Structural drawing has been revised to match Architectural. See attached sketch SKS-0394.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

concrete wall.

Detail 1/S1-3281A depicts the concrete slab meeting below the top of the adjacent concrete wall.

Please coordinate the details for the connection of the concrete slab and adjacent concrete wall to match.

P1-0343 **Deferral of Pylon Footings per ASI 122** **Closed** **07/31/2014** **08/10/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Webcor Construction LP Andrew Kitchen

Co-Author:

REQUEST:

REFERENCE: ASI 122 dated 7/23/14, Detail 4/S1-3281A (IFC Drawings for Main Package dated 3/31/14)

Per ASI 122 sheet notes, all pylons are deferred.

If pylon footings are to be deferred, the anchor bolts will also be deferred. This will prevent footings from being installed as currently designed in Detail 4/S1-3281A.

Note that pylon footing is currently included in the Trade Package TG07.2 contract.

Please provide revised footing details, or designate the anchorbolts to be used.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The pylon footings are not deferred, per ASI 122 A1-2602 (SKA-3704) as well as other roof park zone plans, and are to be constructed as per detail 4/S1-3281A.

P1-0344 **Access Opening Details per Detail A/A1-8630A** **Closed** **07/31/2014** **08/10/2014** **09/04/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Detail A/A1-8630A, Detail 1/S1-2650A (IFC Drawings for Main Package dated 3/31/14)

Detail A/A1-8630A calls for an access opening in wall.

Detail 1/S1-2650A does not illustrate an access opening in

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to response to RFI P1-0341 for revised wall access openings. The Structural drawing has been revised to match Architectural drawings.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

wall at the same location.

Please coordinate the details for an access opening in wall to match.

P1-0345 **W10X54 Beam Connections to Adjacent Concrete Walls and Piers** **Closed** **07/31/2014** **08/10/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Detail 1/S1-2650A, Detail 5/S1-3281A (IFC Drawings for Main Package dated 3/31/14)

Detail 1/S1-2650A depicts W10X54 members connecting to adjacent concrete walls and piers, referring to Detail 5/S1-3281A for exterior pier details.

Detail 5/S1-3281A does not show the connection details for the W10X54 beams to the adjacent concrete walls and piers.

Please provide details and specifications for the connection of the W10X54 beams to the adjacent concrete walls and piers.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The W10 beam connections to the concrete walls and piers shall be per 7/S1-7630. Detail 7/S1-7630 is called out on 1/S1-2650A.

P1-0346 **Topping Slab for Loading Dock 01461** **Closed** **07/31/2014** **08/10/2014** **08/25/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Webcor Construction LP Andrew Kitchen

Co-Author:

REQUEST:

REFERENCE: Sheet A1-9527, L1-2304 (IFC Drawings for Main Package dated 3/31/14)

Sheet A1-9527 shows a non-traffic rated topping slab at Loading Dock 01461.

Sheet L1-2304 shows a non-traffic rated approach to Loading Dock 01461.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to SKA-3894 for Areas within the Loading Dock 01461 that will have reinforcement as call out in Item 3.0 BUS DECK LEVEL TOPPING AND CURB. All other areas will receive reinforcement as called out in Item 4.0.

Refer to sketch SKLA-313 for extent of approach topping for Loading Dock 01461.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please confirm Loading Dock 01461 and the approach to it are not to have traffic rated topping slabs/paving.

P1-0347 **Bollards on Curb Cuts** **Closed** **07/31/2014** **07/31/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

L1-2304 through L1-2304
Sheets L1-2304 through L1-2307, for example at gridline 17-19, have multiple curb cuts with bollards located in the center of them. Please confirm spacing between all bollards meets ADA standards at all curb cuts.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

P1-0348 **Concrete Pylon Deferral** **Closed** **07/31/2014** **08/10/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

ASI 122 - A1-2602 (SKA-3704) through A1-2607 (SKA-3710)
Note says "Defer all pylons; associated lighting; security cameras and signs. Retain the concrete footing for the pylon." Provide requirements for pylon footings in this deferred state, including but not limited to, conduit tie in requirements, future use requirements, embed or drill and epoxy requirements.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to response to RFI P1-0343.

P1-0349 **Phasing Requirements** **Open** **07/31/2014** **08/10/2014** **09/05/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Transbay PMPC Ray Quesada

Co-Author:

REQUEST:

ASI 122 - A1-2602 (SKA-3704)

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Roof Park Restaurant area is being evaluated by

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Note says "Defer the interiors of public restrooms and janitor's closet. Provide plumbing stub out within phased temporary building limit or within the bus deck ceiling." Provide phasing of the rooftop restaurant, including any temporary conditions that need to be accommodated for. Provide specifications and details for all phasing requirements.

TJPA and the design team as to how much to build and when. A decision is probably a few weeks away and phasing details will provided at that time.

P1-0350 **Traffic Coating at Bus Deck Level** **Closed** **08/04/2014** **08/14/2014** **08/26/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Sheets A1-9532 through A1-9534 (IFC Drawings for Main Package dated 3/31/14)

Per Sheets A1-9532 through A1-9534, the topping slab is to receive a scratch coat. The scratch coat may have too high of an amplitude to receive traffic coating. In addition, the contract documents do not require a traffic coating at the drive aisle.

Per the email from Mark O'Dell sent on 7/29/14, traffic coating will be added to the Bus Deck Level. Details and specifications have not been provided for the traffic coating at the Bus Deck Level.

Please confirm that the topping slab is to receive a scratch coat and provide the traffic coating details and specifications per prior discussions.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Correction, the topping slab referenced is required to receive a scratch finish, not a scratch coat; this is confirmed.

Specification section ¿07 18 14 ¿ Floor Coatings (FC-1, FC-2)¿ is currently being updated to document the traffic coating to be added to the Bus Deck Level traffic/topping slab. This will be issued in an upcoming ASI.

P1-0351 **MRc5 requirement** **Open** **08/07/2014** **08/17/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: 32 14 41, 2.2.
Materials are specified in specification 32 14 41 section

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Connecticut phone number specified is the company headquarters. The specified supplier has a

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

2.2 that are from Connecticut, without an equal stipulated. Since the requirements of these materials is to be 100% regionally sourced per section 2.1, provide an equal that is closer to the job site or revise the MRc5 required percentage so that the specifications are coordinated and bidders may be able to comply with this requirement.

manufacturing plant in Carona, California. Please follow through as required.

P1-0352 **Differing Leed Requirements** **Open** **08/07/2014** **08/07/2014** **09/01/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: 32 18 16
Specification 32 18 16 LEED requirements are not in alignment between part 1 and part 2. LEED submittal requirements listed in section 1.4.B need to align with LEED product requirements listed in section 2.1. Additionally, MRc5 option 2 language needs to be added to both part 1 and part 2 LEED requirements. Revise accordingly.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached SKLA-324.

Jenny Sasson / PWP

P1-0353 **Specification for Planting Materials** **Open** **08/07/2014** **08/17/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: 32 93 00
Specification 32 93 00, 2.1.A states to provide 50% of concrete mixes within a total travel distance of 500 miles of the project site. This Specification is for Planting Materials, not Concrete Mixes. Please update this section so that it accurately describes the intent of this LEED Credit.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Revised "concrete mix" to "planting material". See attached SKLA-314.

☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0354	Dimensional Layouts for Chairs and Benches	Open	08/07/2014	08/17/2014	08/27/2014	Potentially	

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: L1-2612 through L1-2617
No dimensional layouts are provided for chairs or benches on the referenced drawings. Please provide dimensional layouts for all chairs and benches. For example, refer to L1-2614 GL 16/C where the typical spacing is indicated but the first and last chair or bench is not dimensioned.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached SKLA-322.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0355	Wood Decking Dimensional Layout	Open	08/07/2014	08/17/2014	08/21/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

reference: L1-2606 and L1-9607
L1-2606 shows wood decking at GL 29. 2/L1-9607 shows the detail for this deck, but neither provide a dimensional layout. Please provide the dimensional layout for this deck.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

L1-2606 is the Materials Plan; refer to L1-2616 for layout.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0356	General Note 19 Tree Grow Period	Open	08/07/2014	08/17/2014	08/21/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

refernce: L-0001, L-0006, L-0007
General Note 19 states that there will be a contract grow period of three years. Based on the current schedule where the earliest contract award date is June 2014 and installation of large trees begin December 2016, this time period is not possible. Please revise accordingly.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per agreement with the TJPA and Webcor, PWP will be modifying the contract grow period to two years; revised drawings / specifications will be issued as part of the scheduled submittal on 09/09/2014.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0357	Dimensions for curvature	Open	08/07/2014	08/17/2014	08/27/2014	Potentially	☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

reference: L1-2612 through L1-2617
There are several sections of the referenced drawings that have curvature which is not dimensioned, i.e. the curvature referenced on the attached mark-up of GL 12 on L1-2613 at C.3 and G. Please provide radii for all curves shown on Park Level Zone Layout Plans L1-2612 through L1-2617.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached SKLA-322.

P1-0358 **Drain Connection Detail** **Closed** **08/07/2014** **08/17/2014** **08/27/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

L1-3202 & L1-3203 between GL J & K refer to Civil drawings for location of the connection to the drainage ¿ please provide this detail of the connection in the Civil drawings.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Plumbing to tie plumbing drains into (E) catch basin and (E) manhole as shown on the attached sketch.

P1-0359 **Missing Detail 9/L1-7304** **Open** **08/13/2014** **08/23/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Reference L1-7302 and 9/L1-7304 (IFC Main Set 03/31/2014):

L1-7302 calls for "Plant Rootball Typ" to be installed in the planters, and refers to 9/L1-7304 for details. 9/L1-7304 does not exist. Please provide the type of plants to be installed within the planters shown in L1-7302.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

P1-0360 **Testing and Reporting Requirements for Shaw Alley Art Installation** **Closed** **08/13/2014** **08/23/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

SUGGESTION:

ANSWER:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Accept Suggestion: ☐

Reference Specification Section 12 93 40 (IFC Main Set 03/31/2014):

Specification Section 12 93 40 includes design requirements and detailed information for the illuminated pavers and benches; please indicate if UL and/or NEMA testing and reporting is required, including the testing and rating requirements if needed.

he luminaire identified in the specification is E.T.L. listing. The E. T. L listing complies with UL standard 676 and is IP 68 Rated.

P1-0361 **Liquidated Damages** **Closed** **08/13/2014** **08/23/2014** **08/25/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Specification Section 34 41 13 (IFC Main Set 03/31/14)

Specification Section 34 41 13 Traffic Signals, Controller and Cabinet 3.9 & 3.10 includes language that assesses Liquidated Damages to the contractor; these should be deleted and addressed within the contract terms Div 00/01. Please delete and address within the Division 00/01 Specifications.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This RFI is a duplicate of RFI P1-0297. Refer to response to RFI P1-0297 for revised specification section 34 41 13.

P1-0362 **Waterproofing at Concrete Bus Crash Rail** **Open** **08/14/2014** **08/24/2014** **09/11/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: A1-8675 (ASI 119 dated 6/18/14)

The details on Sheet A1-8675 of ASI 119 call for WPM-2 waterproofing to be installed at the bus deck crash rail.

There are no details depicting the relationship of the waterproofing from the bus deck level slab to the concrete bus crash rail.

Please provide the details for waterproofing at this

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached drawing A1-8675 for clarification of WP membrane at Bus Deck Level slab to concrete guard rail.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

location.

P1-0363 **Walk-Off Mats at Ground Level** **Closed** **08/14/2014** **08/24/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Detail 1 & 2/A1-8214D (ASI 120 dated 7/11/14), Sheet A1-2305 (ASI 119 dated 6/20/14)

Detail 1 & 2/ A1-8214D of ASI 120 depicts walk-off mats located at W-3 sliding doors.

Per Sheet A1-2305 of ASI 119, walk-off mats at the ground level are to be deleted.

Please confirm that walk-off mats are to be installed at W-3 sliding doors per ASI 120 or coordinate the drawings and details to match.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed. Walk-off mats are deleted per A1-2305.

P1-0364 **One Story Building Reference Per Specification Section 07 54 19 1.1 A 2** **Closed** **08/14/2014** **08/24/2014** **08/22/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Specification Section 07 54 19 1.1 A 2 b (IFC Drawings for Main Package dated 3/31/14)

Specification Section 07 54 19 1.1 A 2 b states, "Roofing low slope roofs on one story structure east of Beale Street with a one-ply PVC membrane, fully adhered to a cover board and insulation."

The contract documents do not give any information on a one story structure east of Beale St.

Please provide information on the referenced one story structure.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

In specification section 07 54 19, delete item 1.1.A.2b referencing one story structure east of Beale Street. No such building exists under this contract.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0365	Fireproofing at Park Level W-4 Steel Ring Beam	Closed	08/14/2014	08/24/2014	08/25/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Detail 2/A1-8237D (ASI 120 dated 7/11/14)

Detail 2/A1-8237D of ASI 120 calls for fireproofing at the steel ring beam.

No fireproofing is shown at the column supporting the steel ring beam.

Please confirm that fireproofing is not required at the column shown in Detail 2/A1-8237D. If fireproofing is required at the column supporting the steel ring beam, please provide the details and type for the required fireproofing.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Sheets A1-8662 and A1-8663 indicate the scope and application of steel fireproofing requirements for the project. Details graphically show the fireproofing in the vicinity of the specific condition drawn, if the steel element is being cut, the fireproofing is shown in section, if the element is not cut (it is in the background) typically the fireproofing is not shown--this is standard graphic convention. For the extent of all fireproofing of ALL structural steel, please refer to Fire Protection Matrix and Schedule in sheets A1-8662 and A1-8663.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0366	Top of Step Elevation for Stair 601	Closed	08/14/2014	08/24/2014	08/21/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE:
Sheet L1-3606 (IFC Drawings for Main Package dated 3/31/14),
Details 1 & 2/A1-8651 (ASI 122 dated 7/23/14)
Detail 3/A1-8652 (ASI 122 dated 7/23/14)

Sheet L1-3606 shows a top of step elevation of 86.90 at Stair 601.

Details 1 & 2/A1-8651 shows a top of step elevation of 86'-9" at Stair 601 then refers to Detail 3/A1-8652.

Detail 3/A1-8652 also shows a top of step elevation of 86'-9".

Please confirm the correct elevation and coordinate the plans and details to match.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This RFI is incorrect. Drawings A1-8651 and A1-8652 (ASI 122 date 7/23/14) clearly show the top of step elevation above the Park Level elevation of 86'-9". See notes on 2/A1-8651 and 3/A1-8652, which refer to Landscape drawings for stair elevations. The Architectural and Landscape drawings are coordinated.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0367	Deferral of Expansion Joint Covers per ASI 122	Closed	08/14/2014	08/24/2014	08/27/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

REFERENCE: ASI 122 - VE Round 3 dated 7/23/14

Per ASI 122 dated 7/23/14, the Roof Park expansion joints have not been deferred, but their covers have been deferred.

Expansion joints and all associated components are sold as a unit. This will affect the warranty (depending if the park is built out) and result in added cost with little benefit.

Please confirm TJPA wants W/O to contract out the entire roof top park expansion joint assembly at grid lines 10 and 20 except the cover.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The decision to defer the grade level seismic joint covers, as noted on SKA-3706, SKA-3708 and SKA-3819 issued as part of ASI 122, is rescinded. Covers are to be provided as part of the complete seismic joint assembly. If the Roof Park is still being deferred at time of installation then an alternate pan infill material will be proposed at that time.

P1-0368 **Dampproofing Requirements at Trench and Slot Drain Channels** **Closed** **08/14/2014** **08/24/2014** **08/27/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Specification Section 07 11 16 1.1 A 4, Sheet L1-7318, Sheet L1-7381 (IFC Drawings for Main Package dated 3/31/14)

Specification Section 07 11 16 1.1 A 4 calls out for site dampproofing at trench and slot drain channels.

Trench drain details do not show dampproofing at these locations. (See Sheet L1-7318 and Sheet L1-7381 for examples.)

Please provide the details and locations requiring dampproofing that the trench and slot drain channels.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Slot drains are no longer used. Dampproofing not required at metal lined trench drains.

P1-0369 **Waterproofing at Walk-Off Mat per Detail 6/A1-9307** **Closed** **08/14/2014** **08/24/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

REFERENCE: Detail 6/A1-9307 (IFC Drawings for Main Package dated 3/31/14)

Detail 6/A1-9307 calls out for ¿continuous WPM¿, but does not identify what type of waterproofing to install.

Please provide the type of waterproofing to be installed at the condition called out on Detail 6/A1-9307.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to attached sketch SKA-4005 for revised detail and wpm clarification.

P1-0370 **Protection Board and Waterproofing Membrane Details at Public Restroom** **Closed** **08/14/2014** **08/24/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Webcor Construction LP Tram Nguyen

Co-Author:

REQUEST:

REFERENCE: Detail 5/A1-9041, Detail 10/A1-9042 (IFC Drawings for Main Package dated 3/31/14)

Detail 5/A1-9041 calls out for "protection board over waterproof membrane" directly below the topping slab. Detail 10/A1-9042 calls out for "protection board and waterproofing where required" directly under topping slab.

A1-9041 & A1-9042 are public restroom typical detail sheets.

Please identify where waterproofing is required within the public restrooms, and what type of waterproofing is to be used.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Waterproofing is required under all porcelain tiled floor and behind the wall tiles, in the public restrooms. The waterproofing membrane is WPM-12, refer to specification section 09 30 00 / 3.2.

P1-0371 **WPM-5 Crystalline Waterproofing at Escalator Pit per Detail 4/A1-7550** **Closed** **08/14/2014** **08/24/2014** **08/25/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Detail 4/A1-7550 (IFC Drawings for Main Package dated 3/31/14)

Detail 4/A1-7550 calls out for WPM-5 (crystalline waterproofing) over plate steel. WPM-5 crystalline

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The membrane over the plate steel has been changed to WPM-10. Refer to SKA-3870 for revised detail 4 on A1-7550.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

waterproofing is specifically intended for sealing of concrete, and will not work on steel.

Please provide direction to the type of waterproofing to be used at this condition, and associated waterproofing details.

P1-0372 **WPM -2 Call Out at Muni Bus Plaza** **Closed** **08/14/2014** **08/14/2014** **08/22/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Detail 2/A1-7822 (IFC Drawings for Main Package dated 3/31/14)

Detail 2/A1-7822 calls out for WPM-2 at the Muni Bus Plaza. Typically WPM-1A is used at exterior Ground Level.

Please confirm the WPM-2 as shown on Detail 2/A1-7822 is to be revised to WPM-1A. If not, please provide the extents of WPM-2 at Ground Level.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Waterproof membrane on Detail 2/A1-7822 has been corrected to WPM-1A, see attached sketch SKA-4001.

P1-0373 **Concrete Paving Specification Clarification** **Closed** **08/14/2014** **08/24/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Specification Section 07 19 25, Specification Section 07 19 23

Specification Section 07 19 25 and Specification Section 07 19 23 both indicate they are to be used for concrete paving.

Please clarify which specification section is to be used for concrete paving.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Section 07 19 23 - Site Repellents issued by PWP (Landscape Architects) shall be used with Landscape Concrete sections such as 03 33 12 - Landscape Cast-in Place Concrete, 03 33 13 - Shaw Alley Art Installation Paving, and 03 45 00 - Site Precast Concrete Elements.

2. Section 07 19 25 - Water Repellent Coatings (WPM-9) issued by AAI, shall be used with Non-Landscape concrete sections.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0374	Details for Site Fluid-Applied Waterproofing (WPM-4)	Closed	08/14/2014	08/24/2014	09/03/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Specification Section 07 13 00

Specification Section 07 13 00 Site Fluid-Applied Waterproofing (WPM-4) appears to be related to roof park elements only.

Does this occur anywhere else? No details for WPM-4 appear in architectural or landscape drawings.

Please provide details for WPM-4 site fluid-applied waterproofing.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See section 1.1.A for summary of locations. Omit item 1.1.A.3 ¿Walls.¿ See section 3.3 for application.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0375	Sloped Topping Specifications	Closed	08/14/2014	08/24/2014	08/27/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Detail 4/A1-7552, Detail 8/A1-7552 (IFC Drawings for Main Package dated 3/31/14)

Several locations show a "sloped topping" which is ¼" thick or less (see 4/A1-7552 & 8/A1-7552) for creating positive slope at waterproofing.

No product is specified for the "sloped topping". Please provide a product that will allow for slopping from less than 2" to 0" thickness (including from 1/2" to 0").

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For sloped topping products refer to response for RFI P1-0230.3; as noted, specification section 09 30 00 to be revised to include products as noted.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0376	Exterior Awning Noise Due to Wind	Closed	08/14/2014	08/14/2014	09/01/2014	Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Specification Section 08 44 27 (W-2 Reissued for Bid Set)

Please confirm that noise due to wind moving through the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed. Specification Section 08 44 27 paragraph 2.2 N will be revised to state: "Unacceptable Conditions: "Vibration harmonics, noise or vibrations created by loosening, weakening or failure of

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

patterns cut out in the Aluminum Panels of the Exterior Awning and through the gaps between the panels Exterior Awing and noise due to wind moving above and below the entire system is not to be considered an unacceptable condition. The contractor is providing the pattern per the contract documents and they will have no control over any noise due to wind moving through the predetermined pattern, gaps between each panel and wind moving above and below the entire system. The contractor should only be responsible for noise due to vibration caused by poor workmanship and should not be responsible for any noise due to the inherent design of the W-1 Exterior Awning.

fasteners, attachments or other components".

P1-0377 **WPM-5 Crystalline Waterproofing at Escalator Pit per Detail 4/A1-7552** **Open** **08/14/2014** **08/14/2014** **08/27/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Detail 4/A1-7552 (IFC Drawings for Main Package dated 3/31/14)

Detail 4/A1-7552 shows WPM-5 crystalline waterproofing extending into a drain body within an escalator pit.

Crystalline waterproofing is a trowelled on waterproofing which seals concrete, and is not a membrane which can be lapped into a drain body.

Please revise the detail to show the extent of WPM-5 crystalline waterproofing to be used at the drain.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The detail has been revised so that the membrane does not lap onto the drain body. Sheet will be issued in ASI 127.

P1-0378 **WPM-9 Call Outs at Elevator Pits** **Open** **08/14/2014** **08/24/2014** **08/27/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Detail 3/A1-7576, Detail 2/A1-7577, Detail 3/A1-7577, Specification Section 07 19 25 (IFC Drawings

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The details have been revised to note WPM-10 over drywall cant strips. Sheet will be issued with ASI 127.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

for Main Package dated 3/31/14)

Detail 3/A1-7576, Detail 2/A1-7577, and Detail 3/A1-7577 call out for WPM-9 over drywall cant strips within elevator pits.

Per Specification Section 07 19 25, WPM-9 is for concrete surfaces only.

Please confirm WPM-9 is to be used over drywall where shown on the contract documents or provide the correct WPM system for the drywall.

P1-0379 **Slab Sloping Details at Roof Park Level** **Void** **08/14/2014** **08/24/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

REFERENCE: Details 1 & 2/A1-8646 (ASI 122 dated 07/23/14)

Details 1 & 2/A1-8646 of ASI 122 show a slab sloping in an east-west direction, above the structural slab below waterproofing.

Slab plans do not identify these slabs.

Please provide information on slabs sloping east-west on the Roof Park Level.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

P1-0380 **WPM-5 Crystalline Waterproofing at Lover Concourse Level Telecom Service Vaul** **Closed** **08/14/2014** **08/24/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Detail 1/A1-9250, Detail 3/A1-9251, Detail 4/A1-9251 (ASI 118 dated 6/20/14)

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For the updated WPM-5 waterproofing details at the Telecom Service

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Vaults, refer to SKA-4015.

Detail 1/A1-9250 of ASI 118 shows WPM-5 crystalline waterproofing being applied to the bottom of metal deck and the bent plate at the edge of deck.

Details 3 & 4/A1-9251 of ASI 118 shows WPM-5 crystalline waterproofing going over a metal sleeve.

Crystalline waterproofing is not compatible with metal.

Please revise waterproofing detail where WPM-5 crystalline waterproofing is shown over metal deck, bent plate, and metal sleeve.

P1-0381 **W-2 Schedule of Unit Prices** **Open** **08/20/2014** **08/30/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Reference 08 44 25 (ASI 120 and Div. 00/01 Specifications)

Specification Section 08 44 25 subsection 1.3 calls for a unit price for Temporary Retail Façade and Glass Retail Façade for 2, 3 and 4 bay modules. There is not a Schedule of unit prices specification for the W-2 system in the Div. 00/01 dated August 11, 2014. If a unit price is required for the Temporary Retail Façade it needs to be included in the Div. 00/01. Currently the only unit price specifications listed are 01 10 20/APA for TG03, 10 10 20/APB for TG04.5.1, 01 10 20/APC for TG04.3, 01 10 20/APD for TG04.4, 01 10 20/APE for TG04.1, 01 10 20/APF for TG04.2, 01 10 20/APG for TG04.6, 01 10 20/API for TG06.0, and 01 10 20/APJ for TG18.1. If unit pricing for Temporary and Glass Retail Façade is desired, provide unit price specification, otherwise revise specification to not include unit pricing language.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

P1-0382 **Glazing Schedule of Alternates** **Open** **08/20/2014** **08/30/2014** **09/10/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Reference 01 10 30/APE (Div. 00/01 Specifications 08/11)

The schedule of alternates for the design build glazing systems was not included in the August 11, 2014 issuance of the Div. 00/01 specifications. Any alternates that are desired for the TG08.10 Glass Curtain Wall (W-2, 3, 4, 6, and 8) need to be included in the Div. 00/01 specifications. Currently the only alternates that affect the TG08.10 package are alternate # 4 which deletes the Beale Street Lobby and #31 which changes the W-2 glass from low iron glass to standard clear. If any other alternates are desired, provide them in the 01 10 30/APE specification.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to attached markup of the revised Specification Section 01 10 30/APE:

Delete paragraph E.1.19 Alternate No, 31: Change specified glass substrate for W-2 glass type from Low Iron glass to Standard clear Glass. Refer to the following Contract Documents: Specification Section: 08 80 03 Glass Types.

Refer to attached markup of the revised Specification Section 01 10 30/APA:

Delete paragraph A.1.3 Alternate No. 3: For W-4 Aluminum-Framed Curtain Wall System, provide an alternate to add reinforcement to vertical and horizontal mullions; add electrical pull string for future wiring; add any required prep for fastening the LED Art wall panels in the future; Details per sheet A1-8247 extent shown in sheets A1-8230 to A1-8232.

Add paragraph A.1.4 Alternate No, 4: Change specified substrate for all W-2 and W-6 glass types from Low Iron Glass to Standard Clear Glass. Refer to Specification Section: 08 80 03 Glass Types.

P1-0383 **Ballistic Resistant Window in Room B1269** **Closed** **08/20/2014** **08/30/2014** **08/25/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference A1-9855 Detail 2 (IFC Main Set)

Provide specification for the glass type for the ballistic resistant window, window frame and pass thru drawer required for the reception window in room B1269. In addition provide details of how the frame attaches to the pass thru drawer mounted on the bottom of the window.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The specification for the glass type for the ballistic resistant window, window frame and pass thru drawer for the reception window in room B1269 have been provided in Specification Sections 10 99 00 Building Specialties and 10 99 00/APA Building Specialties SSI. Frame attaches to the pass thru drawer as stipulated in the manufacturer's documentation.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0384	Planting Strip at Exhaust Ventilation Strap	Open	08/20/2014	08/30/2014	08/22/2014	Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 3/A1-8176 IFC Main Set

Detail 3/A1-8716 shows a planting strip at the exhaust ventilation shaft near the bus ramps; Landscaping drawings do not provide any information regarding this area. Please confirm that planting strip is desired, and detail reference in landscaping for types of plants if any.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The exhaust shaft planting strip, sidewalk area (NIC-Landscape) associated build up, and W-17 modular trellis system will be part of future scope and installation. The detail annotations have been modified accordingly. Refer to SKA-4041 and SKA-4042.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0385	Access Panels at Stair 201	Closed	08/21/2014	08/31/2014	09/03/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE:
Sheet A1-2302 (ASI 119 dated 6/20/14)
Detail 1/A1-7001 (IFC Drawings for Main Package dated 3/31/14)
Detail A/A1-7850 (ASI 122 dated 7/23/14)
Detail B/A1-5102 (ASI 122 dated 7/23/14)

Sheet A1-2302 (ASI 119) and Detail 1/A1-7001 (IFC) both depict an access panel at the Stair 201B on the Ground Level and references Detail A/A1-7850 (ASI 122) and Detail B/A1-5102 (ASI 122).

- Detail A/A1-7850 (ASI 122) does not show an access panel/wall/fence at the same location depicted in Sheet A1-2302 and Detail 1/A1-7001.

- Detail B/A1-5102 (ASI 122) does not show an access panel/wall/fence at the same location depicted in Sheet A1-2302 and Detail 1/A1-7001.

Please provide details for the access panel/wall/fence called out on Sheet A1-2302 and Detail 1/A1-7001.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Access panel/fence will be added to details A/A1-7850 & B/A1-5102 for record in a future drawing issue.

For details of access panel/fence shown on drawing A1-2302 and 1/A1-7001 refer to attached sketch SKA-4055.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0386	WPM-5 Called out in Detail 6/A1-7554 at Second Level W-2 Escalator Pit	Closed	08/21/2014	08/31/2014	08/25/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

REFERENCE: Detail 6/A1-7554 (IFC Drawings for Main Package dated 3/31/14)

Detail 6/A1-7554 calls for WPM-5 crystalline waterproofing to cover insulation and a steel mullion at the second level of the W-2 escalator pit.

WPM-5 crystalline waterproofing is specifically intended for sealing of concrete, and will not work on steel.

Please provide direction to the type of waterproofing to be used at this condition, and associated waterproofing details.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Correction, the detail does not call for the WPM-5 waterproofing to cover insulation and steel million. The detail calls out for a "AIR/VAPOUR BARRIER LAPPED TO WPM-5 AND SEALED". Refer to W-2 specification 08 44 25 for Air/Vapour type.

P1-0387 **Corner Guards Dimension Details per ASI 123** **Closed** **08/21/2014** **08/31/2014** **09/03/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Specification Section 05 50 00 2.5 M 1 & 2 (ASI 123 dated 8/6/14)

Specificiation Section 05 50 00 2.5 M 1 & 2 of ASI 123 states,
"1. For Concrete Columns/Concrete Block Walls: as detailed, 8' x 4" x 1/2" fabricated aluminum angles, 8'-0" high typical or as shown on drawings with anchor straps at 12: o.c.
2. For Gypsum Board Walls: as detailed, 8' x 4" x 1/2" fabricated aluminum angles, 8'-0" high typical or as shown on drawings. Flush countersunk fasteners"

A standard size for corner guards are 4" x 4" x 1/2". Please confirm that corner guards are required to be the dimensions referenced in Specification Section 05 50 00 2.5 M 1 & 2.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

"M. Corner Guards:

1. For Concrete Columns/Concrete Block Walls: as detailed, 4" x 4¿ x ½¿ fabricated aluminum angles, 8¿-0¿ high typical, or as shown on drawings with anchor straps at 12¿ o.c.

2. For Gypsum Board Wall: as detailed, 4" x 4¿ x ½¿ fabricated aluminum angles, 8¿-0¿ high typical, or as shown on drawings. Flush countersunk fasteners."

P1-0388 **Metal Framing Design-Build Compliance with Specification Section 08 05 13** **Open** **08/14/2014** **08/24/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

REFERENCE: (IFC Drawings for Main Package dated 3/31/14)
Specification Section 05 41 00 1.6 G
Specification Section 09 22 19 1.6 K
Specidication Specification 08 05 13
Sheet A-0023

Specification Section 05 41 00 1.6 G and Specification Section 09 22 19 1.6 K require design-build work complying with Specification Section 08 05 13 "where shown on drawings and on Partition Schedule drawing A-0023."

Sheet A-0023 does not indicate any wall type needing to meet the design requirements of Specification Section 08 05 13.

Please confirm that none of the wall types identified on Sheet A-0023 are required meet the design requirements of Specification Section 08 05 13.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

P1-0389 **CJC4 Expansion Joint at Second Level GL 10** **Closed** **08/21/2014** **08/31/2014** **09/01/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE:
Sheet A1-8880 (ASI 123 dated 8/6/14)
Sheet A1-9604 (IFC Drawings for Main Package dated 3/31/14)

Sheet A1-8880 of ASI 123 directs for the installation of a CJC4 expansion joint within the gypsum board ceiling at GL 10 on the Second Level.

Per Sheet A1-9604 of IFC Main Package, the ceiling for Room 02320 is exposed to structure, not a gypsum board ceiling.

Please confirm no ceiling expansion joint is to be installed at Second Level GL10.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed, ceiling expansion joint type CJC4 is not to be installed in Room 02320.

Number	*Subject*	*Status*	*Date Created*	*Date Required*	*Date Answered*	*Cost Impact*	*Proceed*
P1-0390	**WJC4 Adjoining Materials**	**Closed**	**08/21/2014**	**08/31/2014**	**09/05/2014**	**Potentially**	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE:
Sheet A1-8880 (ASI 123 dated 8/6/14)
Detail 2/A1-8178 (IFC Drawings for Main Package dated 3/31/14)

Sheet A1-8880 of ASI 123 calls out for WJC4 to have adjoining materials of gypsum board.

Detail 2/A1-8178 of IFC Main Package does not show gypsum board in the plain of the wall joint.

Please confirm no gypsum board is required in plain of WJC4.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to enclosed revised detail 2 on SKA-4079 (A1-8178) for material clarification.

Refer to enclosed revised Expansion Joint Schedule in SKA-4080 (A1-8178) to clarify that WJC4 occurs in the interior side and WJC3 occurs in the exterior side. The adjoining and infill material columns of Seismic Joint Schedule are revised to match Specification and details.

Enclosed page 13 of Specification 07 09 13 3.4 Paragraphs L and M are revised to match A1-8880.

P1-0391	**Insulated Soffit References per A1-9603**	**Open**	**08/22/2014**	**09/01/2014**	**09/03/2014**	**Potentially**	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Sheet A1-9603 (ASI 119 dated 6/20/14)

Sheet A1-9603 references insulated soffits at Rooms 01361, 01381, 01425, 01426, 01441, 01483, 01603.

Insulated soffits are not shown on RCP or sections.

Please confirm that insulated soffits are not required at the referenced locations.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

P1-0392	**Ceiling Type for Room 01603**	**Closed**	**08/22/2014**	**09/01/2014**	**09/03/2014**	**Potentially**	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Sheet A1-9603 (ASI 119 dated 6/20/14), Detail 3/A1-4306 (IFC Drawings for Main Package dated 3/31/14)

Sheet A1-9603 references a gypsum board ceiling at

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Room finish schedule on A1-9603 for Room 01603 is correct.

Sheet A1-4306 & Detail 3/A1-8511 refer to soffit on underside of stair 603, refer to A1-7022 to confirm

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Room 01603.

Sheet A1-4306 and Detail 3/A1-8511 call for a metal ceiling at this location.

Please confirm ceiling type.

ceiling type for room 01603.

P1-0393 **Insulation Beneath the Radiant Floor Heating System** **Void** **08/22/2014** **09/01/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

REFERENCE: Specification Section 07 21 00 1.1 2, Specification Section 07 21 00 3.2 B, Sheet A1-2982 (IFC Drawings for Main Package dated 3/31/14)

Specification Section 07 21 00 1.1 2 and Specification Section 07 21 00 3.2 B indicate insulation is to be furnished and installed beneath the radiant floor heating system. Per Specification Section 07 21 00 2.3 R INS-16 is to be used in radiant terrazzo floor areas. Sheet A1-2982 shows INS 13 at the radiant flooring.

Per Specification Section 01 10 30/APE E.1.7 Alternate 15, the deletion of radiant flooring is to be priced.

Please confirm insulation requirements are not to change as part of Alternate 15.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

P1-0394 **Insulation Specification for Parapets** **Closed** **08/22/2014** **09/01/2014** **09/04/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Specification Section 07 21 00 1.1 1 d, Specification Section 07 21 00 (IFC Drawings for Main Package dated 3/31/14)

Specification Section 07 21 00 1.1 1 d indicates

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to attached sketch SKA-4056 for insulation type within parapet and to Specification Section 07 21 00 / 2.3 C for INS-3 description.

Specification Section 07 21 00 / 1.1 A is being revised

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Specification Section 07 21 00 does not apply to parapets.

Several details (for example, Details 1 & 2/A1-7870) show insulation within parapets.

Please provide a specification for insulation shown within parapets.

as follows:

¿A. Section includes thermal insulation to limit thermal gains and losses at the following locations:

1. Building envelope, excluding the following locations:

a. Roof insulation specified elsewhere.

b. Doors.

c. Glazed assemblies. DELETED

d. Parapets. . DELETED

e. Louvers, except where blank-off panels occur.

f. Flexible Head and edge of Wall firestopping sealants and membrane.

g. Fire safing and smoke seals at slab edges. DELETED.

2. Beneath the suspended concrete floor slabs where indicated, including beneath the radiant floor heating system.

3. Elsewhere as indicated. DELETED¿

P1-0395 **Request for Specification Section 07 12 11 Cellular Foamed Glass Insulation** **Closed** **08/22/2014** **09/01/2014** **08/26/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Specification Section 07 21 00, Specification Section 07 12 11 (IFC Drawings for Main Package dated 3/31/14)

Specification Section 07 21 00 references Specification Section 07 12 11 for Cellular Foamed Glass Insulation.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Cellular Foamed Glass Insulation does not apply. Specification Section 07 21 00 paragraph 1.1 G is deleted.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Specification Section 07 12 11 has not been issued.

Please provide the referenced spec.

P1-0396 **Request for Specification Section 07 27 00** **Closed** **08/22/2014** **09/01/2014** **09/05/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Specification Section 07 21 00 3.2 D, Specification Section 07 27 00 (IFC Drawings for Main Package dated 3/31/14)

Specification Section 07 21 00 3.2 D references Specification Section 07 27 00.

Specification Section 07 27 00 has not been issued.

Please provide the referenced specification.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Specification Section 07 27 00 was deleted previously and replaced with the work of specification 07 13 14 "Sheet waterproofing and Miscellaneous Flashings." Specification Section 07 21 00 paragraph 3.2 D is revised to replace Section 07 27 00 with Section 07 13 14.

P1-0397 **Design-Build Requirement for Roof Hatches** **Open** **08/22/2014** **09/01/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

REFERENCE: Specification Section 07 72 33 (IFC Drawings for Main Package dated 3/31/14)

Specification Section 07 72 33 requires design-build requirements for roof hatches.

Roof hatches is not typically a D-B scope of work.

Please confirm TJPA desires engineering for roof hatches.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

P1-0398 **Tubular H.O.G. Protective Enclosure and Stainless Steel Surface Collar Details** **Closed** **08/22/2014** **09/01/2014** **08/26/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

REFERENCE: (IFC Drawings for Main Package dated 3/31/14)
Specification Section 08 62 50 3.5
Sheet A1-8877
Specification Section 08 62 50 3.5 A 2

Specification Section 08 62 50 3.5 Tubular Daylighting Devices references Tubular H.O.G Protective Enclosure and Stainless Steel Surface Collar. Sheet A1-8877 does not identify these pieces.

In addition, Specification Section 08 62 50 3.5 A 2 references seismic angle braces and Structural drawings. Structural drawings do not identify these pieces.

Please provide details and structural information on Tubular H.O.G Protective Enclosures and Stainless Steel Surface Collars referenced in Specification Section 08 62 50 3.5.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

All these questions no longer apply, as the work of Specification Section 08 62 50 Tubular Daylighting Devices is hereby deleted.

P1-0399 **Revision of Referenced Specificaton Section 09 90 00** **Closed** **08/22/2014** **08/22/2014** **08/26/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Specification Section 09 21 16 1.6 E, Specification Section 09 90 00 (IFC Drawings for Main Package dated 3/31/14)

Specification Section 09 21 16 1.6 E references Specification Section 09 90 00.

Specification 09 90 00 is not part of the contract documents.

Please revise the referenced specification number.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Specification Section 09 21 16 1.6 E is revised to reference Section 09 91 00 in lieu of Section 09 90 00, which does not apply.

P1-0400 **Portable Lighting Requirement per Specification Section 09 21 16 1.6 E** **Closed** **08/22/2014** **09/01/2014** **09/03/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

REFERENCE: Specification Section 09 21 16 1.6 E 3, Specification Section 09 21 16 1.6 E 5 (IFC Drawings for Main Package dated 3/31/14)

Specification Section 09 21 16 1.6 E 3 requires the trade subcontractor to provide portable lighting for the review of mock-ups under various light conditions for defects and improperly finished joints, trim, and screw heads.

Specification Section 09 21 16 1.6 E 5 indicates that the mock-ups will be used as a standard for the gypsum board work with the same finish for the Project.

No requirement is given elsewhere that portable lighting is required for providing various lighting conditions for inspection/punch prior to final acceptance by TJPA.

Please confirm no lighting for inspection/punch prior to final acceptance is required beyond the ambient lighting found in the area under review.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

No portable lighting is required for the punchlist review prior to final acceptance by TJPA, unless the punchlist review is required prior to the time permanent building lighting is in place and operational.

P1-0401 **Utilization of Level 4 Finish** **Closed** **08/22/2014** **09/01/2014** **09/08/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen

To: Turner Construction Compan PHIL MILITELLO

Answered By: Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Specification Section 09 21 16 3.7 F 5 (IFC Drawings for Main Package dated 3/31/14)

Specification Section 09 21 16 3.7 F 5 indicates a Level 5 finish is to be installed at surfaces to be painted, which are not Finish Levels 1 - 4.

Level 4 finish level is to be used "for all other areas".

There does not appear to be any areas not covered by Levels 1 - 3 and 5. Please confirm Finish Levels 4 finish is not used on the project.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Level 4 finish is to be provided where a flat paint, light texture or lightweight wall covering is specified.

P1-0402 **Revision of Referenced Specificaton Section 09 31 00** **Closed** **08/22/2014** **09/01/2014** **08/26/2014** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Specification Section 09 25 50 3.2 A 4, Specification Section 09 31 00 (IFC Drawings for Main Package dated 3/31/14)

Specification Section 09 25 50 3.2 A 4 references Specification Section 09 31 00.

Specification Section 09 31 00 is not part of the contract documents.

Please revise the referenced specification number.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Specification Section 09 25 50 3.2 A 4 is revised to reference Section 09 30 00 in lieu of Section 09 31 00, which does not apply.

P1-0403 **Acclimization Requirements for ACT Installation** **Closed** **08/22/2014** **09/01/2014** **08/27/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Specification Section 09 51 00 1.9 A, Specification Section 09 51 00 3.2 A (IFC Drawings for Main Package dated 3/31/14)

Specification Section 09 51 00 1.9 A requires temperatures be not less than 70 degrees F at least 3 days prior to and 3 days after installation of ACT.

Specification Section 09 51 00 3.2 A requires temperatures of at least 72 degrees F 3 days prior and after installation of ACT.

Please clarify acclimatization requirement. (NOTE: changing the requirement to maintaining minimum requirements of the product manufacturer may reduce acclimatization costs).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Specification Section 09 51 00 paragraphs 1.9 A and 3.2 A are revised to state: "provide and maintain environmental conditions and ambient acclimatization requirements per manufacturer's written requirements.

P1-0404 **Clarification for Work Supported from ACT System** **Closed** **08/22/2014** **09/01/2014** **09/08/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

REFERENCE: Specification Section 09 51 00 1.7 C, Specification Section 09 51 00 3.2 M (IFC Drawings for Main Package dated 3/31/14)

Specification Section 09 51 00 1.7 C requires that light fixtures, air supply diffusers, boots, fire alarm grills and exhaust and return air grilles are not supported from the ACT system.

Specification Section 09 51 00 3.2 M requires that upon request, written confirmation be provided that the work of Divisions 21, 22, 23, 26, 27 and 28 can be supported by the ACT system. Per Typical Suspended Panel Ceiling Note 11/A-0034, light fixtures and air terminals weighing less than 56 pounds may be supported directly on the heavy duty ACT system.

Please clarify what elements of Divisions 21, 22, 23, 26, 27 and 28 are to be supported by the ACT system.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Item 3.2.M of Specification Section 09 51 00 will be deleted. Only elements as defined in drawing 5/A-0034 are permitted.

P1-0405 **Acclimization Requirements for Access Flooring** **Closed** **08/22/2014** **09/01/2014** **08/26/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Specification Section 09 69 00 1.8 A, Specification Section 09 69 00 1.9 A (IFC Drawings for Main Package dated 3/31/14)

Specification Section 09 69 00 1.8 A requires that ambient temperature to be between 40-90 degrees F and relative humidity is not more than 70 percent at the time of installation.

Specification Section 09 69 00 1.9 A requires that ambient temperature to be between 50-85 degrees F and relative humidity is between 20-80 pecent.

The above referenced Specification Sections do not match. Please clarify what acclimatization requirement is to be used. (NOTE: changing the requirement to maintaining minimum requirements of the product

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Specification Section 09 69 00 paragraphs 1.8 A and 09 69 00 1.9 A are revised to state: "Provide and maintain environmental conditions and ambient acclimatization requirements per manufacturer's written requirements for the application of Access flooring."

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

manufacturer may reduce acclimatization costs).

P1-0406 **Correction of Fahrenheit to Celsius Calculation** **Closed** **08/22/2014** **09/01/2014** **08/26/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Specification Section 09 69 00 1.9 A (IFC Drawings for Main Package dated 3/31/14)

Speficiation Section 09 69 00 1.9 A requires an ambient temperature between 50-85 degrees F (100-290 degrees C).

The Fahrenheit to Celsius calculation is incorrect. Please revise the requirement.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See response as for RFI #P1-0405 - question in this RFI is no longer applicable.

P1-0407 **Information on Fire Extinguisher Cabinets** **Open** **08/22/2014** **09/01/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

REFERENCE: Specification Section 10 44 13 2.2 (IFC Drawings for Main Package dated 3/31/14)

Specification Section 10 44 13 2.2 indicates fire extinguisher cabinets are "TBD".

Please provide information on the fire extinguisher cabinets.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

P1-0408 **Interior Bird Deterrent Systems Specifications** **Closed** **08/22/2014** **09/01/2014** **08/26/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REFERENCE: Specification Section 10 81 13 1.1 a (IFC Drawings for Main Package dated 3/31/14)

Specification Section 10 81 13 1.1 a indicates that Specification Section 10 81 13 specifies bird deterrent systems at the exterior of the building only.

Sheet A1-8251 indicates that bird control is to be installed within the Grand Hall.

Please provide the specification for interior bird deterrent systems.

Specification Section 10 81 13 1.1 A.1 is revised to include the building interiors.

P1-0409 **Drill Holes for the Birdwire System** **Closed** **08/22/2014** **09/01/2014** **09/04/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Specification Section 10 81 13 3.2 C 2 (IFC Drawings for Main Package dated 3/31/14)

Specification Section 10 81 13 3.2 C 2 indicates that the installer of the Birdwire System is to drill ¼¿ holes in the substrate for mounting.

These holes may void the warranty of the substrate, and create a possible point of water intrusion.

Please confirm this is acceptable, or revise specification to allow for installation with adhesive only.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Install system using mechanical fastening methods only, without the use of adhesives. Use aluminum or stainless steel clamps, brackets, clips and fasteners for installation as shown in the Contract Document details. Use stainless steel hose clamp with attached post when attaching to pipe or round structural sections where diameter allows (e.g. light poles). The mechanical fastening method shall not penetrate the substrate in a manner that creates water intrusion or voids the warranty of the substrate.

P1-0410 **Painting of ACT-1 Ceiling for B1268** **Closed** **08/22/2014** **09/01/2014** **09/01/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Sheet A1-9602 (ASI 119 dated 6/20/14)

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed. The ACT-1 ceiling within Room B1268 is not to be painted, refer to attached SKA-4066.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Sheet A1-9602 of ASI 119 dictates that ACT-1 ceiling within Room B1268 is to be painted.

No other ACT-1 ceilings are scheduled to be painted.

Please confirm the ACT-1 ceiling within Room B1268 is not to be painted.

P1-0411 **ACT Ceiling Type for Room 01223** **Closed** **08/22/2014** **08/22/2014** **09/03/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Sheet A1-9603 (ASI 119 dated 6/20/14)

Sheet A1-9603 of ASI 119 calls out the ceiling finish of Room 01223 as "ACT".

Typically on the finish schedules, the type of ACT is called out (i.e. ACT-1).

Please confirm all ceilings called out on the finish schedule to be "ACT" are to be Ceiling Type ACT-1.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed, all ceilings noted as ACT on schedule are ceiling type ACT-1.

See attached sketch.

P1-0412 **AWP-1 Call Out per Specification Section 09 77 23** **Closed** **08/22/2014** **09/01/2014** **09/05/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE:
Sheet A1-9606 (ASI 122 dated 7/23/14)
Sheet A1-9804 (ASI 118 dated 6/20/14)
Sheet A1-9601 (ASI 119 dated 6/20/14)

Sheet A1-9606 indicates that Specification Section 09 77 23 Acoustic Wall Treatment is identified on the finish schedules as AWP-1. AWP-1 does not appear on any of the finish schedules.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For Acoustic Wall Treatment AWP-1 call out, refer to attached SKA-4065.

For specifications of Fabric (FAB-2) to be used for the acoustic wall panel, see below: (to be included in the upcoming ASI-0127)

Section 09 77 23 Acoustical Wall Treatment 2.3. Material

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

- Per A1-9804, Rooms B1232 and B1239 have AWP-1 on the walls.

- Per A1-9601, the wall finish of B1232 and B1239 is painted gypsum.

Please coordinate the finish schedule to show the rooms to receive Acoustic Wall Treatment.

B. Fabrics:

2. Acoustical panel fabrics, unbacked tackable fabric by one of the following:

a. Knoll

b. Mayer Fabrics (series: Basic)

c. Maharam Fabric.

3. Color: To be selected from manufacturer standard range of colors.

P1-0413 **Wall Protection Systems Locations per Specification Section 10 26 00** **Closed** **08/22/2014** **09/01/2014** **09/03/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Specification Section 10 26 00 (IFC Drawings for Main Package dated 3/31/14)

Specification Section 10 26 00 is for Wall Protection Systems.

The documents do not identify locations for these products.

Please confirm that no products listed within Specification Section 10 26 00 are to be furnished or installed on Phase 1.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed, specification section 10 26 00 is not related to any work furnished or installed in Phase 1. This section will be deleted from TOC in upcoming ASI 0127.

P1-0414 **Structural Information for HSS Post and Column Baseplate** **Closed** **08/22/2014** **09/01/2014** **09/03/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Detail 1/A1-9858 (IFC Drawings for Main

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For both A) and B) the Structural Drawings do show

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Package dated 3/31/14)

A.) Detail 1/A1-9858 calls out for:
- HSS Post
- Column Baseplate secured to Structural Slab

Detail 1/A1-9858 indicates the structural information is located on the structural plans. Structural plans do not show this steel.

B.) Detail 3/A1-9858 calls for:
- Structural Lintel Beam
- Shear Plate welded to HSS and bolted to Lintel Beam
- Double Steel Angle spaced at every 3'-0" alternating sides

Detail 3/A1-9858 indicates the structural information is located on the structural plans. Structural plans do not show these elements.

Please provide the referenced structural information for steel members and attachment.

the requested information. Please refer to 4/S1-9100 issued with IFC Set dated 03/31/14.

P1-0415 **Pricing Coordination with PG&E** **Open** **08/26/2014** **09/05/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Reference Note #8 C1-8001 - C1-8005 ASI 123

Note #8 on Civil drawing(s) 8001 - 8005 contains the following: "Contractor shall coordinate with PG&E via TJPA for service connection work prior to start of construction. Location of PG&E service point is undermined and subject to change."

Please provide clarity for the Trade Group bidders on how TJPA would like them to provide pricing, for this unknown element with an undetermined location and/or duration of time necessary for coordination.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

P1-0416 **Finish Details for Landscape Drawings** **Closed** **08/26/2014** **08/26/2014** **09/01/2014** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference A1-2870, S1-2310 and S1-3201 (IFC Main set)

Architectural drawing A1-2870 directs the contractor to the Structural drawings for information regarding the concrete finish elevations; Structural drawings S1-2310 & S1-3201 provide elevation for top of concrete at the train box only; landscaping drawings do not provide any finish information ¿ (see highlighted section) as this is not included in the landscaping.

Please provide information regarding the highlighted section on the attached drawing L1-2330 and/or drawing number wherein concrete sectional details can be found, including topping slab to concrete on grade. Provide details for elevations, expansion joints, contraction joints, landscaping if any, civil site work if any.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The area referred to and highlighted in this RFI is Parcel F. There is no Landscape or Civil Site Work scope in this area, as the finishing of this area is future work not within the current scope of the Transbay Transit Center project.

Note:

A1-2870 does not direct the contractor to the Structural drawings for concrete finish elevations.

S1-2310 has a few elevations, but that is a structural convention to illustrate a step in the slab. All elevations for the top of concrete Ground Floor level slab are derived from the Architectural slab edge drawings.

S1-3201 is a section, not a plan and there are no elevations shown on this drawing.

P1-0417 **VE Item 4a** **Open** **08/26/2014** **09/05/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Reference all Landscaping drawings

Recently it was discussed that VE item number 4a (see attached); removal the banding at the topping slabs has been accepted by TJPA. Please provide new landscaping drawings and details with information to allow the bidders to incorporate this into their pricing.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

P1-0418 **Revision of Corrosion Engineer Requirement Anywhere Stated** **Closed** **08/28/2014** **09/07/2014** **09/08/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REFERENCE: Specification Sections requiring a Corrosion Engineer

Specifications currently require a corrosion engineer to conduct a component-by-component analysis of potential corrosion and and provide the engineer's report.

Per discussions with TJPA, PMPC, and WOJV, the use of a corrossion engineer is no longer required.

Please confirm that all specification sections currently requiring a corrosion engineer will be removed and the only requirement is to provide the report as approved by the TJPA Representative.

The Contractor is to provide a component-by-component corrosion analysis report with their own forces, rather than providing an analysis by a corrosion engineer, when a corrosion analysis is called for in the specifications.

It is believed the requirement for the corrosion analysis to be performed by a corrosion engineer has been removed from all specification sections. Please provide a follow-up RFI for any current specification sections you find with the requirement for a corrosion engineer.

P1-0419 **Application of Specification Section 01 80 50** **Open** **08/28/2014** **09/07/2014** **09/14/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Specification Section 01 80 50 1.1 B (IFC Drawings for Main Package dated 3/31/14)

Specification Section 01 80 50 1.1 B states, "The requirements of this Section apply to all non-structural components, unless otherwise noted."

Per previous meetings with PMPC, 01 80 50 is to be specifically referenced in each specification to which it applies.

Please provide the areas and specification sections to which Specification Section 01 50 80 Seismic Design Criteria for Nonstructural Components applies.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Specification Section 01 80 50 is revised to include this statement in the Summary:

"B. The requirements of this Section apply when adopted by reference by other Sections of the Specifications."

The Specification Sections listed below include nonstructural components requiring seismic criteria in their work, thus they will contain a reference to Section 01 80 50 Seismic design Criteria for Nonstructural Components.

- 07 09 13 - Seismic Joint Assemblies

- 07 09 15 - Vehicular Seismic Joint Assemblies

- 09 22 19 - non structural metal framing

- 09 24 00 - Portland Cement Plastering (W-18)

- 09 51 00 - Acoustic ceiling tiles

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

- 09 69 00 - Access Flooring

- 10 14 19 - Dimensional Lettering
- 10 14 26 - Pylon Signage
- 10 14 33 - Illuminated Panel Signage
- 10 14 36 - Non-Illuminated Panel Signage
- 10 14 66 - Floating Signage
- 10 14 83 - Interpretive Graphics
- 10 18 00 - Informational Kiosks
- 10 21 13 - Toilet partitions and screens
- 10 22 39 - Operable Partition
- 10 44 00 - Automatic smoke and fire curtains
- 10 51 13 - Metal lockers

- 12 93 10 - Lighting and Security Pylon
- 12 93 40 - Shaw Alley Site Art Installation

- 23 34 00 - Fans
- 21 05 48 - Vibration isolation and seismic restraints
- 22 05 48 - Vibration isolation and seismic restraints
- 23 05 48 - Vibration isolation and seismic restraints
- 26 05 48 - Vibration isolation and seismic restraints

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

- Division 27 - Communications

P1-0420 **Framing Details for Access Panels Within Gypsum Board Ceilings** **Closed** **08/28/2014** **09/07/2014** **09/05/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Access panels will be required within gypsum board ceilings.

Typical access panel ceiling framing has not been provided.

Please provide the desired framing detail for access panels within gypsum board ceilings.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to drawing A1-9042 for detailing of ceiling access panel within a gypsum board ceiling.

P1-0421 **VOID** **Void** **08/28/2014** **09/07/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

P1-0422 **Fire Extinguisher Locations per Specification Section 10 44 13 1.3 C 2 c** **Open** **08/28/2014** **09/07/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

REFERENCE: Specification Section 10 44 13 1.3 C 2 c (IFC Drawings for Main Package dated 3/31/14)

Specification Section 10 44 13 1.3 C 2 c states, " Where extinguishers are not indicated, assume cabinet and extinguishers will be located within 75 feet of any point in the building, or at a rate of one for each 3,000 square feet

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

of building area..."

No fire extinguishers are located on the plans. Please provide fire extinguisher locations.

P1-0423 **Painted Cement Board for SFPD Restrooms** **Closed** **08/28/2014** **09/07/2014** **09/03/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Details 4-8/A1-9060 (IFC Drawings for Main Package dated 3/31/14)

Details 4 - 8/A1-9060 indicate that the exposed wall space area above tile within the SFPD Restrooms are to be painted cement board.

Painting of exposed cement board is not a typical application.

Please confirm painted cement plaster board is desired where indicated in the contract documents, and provide finish/appearance required for the painted cement board.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For the restrooms, cement board is used as a substrate for the tile finish. The wall area between the top of the tile and the ceiling is painted gypsum board. The annotation on the Lower Concourse Restroom elevations and the wall assembly annotation on the Partition Schedule have been updated accordingly. Please refer to the attached SKA-4070 to SKA-4074.

P1-0424 **Installation of Electrical Components per Specification Section 09 24 00 1.1 C 2** **Open** **08/28/2014** **09/07/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

REFERENCE: Specification Section 09 24 00 1.1 C 2 (ASI 124 dated 8/18/14)

Per Specification Section 09 24 00 1.1 C 2 of ASI 124, the raceways, wiring, and pathways needed for concealed electrical systems i.e., lighting fixtures, exit lighting, power, way finding, automatic door power, along with low voltage wires (concealed or exposed as indicated in drawings are to be furnished by others, but installed by the Portland Cement Plaster Trade Package.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

TG10.4 - Electrical, Communications, Security, and Integrated Networks, is to furnish and install all electrical work unless specifically referenced in other trade packages (for example, some low voltage is in the Doors and Hardware Trade Package).

Please remove installation of electrical out of the specification for Specification Section 09 24 00.

P1-0425 **Test Methods per Specification Section 09 24 00 1.7 G 2** **Open** **08/28/2014** **09/07/2014** **09/11/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Specification Section 09 24 00 1.7 G 2 (ASI 124 dated 8/18/14)

Specification Section 09 24 00 1.7 G 2 a indicates that TJPA's Inspection Agent will conduct testing of exterior enclosure welds, "utilizing one of the following test methods."

No test methods are listed.

Please provide the referenced testing methods.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Specification Section paragraph 09 24 00 1.7 G.2 has been deleted, thus no test method is necessary. See revised specification attached to RFI P1-0428.

P1-0426 **Confirm the Use of Scanning and Other Means to Locate Reinforcing Bars** **Open** **08/28/2014** **09/07/2014** **09/12/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Note PA-1/S-0008, Note PA-3/S-0008 (IFC Drawings for Main Package dated 3/31/14)

Note PA-1/S-0008 defines a powder actuated fastener as a post installed anchor.

Note PA-3/S-0008 states to use scanning equipment or

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

If powder actuated fasteners are long enough to cause damage to rebar, then scanning per PA-3 is required. If the powder actuated fasteners are short enough not being able to hit or damage rebar, then section PA-3 is not invoked hence scanning is not required.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

other means to locate and avoid cutting or damaging reinforcing bars.

Based upon these requirements, scanning for rebar will be required prior to the installation of any powder actuated fasteners (metal framing top and bottom tracks, ceiling wires, etc.).

This could significantly increase the cost and duration of the work. Please confirm scanning or other methods for locating rebar is required prior to the installation of powder actuated fasteners.

P1-0427 **Drawings for Portland Cement Plaster** **Open** **08/28/2014** **09/07/2014** **09/11/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Specification Section 09 24 00 1.1 A 8 (ASI 124 dated 8/18/14)

Specification Section 09 24 00 1.1 A 8 a indicates architectural drawings are to be used for to determine design intent for Portland cement plaster.

No details or other drawings have been provided for the Portland cement plaster scope of work.

Please provide the referenced drawings.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The design intent and scope of the work of the Portland Cement Plastering is clearly included in the following drawings:

1. A1-5612D, A1-5613D, A1-5615D, A1-56152D from the ASI -0120 issued 7/11/2014.

2. A1-8229D, A1-8230D, A1-8231D, A1-8232D, A1-8233D, A1-8234D, A1-8237D, A1-8238D, A1-8239D, A1-8240D, A1-8241D, A1-8242D, A1-8245D, A1-8402D, A1-8403D, A1-8404D & A1-8454 from the ASI -0120 issued 7/11/2014.

3. A1-8614 (SKA-3964) and A1-8615 (SKA-3965) of VE Round 4 (ASI-0124) issued 8/18/2014

No other 'details or other drawings' are required.

P1-0428 **Portland Cement Plaster Color** **Open** **08/28/2014** **09/07/2014** **09/15/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

REFERENCE: Specification Section 09 24 00

Specification Section 09 24 00 2.7 B indicates that the cement plaster color is to be Gray. No other integral colors are noted.

If the cement plaster requires paint, the plaster will need to cure for an extended duration before paint is applied. This will impact the duration the scaffold is in place.

Please note that TG16.1 Drywall/Framing is currently scoped to leave the scaffold in place if the cement plaster requires painting.

Please confirm that the gray cement plaster is to remain exposed and does not require paint.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Specification Section 09 24 00 paragraph 2.7 B has been revised. Please refer to attached markup of this section for revised plaster system and materials.

Issues related to curing times per specification are determined by the plaster system manufacturer's recommendations.

Please refer to paragraph 2.5 in the attached revised plaster Section. The color is integral to the pre-mixed exterior finish coat, which is applied over the plaster mesh over the brown coat. The basis of design specified is Parex "Image Smooth Finish" with a custom color - The color is BM 1548 classic gray to match TJPA's Representative sample.

The duration of the scaffold in place is a Means and Methods decision to be determined by the Contractor.

P1-0429 **Doors 01901A and 01920A per Sheet A1-9703** **Closed** **09/03/2014** **09/13/2014** **09/05/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: Sheet A1-9703 (ASI 124 dated 8/18/14)

Sheet A1-9703 of ASI 124 calls out Doors 01901A and 01920A.

The plans do not show these doors.

Please provide a plan showing Doors 01901A and 01920A.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Both doors are located in at the Ground Floor Zone 10 SW area in the vicinity of the Vehicle and Bicycle Ramp. Door 01901A is the exterior exit door from Stair 901 and Door 01920A is the door for the Communication Vault to the south and west of the stair exit door.

Please see attached SKA-4077 for the location and SKA-4078 for the updated Door Schedule showing these two doors.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0430	Wall Type Clarification at Stair 601A	Closed	09/03/2014	09/13/2014	09/04/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE:
Sheet A1-2306 (ASI 124 dated 8/18/14)
Detail 1/A1-7020, Details 2 & 4/A1-7702 (IFC Drawings for Main Package dated 3/31/14)

Sheet A1-2306 and Detail 1/A1-7020 call out for Wall Type 61 to be used at Stair 601A.

Details 2 & 4/A1-7702 calls out for these walls to be Wall Type 10.

Please clarify the wall type to be used at this location.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Wall type 61 will be used at this location.

P1-0431	Locations Where Wall Type 30 and 61 Support W-5 System	Closed	09/03/2014	09/13/2014	09/05/2014	Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: (IFC Drawings for Main Package dated 3/31/14)
Sheet A1-0023
Detail 1/A1-7020

Sheet A1-0023 describe Wall Types 30 and 61 as supporting the Colored Glass Cladding System (W-5).

Details (Detail 1/A1-7020, for instance) show the Colored Glass Cladding System (W-5) as being supported separately from Wall Types 30 and 61.

Please confirm Wall Types 30 and 61 are only supporting the W-5 where the W-5 system is specifically shown to hang from Wall Types 30 and 61 on the drawings.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Wall types 30 & 61 are specific to supporting the W-5 System and at locations where noted on the drawings. The W-5 System may also be supported by HSS posts, these locations are also appropriately referenced and detailed on the drawings.

P1-0432	POR-1 Finish Conflict	Pending	09/05/2014	09/15/2014		Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Reference A1-9606 (SKA-3884) ASI 122 (07/23/2014) and Specification 09 30 00 Section 3.9 IFC Main Set (03/31/2014)

A1-9606 calls out POR-1 finish as Polished (POR-2A) and Matte (POR-2B). Specification 09 30 00 3.9 calls out the finish for POR-1 as Polished (POR-1A) and Matte (POR-1B). These are in conflict. Please revise so that the drawing and the Specification are not in conflict.

P1-0433 **POR-3 Base Conflict** **Open** **09/05/2014** **09/15/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Reference A1-9606 (SKA-3884) ASI 122 (07/23/2014) and Specification 09 30 00 Section 3.9 IFC Main Set (03/31/2014)

A1-9606 calls out POR-3 base to be '3¿ high x 12¿ bullnose'. Specification 09 30 00 3.9 calls out the size as '4¿ x 12¿ bullnose'. These are in conflict. Please revise so that the drawing and the Specification are not in conflict.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0434	POR-4 Base Conflict	Open	09/05/2014	09/15/2014		Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Reference A1-9606 (SKA-3884) ASI 122 (07/23/2014) and Specification 09 30 00 Section 3.9 IFC Main Set (03/31/2014)

A1-9606 calls out POR-4 base to be '3¿ high x 12¿ bullnose'. Specification 09 30 00 3.9 calls out the size as '4¿ high bullnose'. These are in conflict. Please revise so that the drawing and the Specification are not in conflict.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

P1-0435	CET-3	Open	09/05/2014	09/15/2014		Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Reference A1-9606 (SKA-3884) ASI 122 (07/23/2014) and Specification 09 30 00 Section 3.9 IFC Main Set (03/31/2014)

A1-9606 Identifies CET-3, but Specification 09 30 00 3.9 does not show CET-3. Please provide specification for CET-3.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

P1-0436	CET-1	Open	09/05/2014	09/15/2014		Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Reference A1-9606 (SKA-3884) ASI 122 (07/23/2014) and Specification 09 30 00 Section 3.9 IFC Main Set (03/31/2014)

Specification 09 30 00 3.9 specifies CET-1, but A1-9606 does not identify CET-1. Please update A1-9606 to include CET-1.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0437	Floor Finish CT	Open	09/05/2014	09/05/2014		Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Reference A1-9603 (SKA-3428) ASI 119 (06/20/2014) and A1-9606 (SKA-3884) ASI 122 (07/23/2014)

A1-9603 calls out floor finish ¿CT¿ in several locations. ¿CT¿ is not defined in the room finish schedule abbreviations, or the A1-9606 Materials Legend. Please provide a definition for ¿CT¿ on the finish schedule.

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0438	Environmental Requirements for Tile Carpeting	Open	09/05/2014	09/15/2014		Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Reference Specification 09 68 13 IFC Main Set (03/31/2014)

09 68 13 1.7 E and 09 68 13 1.8 A dictate specific environmental requirements for installation of tile carpeting. These requirements may differ from the manufacturer¿s written installation requirements. Please confirm the specified environmental conditions are to be provided in lieu of the requirements established within manufacturer¿s written installation instructions, or revise specification to require environmental conditions to meet the manufacturer¿s written installation instructions.

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0439	Automatic Smoke and Fire Curtains at Elevator Doors	Open	09/08/2014	09/18/2014		Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Reference Specification Section 10 44 00 ASI 121 (07/18/2014)

Specification 10 44 00 section 1.1 A states that automatic smoke and fire curtains are at all elevator doors. The architectural and electrical drawings do not indicate that

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

automatic smoke and fire curtains exist at all elevator doors. Please confirm if all elevator doors receive automatic smoke and fire curtains.

If yes, please revise: 1) the architectural elevator jamb/head details and/or detail callouts and, 2) coordinate revisions with the electrical drawings.

If no, please provide: 1) a matrix of the elevators that require automatic smoke and fire curtains and 2) revise architectural details and/or detail callouts. 3) coordinate revisions with the electrical drawings.

Please note the following coordination conflicts currently exist between the architectural and electrical drawings and should be addressed in the answers above:
-E1-2204 shows power for smoke curtains at elevators PE403 and PE404 but the architectural detail for the elevator does not show an automatic smoke and fire curtain at the door head/jamb. Coordinate and revise accordingly.

-The electrical drawings show power for smoke and fire curtains for Lower Concourse Passenger Elevators 301,302, 502, 503, 704 and 705 but the architectural detail for the elevator does not show an automatic smoke and fire curtain at the door head/jamb. In addition the door head/jamb details are for service instead of passenger elevators. Coordinate and revise accordingly.

-Electrical drawings show power for automatic smoke and fire curtains for PE202 on the ground level. Provide elevator door jamb detail for PE202 on the ground level that includes automatic smoke and fire curtain.

-PE403, PE404, PE502, PE503, PE704 and PE705 all have details that show a smoke and fire curtain on the ground level. Electrical drawings do not have power for smoke and fire curtains at these locations on the ground level. Coordinate and revise accordingly.

-PE403 and PE404 electrical drawings show power for automatic smoke and fire curtains on the second level however there is not a detail for the elevator jamb/head condition that shows the automatic smoke and fire curtain.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Coordinate and revise accordingly.

-PE704 and PE705 3/A1-7204 references 4/A1-7830 which is regarding stair 501 and not PE704 and PE705. Revise callout for the elevator jamb/head condition for the second level.

-PE302, PE303, PE502, and PE503 provide detail of elevator jamb/head condition, electrical drawings show an automatic smoke and fire curtain on the bus deck level for these elevators however there are not details for that.

P1-0440 **Access Hatch per Detail 4/A1-9220** **Open** **09/08/2014** **09/18/2014** **09/14/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

REFERENCE: (IFC Drawings for Main Package dated 3/31/14)
Specification Section 08 31 20 1.1 A
Detail 4/A1-9220

Specification Section 08 31 20 1.1 A Floor Doors references "single-leaf floor doors at water tanks."

Detail 4/A1-9220 illustrates a single-leaf door to be installed at the Train Platform Level Water Storage Tank but calls out "Access Hatch". There are no specifications for Access Hatches.

Please confirm Specification Section 08 31 20 Floor Doors is to be used for all single-leaf doors/access hatches/openings at water tanks or provide an Access Hatch specification.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Specification Section 08 31 20 Floor Doors are to be used for all single leaf floor doors at the water tanks. For updated drawing annotations for the water tank floor doors, refer to SKA-4095 and SKA-4096.

P1-0441 **Single Colored Polished Concrete at Bus Deck** **Open** **09/08/2014** **09/18/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

REFERENCE:
Specification Section 01 10 30/APE E.1.12 (IFC Drawings for Main Package dated 3/31/14)
Sheets A1-9562 through A1-9567 (ASI 119 dated 6/18/14)

Per the Deduct Alternates meeting between TJPA, AAI, WOJV, and PCMP on 8/20/14, Alternate No. 24 (Specification Section 01 10 30/APE E.1.12) to substitute Terrazzo floor with Single Color Polished Concrete was accepted.

Sheets A1-9562 through A1-9567 currently call for Terrazzo flooring at the Bus Deck Level.

Please provide drawings and specifications that reflect the Single Color Polished Concrete to be installed at the Bus Deck Level.

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

P1-0442 **Single Colored Polished Concrete at Beale St. Lobby** **Open** **09/08/2014** **09/18/2014** **Potentially** ☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

REFERENCE:
Specification Section 01 10 30/APE E.1.13 (IFC Drawings for Main Package dated 3/31/14)
Sheet A1-9540 (ASI 119 dated 6/20/14)

Per the Deduct Alternates meeting between TJPA, AAI, WOJV, and PCMP on 8/20/14, Alternate No. 25 (Specification Section 01 10 30/APE E.1.13) to substitute Terrazzo floor with Single Color Polished Concrete was accepted.

Sheets A1-9540 currently call for Terrazzo flooring at the Beale Street Lobby.

Please provide drawings and specifications that reflect the Single Color Polished Concrete to be installed at the Beale Street Lobby.

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0443	Verification of Performance Requirements by Door Designer/Subcontractor	Open	09/08/2014	09/08/2014		Potentially	☐

From: Webcor Construction LP Tram Nguyen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

REFERENCE: (IFC Drawings for Main Package dated 3/31/14)
Specification Section 08 11 13
Specification Section 08 11 15
Specification Section 08 11 16
Specification Section 08 34 54
Specification Section 08 71 10
Specification Section 08 78 10

Specification Section 08 11 13 Steel Doors and Frames, Specification Section 08 11 15 Commercial Security Steel Doors and Frames, Specification Section 08 11 16 Flush Stainless Steel Doors and Frames, and Specification Section 08 34 54 Ballistic Doors and Frames have Design Criteria and Performance Requirements/Design-Build requirements.

Specification Section 08 71 10 Base Building Hardware and Specification Section 08 78 10 Main Package Special Function Hardware do not have Design Criteria and Performance Requirements/Design-Build requirements.

Please confirm the door designer/subcontractor is not responsible to verify the capabilities of the specified door hardware are not exceeded by the Design Criteria and Performance Requirements/Design-Build requirements of the doors, and make hardware changes as part of the base bid work.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

P1-0444	Precast Terrazzo Sills	Open	09/09/2014	09/19/2014	09/14/2014	Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Specification Section 09 66 41 1.1 IFC Main Set (03/31/2014)

Specification Section 09 66 14 1.1 indicates that this Spec applies to precast epoxy terrazzo stair treads and sills. There are no precast terrazzo sill locations in the plans. Please confirm there are no precast terrazzo sills.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Specification Section 09 66 14 1.1 indicates that this Spec applies to precast epoxy terrazzo stair treads and sills. There are no precast terrazzo sill locations in the plans. Please confirm there are no precast terrazzo sills.

Webcor/Obayashi Joint Venture

PROJECT MANAGEMENT - REQUEST AND ANSWERS LOG

30100 - Transbay Transit Center Project

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0445	Rope	Open	09/09/2014	09/19/2014	09/14/2014	Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference 9/A1-9042 IFC Main Set (03/31/2014)

9/A1-9042 indicates ¿rope and sealant¿ are to be installed at inside corners. There is no specification for "rope". Please provide a specification for ¿rope¿.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Term has been corrected on the drawing from ¿rope¿ to ¿backer rod¿, see attached sketch SKA-4088.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0446	Terrazzo Control Sample	Open	09/10/2014	09/20/2014		Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Reference Specification Section 09 66 23 2.3.B.5.a.1.b and 09 66 23 2.5.A IFC Main Set (03/31/2014)

09 66 23 2.3.B.5.a.1.b and 09 66 23 2.5.A direct bidders to match TJPA¿s and the Artist¿s control sample. No control sample has been provided. Please provide the referenced control sample.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0447	Custom Color Recipes for Terrazzo	Open	09/10/2014	09/20/2014		Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Reference Specification Section 09 66 23 2.3.B.5.b IFC Main Set (03/31/2014)

09 66 23 2.3.B.5.b directs bidders to budget for up to 20 different custom colors and metallic infill. No final color recipes have been provided. This will not allow for consistent bid inclusions, and may lead to increased cost of the bids. Please provide specific recipes for all of the desired terrazzo colors.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0448	Bronze Floor Inserts	Open	09/10/2014	09/20/2014		Potentially	

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Reference Specification Section 09 66 23 2.3.C IFC Main Set (03/31/2014)

09 66 23 2.3.C indicates that 56 bronze floor inserts are to be furnished and installed as part of the terrazzo work. Please see the following and provide responses accordingly:

1) No drawings or specifications (grade of bronze, required finish, patina, etc.) have been provided showing the bronze floor inserts. Please provide these drawings/specifications.

2) 09 66 23 2.3.C states that there are 6 different designs of bronze inserts, but the list below only shows 5. Please revise so these are no longer in conflict.

3) 09 66 23 2.3.C.5 shows "12 inch TBD". Please provide the missing information that is currently shown as "TBD".

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0449	Terrazzo Anchoring Devices	Open	09/10/2014	09/20/2014		Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Reference Specification Section 09 66 23 2.4.F IFC Main Set (03/31/2014)

09 66 23 2.4.F indicates that anchoring devices are as indicated on the drawings. No anchoring devices are shown on the drawings. Please provide anchoring device information.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
P1-0450	Environmental Conditions for Epoxy Terrazzo Flooring	Open	09/11/2014	09/21/2014		Potentially	☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference Specification Section 09 66 23 1.9.A IFC Main Set (03/31/2014)

09 66 23 1.9.A states ¿The minimum slab temperature shall be 60 degrees F before commencing installation, during installation, and for at least 72 hours after installation is complete. The substrate temperature must be at least 5 degrees F above the dew point during installation.¿ The Manufacturer's written installation instructions state "Throughout the application process, substrate temperature should be 60ºF ¿ 90ºF. Substrate temperature must be at least 5ºF above the dew point. Applications on concrete substrate should occur while temperature is falling to lessen offgassing. The material should not be applied in direct sunlight, if possible. Protect material from freezing prior to installation.." The specifications do not match manufacturer¿s written installation instructions. Please confirm the environmental conditions required within 09 66 22 shall override the manufacturer¿s written installation instructions.

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

P1-0451 **Environmental Conditions for Terrazzo Epoxy Crack Suppression System** **Open** **09/11/2014** **09/21/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Reference Specification Section 09 66 22 1.8.A IFC Main Set (03/31/2014)

09 66 22 1.8.A states ¿The minimum slab temperature shall be 60 degrees F before commencing installation, during installation, and for at least 72 hours after installation is complete. The substrate temperature must be at least 5 degrees F above the dew point during installation.¿ The Manufacturer's written installation instructions state "During installation and initial cure cycle substrate and ambient air temperature must be at a minimum of 60ºF (16ºC). Substrate temperature must be at least 5ºF (3ºC) above the dew point. The specifications do not match manufacturer¿s written installation instructions. Please confirm the environmental conditions

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

required within 09 66 22 shall override the manufacturer¿s written installation instructions.

P1-0452 **Attached Electronic File for Terrazzo** **Open** **09/11/2014** **09/21/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Reference Specification Section 09 66 23 1.1.A.2 and 1.3.D IFC Main Set (03/31/2014)

09 66 23 1.1.A.2 and 09 66 23 1.3.D reference an ¿attached electronic file¿. No electronic file for Terrazzo has been provided. Please provide the referenced electronic file.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

P1-0453 **Bicycle Wheel Channel in Terrazzo Treads** **Open** **09/11/2014** **09/21/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Reference Specification Section 09 66 23 1.1.A.5 and 1.3.E.2 IFC Main Set (03/31/2014)

09 66 23 1.1.A.5 and 09 66 23 1.3.E.2 call out for a stainless steel bicycle wheel channel in terrazzo treads. Details at terrazzo stairs do not call out a bicycle wheel channel. Please confirm no bicycle wheel channel is required at terrazzo treads.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

P1-0454 **Terrazzo Color Schemes** **Open** **09/11/2014** **09/21/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference Specification Section 09 66 23 1.3.E.1 and 1.4.D.1 IFC Main Set (03/31/2014)

09 66 23 1.3.E.1 and 09 66 23 1.4.D.1 mention color schemes/ terrazzo color identification. No color schemes/ terrazzo color identification has been provided. Please provide color schemes/ Terrazzo color identification so that the terrazzo can be accurately priced.

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

P1-0455 **Unit Price for Epoxy Flooring** **Open** **09/11/2014** **09/21/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Reference Specification Section 09 66 23 1.4.C.1 IFC Main Set (03/31/2014) and 01 10 20 Div. 00/01 (08/11/2014)

09 66 23 1.4.C.1 states to provide a unit price per 2 (two) samples of 6 inch square epoxy flooring in excess of 20 colors. 01 10 20 (and its appendices) do not call out this unit price. Please revise these specifications to match.

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

P1-0456 **LEED Credit MR5 for Terrazzo** **Open** **09/11/2014** **09/11/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Reference Specification Section 09 66 23 1.5.C IFC Main Set (03/31/2014)

09 66 23 1.5.C calls out for LEED Credit MR 5, which requests information on the terrazzo's materials extraction, processing and location of manufacture. No specific aggregates have been specified for this scope of work. Please confirm there is no minimum amount of material for 09 66 23 which must be extracted, processed and

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

manufactured within the straight-line total travel distance described in 09 66 23 1.5.C.

P1-0457 **Fl Requirements for Terrazzo** **Open** **09/12/2014** **09/22/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Reference Specification Section 03 30 02, 09 66 22, 09 66 23 IFC Main Set (03/31/2014)

03 30 02 3.6.A.2 states to comply with dimensional tolerance limitations given by ACI 117 for Concrete Finishes, and 03 30 02 3.6.A.4.c states "Fl numbers shall not apply to unshored slabs or shored slabs with camber." ACI 117 4.4.1 states that slabs on structural steel or precast concrete have no deviation from elevation requirement. However, 09 66 22 3.2.B states that the Terrazzo Trade Subcontractor must level the floor to a specific Fl, and 09 66 23 3.3.F refers to 09 66 22 3.2.B for Fl requirements for Epoxy Terrazzo Flooring. As such, the concrete filled metal pan deck and topping slabs have a Fl requirement which conflicts with the allowable Fl referenced in 09 66 22 and 09 66 23. In addition, the concrete substrate may continue to move after installation of terrazzo. Please provide direction on installation of terrazzo epoxy crack suppression and epoxy terrazzo flooring where their Fl requirements conflict with the Fl requirements of the concrete substrate.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

P1-0458 **Overhead Coiling Doors and Grilles Interface Cabinet Location** **Open** **09/12/2014** **09/22/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Specification 08 33 23 2.3.B and 08 33 16 Section 2.3.B IFC Main Set (03/31/2014)

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Specifications state ¿TJPA Representative prior to installation shall approve the exact style and finish of each cabinet.¿ Please provide the exact style and finish for the interface cabinet required for the overhead coiling doors and grills so that the bidders will know what to price.

P1-0459 **Aluminum Enclosures at Jambs** **Open** **09/15/2014** **09/25/2014** **Potentially** ☐

From: Webcor Construction LP Andrew Kitchen **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Specification 08 33 16 and 08 33 23 2.6.H IFC Main Set (03/31/2014)

This section is specific to Aluminum Enclosures at Jambs for the overhead coiling doors and grilles. Detail 2/A1-81453 and 2/A1-8154 show aluminum head conditions for the overhead doors and grilles. Please confirm the aluminum finish at the jamb is the same as the finish for the aluminum head closures. If not provide finish for aluminum head closures.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

P1-180.1 **VOID** **Void** **07/11/2014** **07/21/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

VOID

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

P1-328 **Void** **Void** **07/29/2014** **08/08/2014** **Potentially** ☐

From: Webcor Construction LP Zachary Moore **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

SUGGESTION:

ANSWER:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Accept Suggestion: ☐

Void

RFI B-0047 **BRP - Backfill Over Barrette Pile Concrete** **Closed** **09/05/2014** **09/15/2014** **09/11/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Arup Kevin Clinch

Co-Author: Shimmick Construction Company, Inc Jeremiah Kent

REQUEST:

Part 3.4.D.9 of Section 31 63 32 - Barrette Piles - Bus Ramps states the following:

Place concrete in a continuous operation until barrette pile is completely concreted to at least two feet above final top-of-pile elevation. Above this, place controlled low strength material (CLSM) or lean mix concrete to within 3 feet of the guide wall top. The top two feet of concrete and the CLSM shall be
demolished during exaction for the pile cap.

SCCI believes that using drain rock or sand, instead of CLSM, to backfill above the structural concrete
will ensure that the rebar cage is clean upon the backfills removal. Using this lighter material will also
work to ensure that bearing pressure limits are not exceeded while the second barrette pile is installed.

Is it acceptable to use drain rock or sand instead of CLSM for this backfill?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is acceptable.

RFI T-0491 **BSE - Extract Timber Piles at Footing Along Gridline 33.5** **Closed** **04/09/2013** **04/19/2013** **04/17/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Danny Walsh

REQUEST:

Reference Specification: 02 41 19
Reference Drawings: GT-2103 & D-2213

Based on conversation at the 4/3/13 weekly coordination meeting, BBII understands that the TJPA may consider

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is not acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

lifting the ban on pile extraction previously issued in COM1347 (TCC letter dated 10-10-12) which directed all remaining piles to be removed by excavation and cutting.

BBII requests an exemption to the direction issued in COM 1347 that will permit the timber piles beneath the existing footing on gridline 33.5 to be extracted per the contract documents. The piles beneath this footing should be considered for exemption since they fall outside of the Zone 4 J-line "critical areas", the thin strip orientation has a minimal area of influence on the J-Line wall, and the geotechnical drawings already allow non-ground deformation control pile removal along most of the footing (see sheet GT-2103 & D-2213 attached).

Please advise if this request is acceptable?

RFI T-1030 **SSS - Second Level Canopy Framing Details** **Closed** **12/12/2013** **12/22/2013** **12/31/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On level 2 at the canopy areas and detail 1/S1-5032 refer to sketches CD RFI 171 SK1, SK2 & SK3 for it ems 1 to 4:

1) Confirm the erection aid angles bolted to the W section s are acceptable.
2) Confirm the required dimension of the angle to extend p ast the HSS.
3) Confirm the deck support angle indicated is acceptable and provide the required weld information.
4) Confirm the dimension for the bottom of deck to top of s lab.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Acceptable.

2) Pop-Out perimeter angle is 4x4x1/4 on three sides. Plan Section A-A does not show perimeter angle per RFI T-0803.1 and 4/A1-8188. Please see page 5 of RFI PDF markup with location and dimension.

3) Acceptable. Provide a 3" long weld of ¼" fillet weld every 12" on both sides of the angle, similar to that shown in 10/S1-5002.

4) Dimension is 1 1/4" - see page 5 of RFI PDF markup with dimension.

RFI T-1096 **BGP - Area 4 Exterior Wall Verts in Contact With Waterproofing** **Closed** **01/09/2014** **01/19/2014** **01/14/2014** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

In Area 4, between soldier piles #41 and #42, there are approximately 13ea wall vertical bars that are in contact with the waterproofing due to CDSM Encroachment. Soldier Piles #41 and #42 were surveyed and shown to not encroach more than 1/2". However, at the elevation of wall lift 1, it appears that the CDSM encroaches vertically into the foundation wall. Due to the wall verticals having little or no clearance to the waterproofing, the first list wall vertical bars cannot be coupled onto the dowels protruding from the top of the haunch. Per discussion with TT field representative, Gerdau proposes the following:

Option 1: Remove the waterproofing, chip the CDSM wall between soldier piles 41 and 42 to allow for clearance between the vertical bars and waterproofing. Vertical bars adjacent to soldier piles
41 and 42, up to 6 total, will be abandoned.

Option 2: The dowels above the haunch will be slightly bent away from the CDSM wall to allow for threading of the first lift wall vertical bars. Prior to bending the bar, the haunch concrete will
have to chipped out a minimum of 1.5 ft wide by 1ft deep to allow for hickey bar access. Once the first lift vertical bar is threaded onto the dowel, then the vertical bar will be transitioned back
into vertical alignment with a slight bend over approximately 6ft. Note that this transition will require the wall horizontals to be bent and cross-ties will need to be shortened to follow the
profile of the wall verticals.

Please confirm if proposed options are acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Option 2 is preferred with the following modifications and additions:
1.Depth of haunch concrete removal shall be 1'-3" minimum at the encroaching bars.
2.Bars shall be bent such that the top of coupler is displaced 1" from the waterproofing.
3.Displacement shall be made in a controlled fashion.
4.Bars shall only be bent in one direction.
5.Embedded horizontal wall reinforcing that might prevent the field bend from occurring at the bottom of the 1'-3" excavation shall be locally removed. Other reinforcing shall be protected in place.
6.As proof of concept, work shall begin with the bars immediately in front of steel soldier piles. If displacement cannot be controlled for all bars at the soldier pile locations, Option 2 shall cease and Option 1 shall commence. No bars will be accepted that have displaced more than 2" without nondestructive testing; 1", however, is the target. Option 1 may continue to bars between steel soldier piles only after acceptance of work by the structural engineer.
7.The integrity of the waterproofing behind the excavation shall be maintained. Acceptance of the waterproofing by the manufacturer's representative and waterproofing contractor at the completion of field bending is required prior to patching the haunch excavation.
Option 1 is acceptable only if Option 2 does not produce acceptable results. Modification and additions to Option 1 are as follows:
1.The target cover for wall reinforcing bars is 2" minimum.
2.The minimum acceptable concrete cover over a bar or coupler at the level of the haunch is 3/4". This may require that CDSM grout be removed at the level of the haunch. To facilitate a smooth grout transition, this may require that grout be removed below the level of the haunch and perhaps excavation of the haunch itself. This has implications for waterproofing.
3.At locations where 3/4" cover is not provided to the coupler at steel soldier pile locations, the coupler shall be removed with due regard to protecting the adjacent installed waterproofing.
4.Any bars abandoned shall be replaced with bars having proper clear cover. It is not required that these

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bars be doweled or spliced with the abandoned stubs.
5.The integrity of the waterproofing shall be maintained. Acceptance of the waterproofing by the manufacturer's representative at the completion of CDSM grout removal and patching is required.
This RFI may serve as the basis of a Corrective Action Plan which shall include:
Limits, products, and method of excavating and patching haunch concrete
If Option 1 is triggered, the CAP shall include:
Selective demolition plan and procedure for removal of the existing waterproofing and for the replacement of the back-up layers of materials and waterproofing.
Products and methods of CDSM grout removal and patching
Option 1 will not proceed until review and approval of the CAP Submittal by the design team and the owners waterproofing consultant.
Additional Requirements:
If waterproofing is damaged or otherwise deemed unacceptable, a supplement to the CAP shall be issued containing the repair.
Regardless of the option used to address the rebar issue, the contractor shall perform a vertical survey to establish the location of the CDSM wall and will establish its verticality. Sign off on the associated Nonconformance, NCR#441, will not occur before the contractor has presented documentation quantifying the presence or absence of a CDSM wall encroachment. Acceptable documentation would contain a vertical array of points capable of capturing bulges in the CDSM wall.
The owner's waterproofing consultant, the waterproofing contractor, the contractor's waterproofing designer, and the waterproofing manufacturer shall review the completed repair work to verify that the waterproofing has been properly protected or replaced (depending upon the repair procedure) prior to the continued installation of rebar.
Option 2 excavation and bar realignment may proceed per this RFI response

RFI T-1124	**SSS - Plate Grade Substitution**	**Closed**	**01/21/2014**	**01/31/2014**	**01/27/2014**	**Potentially**	☐

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From: Skanska USA Civil West California Dis Ryan Clayton **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Note SS-1 on drawing S-0007 states plate used for built-up shapes as follows: "ASTM A572, Grade 50, UON (58 ksi max yield for plates used for beam flanges) ASTM 709, Grade 70W where specifically specified."

ASTM standards state the maximum plate thickness available in ASTM Grade 50 is 4", and for Grade 42 is 6" Numerous locations on the Moment Frame Columns specify thickened web plates that exceed 4" in thickness.

Is it acceptable to use ASTM A572 Grade 42 for plate thicknesses over 4"? If not, please specify required material and grade.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The topic of this RFI is related to the thicken web at the moment connection panel zone. As specified, all steel plates for built-up shapes shall be ASTM A572 Grade 50, or A709 Grade 70 where specifically specified. It is our understanding from steel fabricators, grade 50 plates thicker than 4" are available by normalizing grade 42 plates (a small premium) to gain higher strength.

RFI T-1151 **SSS - AESS Mockup Sequence Clarification** **Closed** **02/05/2014** **02/15/2014** **02/10/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please clarify the sequence the contractor is being asked to provide for the AESS mockup. Is the contractor required to provide a mockup (and have A/E review/approve) in the field at grid line 11 (South) per A1-8660 prior to fabricating all AESS elements as indicated in 05 12 14?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Specification section 05 12 14/1.6H states: "Mockups: Prior to fabricating AESS, construct mockups to demonstrate aesthetic effects as well as qualities of materials and execution." The purpose of the mock-up is to establish a standard of quality that will be provided in the other work. Fabrication of work prior to mockups approvals that may not meet the established standard of quality, presents a risk to the contractor. Submit a proposal to the TJPA Representative for when and how the contractor proposes to submit the mock-up and meet these goals within the Project Schedule.

RFI T-1196 **SSS - Rebar Coupler Attachment Plate** **Closed** **02/25/2014** **03/07/2014** **03/04/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached sketch CD RFI # 315 SK1 for the rebar coupler attachment plate shown in detail 9/S1-3702 that is

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The plate is to flush to the end of the girder. The plate detail shown on 9/S1-3702 is a graphical error.

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shown extended past the end of the transfer girder by 6". All other locations for similar plates are shown with the plates flush to the end of the girder.
Please confirm the plates at these locations are intended to extend past the end of the girder by 6".

RFI T-1220 **BGP - SFPUC Grounding Details** **Closed** **03/06/2014** **03/16/2014** **03/17/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ryan Brekke

REQUEST:

Reference: E1-6006, E1-3212

ASI 113 Revision Narrative, plan sheet El-6006 states, "Moved SFPUC grounding layouts to sheet El- 3213 for clarification."

Sheet El-3213 was not issued as a contract document, and is not listed as such on the drawing index, E- 0000. It is also not included in any ASI issued to date. Please provide plan sheet El-3212.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The narrative is referring to details on sheet E1-3212, which has been issued with an ASI and bid package.

RFI T-1233 **SSS - HSS Sleeve for Light Column Anchor Bolts** **Closed** **03/14/2014** **03/24/2014** **03/25/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

AISC Code of Standard Practice allows for variation of 1/8" between the centers of any two Anchor Rods within an Anchor-Rod Group and an accumulated variation of ¼" between centers of Anchor-Rod Groups. To account for this variation and any slight offset of the galvanized duct around the light column anchor bars, Skanska requests to increase the size of the HSS tube welded to the underside of the top anchor plate.

Please confirm it is acceptable to provide a 5.0"x 0.125" HSS sleeve as indicated in the attached sketch. Upon approval, this revision will be incorporated into the Light

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

We confirm that the 5.0" x 0.125" HSS sleeve is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Column Anchor Bolt shop drawings and submitted for record.

RFI T-1305 **SSS - Deck Support at MF Protected Zones** **Closed** **04/04/2014** **04/14/2014** **04/16/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 382 SK1 for items 1 & 2:
1) The bent deck support plates per detail 8/S1-5003 will not work at the shaped flanges.
Supply an alternate detail.
2) The bent deck support plates per detail 8/S1-5003 occur inside the "Protected Zone."
Confirm welding is acceptable or supply an alternate soluti on.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) At the protected zone, do not use detail 8/S1-5003 as specified. Rather, use 18 gage closure plate and weld the closure plate to the top of the beam flange per typical deck welding detail.
2) see response to #1.

RFI T-1344 **BGP - Bike Ramp Column Jacket Ring Plate Welded Studs** **Closed** **04/22/2014** **05/02/2014** **04/29/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference S 1-3503 rev 2 detail 6, and A 1-9213 rev 0 detail 7 & 8.

Detail 6 on S1-3503 calls for 1/2" thick ring with 8" long welded studs at base of column, to be used for installation of column jackets. Details 8 & 9 on AI-9213 show the above 1/2" ring and jacket is required where a column extends through the bicycle ramp.

Please confirm there is not a conflict when using 1/2" thick plate and 8" welded stud, in a 8" bike ramp slab.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is acceptable to use 6" long welded studs at the bike ramp slab.

RFI T-1585 **BGP - Deformed Bars at Seismic Joint Embed** **Closed** **08/04/2014** **08/14/2014** **08/15/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference S1-3010 and RFI #T-1547 response.

Per RFI T-1547 response, please confirm deformed bars on seismic joint embeds on Detail 4 ofSI-3010 do not require a head.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed that straight 1" welded rebars are acceptable as long as ASTM A706 bars are used.

RFI T-1594 **BGP - Plumbing Sleeve Location Near GL 19.1** **Closed** **08/08/2014** **08/18/2014** **08/08/2014** **Potentially** ☐

From: Shimmick Construction Company, Inc Sylvia Hartanto **To:** Webcor/Obayashi Joint Ventu Spencer Sayles **Answered By:** Webcor Construction LP Claude Titche

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

On sheets AI-2225 and AI-2845 an arrow points to a plumbing sleeve location where there is no mark for a sleeve. Please confirm whether a plumbing sleeve exists in the location shown.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

A plumbing sleeve exists at the noted location.

RFI T-1631 **SCS - Elevation at Transformer Vaults Room** **Void** **08/25/2014** **09/04/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Shimmick Construction Company, Inc Henry Chiang

REQUEST:

On Sheet AI-2203, on the slab around the transformer vaults room, grid lines 12-C, the elevation is indicated as TOFF -7'-9". On Plan II A 1-3002, there is an elevation point corresponding to the same slab at grid lines 12.1-B.5 that indicates an elevation of TOC -7'-9". On the detail A/AI-9236 same point has an TOC elevation of-8'-2". Please confirm that elevation -7-9" on Detail I/AI-3003 corresponds to TOFF instead of TOC

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SHIMM00-0326 **BGP - Plumbing Clarifications Area 4** **Open** **09/18/2013** **09/28/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Filip Filipic **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

REQUEST:

SUGGESTION:

ANSWER:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Accept Suggestion: ☐

Reference drawing PSK-2022 and IR Rreport 1633.

On 0/10/2013 DBI inspector expressed concern about the installation of the 2" vent and 3" connections in the mat slab area 4 - See IR 1633.

Please confirm that 2" ven and 3" connection pipes are to be installed per PSK-2022.

SHIMM00-0361 **Dewaering Well Re-Route** **Open** **10/21/2013** **10/31/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Scott Bunnell **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST:

Please reference Detail 6/A1-8711 and S1-3201 of the Contract Drawings and the attached drawing.

SCCI is requesting to re-route all 2" dewatering well llines as proposed in the attached drawings. The re-route is to elimnate any potential conflicts with future work (bracing removal, wall waterproofing, rebar, and for/pour/strip). Upon completion of the use of the dewatering system, the line will be cut below the sleeve, capped and grouted in with the trestle block-out pour back. The line will be poured in place with the future mat and concourse slabs and all 3 wall lifts. The line will also be capped at the top of the final wall lift.

Is this acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SHIMM000-0001 **BGP - Construction Joint Layout** **Closed** **11/15/2012** **11/25/2012** **11/15/2012** **Potentially** ☐

From: Shimmick Construction Company, Inc Tyler Shell **To:** Webcor Construction LP Robert Kjome **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

Please confirm that the construction joint layouts for the Lower Concourse, Foundation Walls and Mat Slab as shown on sheet SL-025 (Exhibit A) are acceptable. Please note that the construction joint lengths of the Mat Slab

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Construction joints on Sheet SL-025 are diagramatical in nature and is not intended to replace the design drawings. Proposed construction joint locations shall be included in a submittal per specifications and

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

exceed 120 linear feet in (7) of the specified areas.

conform with the requirements set forth in specification section 03 30 20.

SHIMM000-0002 **BGP - Foundation Wall Horizontal Construction Joint Elevation** **Closed** **11/27/2012** **12/07/2012** **11/27/2012** **Potentially** ☐

From: Shimmick Construction Company, Inc Tyler Shell **To:** Webcor Construction LP Robert Kjome **Answered By:** Webcor Construction LP David Fields

Co-Author:

REQUEST:

Reference Drawings: S1-3201, SCCI#11 & #12
Reference Specification: 03 30 20

Please see attached drawings showing conflicts between the temporary waler lookouts and the horizontal wall construction joints as shown on drawing S1-3201. Please provide direction

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Coordinate construction joint locations with TG0300 including but not limited to shop drawings and sequencing consistent with S1-3201. Submit proposed joint locations for evaluation.

SHIMM000-0003 **BGP - UV damage to Modified Bitumen Waterproofing** **Closed** **01/11/2013** **01/21/2013** **01/11/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Chris Williams **To:** Webcor Construction LP Robert Kjome **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

Specification Reference: 07 12 10

Most of the self-adhering modified butimens are damaged by long-term exposure to UV. Can this membrane be exposed to ultraviolet radiation for extended periods of time? If so, how long?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please refer to the Manufacturer's product data and specifications regarding allowable time the modified Butimen Waterproofing can be exposed to ultraviolet radiation. All means and methods of sequencing construction must adhere to the manufacturer's specifications and recommendations as defined for allowable UV exposure.

SHIMM000-0004 **BGP - Modified Bitumen Waterproofing** **Closed** **01/11/2013** **01/21/2013** **01/11/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Chris Williams **To:** Webcor Construction LP Robert Kjome **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

Reference Specification: 07 12 10

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

If Shimmick cannot find an equal system, proceed per

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

A two-ply self-adhered modified bitumen waterproofing system has been specified for this blind side application (Section 1.1 of Specifications). It is unusual for any modified bitumen system to be used in a blind side application (i.e., where the waterproofing is installed before the structure is constructed). Section 2.2 of the Specifications lists only one potential manufacturer, Laurenco Waterproofing Systems. The Laurenco system is a bitumen modified with chloroprene rubber and applied with a cold adhesive. The required waterproofing membrane properties listed in Section 2.4.B are identical to those published by Laurenco. We cannot find any other other modified bitumen manufactured with chloroprene on the market. Are you aware of any other systems?

the specified manufacturer.

SHIMM000-0005 **BGP - Waterproofing Wall System Layers** **Closed** **01/11/2013** **01/21/2013** **01/11/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Chris Williams **To:** Webcor Construction LP Robert Kjome **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

Reference Specification: 07 12 10, 3.2-3.3

1. Section 3.2, D. requires the protection board horizontal construction joints to be shingled lapping the upper sheet over the lower sheet by 4 inches. What is the purpose of this shingle? Since the waterproofing membrane will not be adhered directly to the protection board and layers will be present between them (e.g. drainage composite w/filter fabric, insulation, felt), the shingle does not seem necessary. Please confirm.

2.Section 3.2, F. reads "seal top edge of filter fabric to membrane". There is a layer of 1/2" thick insulation between drainage composite and waterproofing membrane. Please clarify.

3. In addition to these items, there is also a concern about the number of layers used on this wall including the stability and durability prior to concrete placement. There is a large potential for problems such as creep of the adhesives securing the various layers together and loss of

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Adhere to the manufacturers' specified details.

2. Please provide the manufacturer's shop drawings depicting the 1/2" thick insulation between drainage composite and waterproofing membrane.

3. We concur that asphalt saturated felt layers, drainage composite, filter fabric, and EPS insulation are required by the specifications as layers in the waterproofing. Please submit specific RFI's requesting clarification for dispcrepencies between the specifications and what is shown in the drawings. Furthermore, please address specific locations shown on the contract drawings that are in concern with the manufacturer's details.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

adhesion between layers. What is the purpose of the asphalt saturated felt layers, drainage composite, filter fabric and EPS insulation? Can some of these layers be eliminated? What level of adhesion is required between layers? Does this system of layers have sufficient rigidity to provide intimate contact between the waterproofing layer and

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SHIMM000-0006 **BGP - Horizontal Construction Joints - Foundation Walls** **Closed** **01/16/2013** **01/26/2013** **01/16/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Robert Kjome **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

Reference Specification: 03 20 00
Reference Drawing: S1-3001

Please reference detail 7 on Drawings S1-3001 and Specifications Section 03 20 00 3 .2-B. Structural details do not clearly show size of the foundation wall horizontal construction joint keyway. Specifications Section 03 20 00 3 .2-B, however, calls out for: "1-1 12 inch deep key type construction joint at the end of each placement for slabs, beams and walls unless otherwise noted on drawings". Since Specifications take precedence over the drawings in this case, SCCI believes that all horizontal construction joints in the foundation walls shall have 1 1/2" deep keyway.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Sheet S-0005 note GR-11 reads "APPLY DETAILS, SECTIONS, AND NOTES ON THE DRAWINGS WHERE CONDITIONS ARE SIMILAR TO THOSE INDICATED BY DETAIL, DETAIL TITLE OR NOTE."

Sheet S1-3201 references 7/S1-3001 for all horizontal constructions joints in the foundation walls.

SHIMM000-0007 **BGP - WPM-1 - Mud Slab Finish for Waterproofing** **Closed** **01/17/2013** **01/27/2013** **01/31/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Chris Williams **To:** Webcor Construction LP Robert Kjome **Answered By:** Webcor Construction LP Joanne Filipas

Co-Author:

REQUEST:

Specification Section 07 12 10, 3.2

The concrete surface profile (CSP) required by the waterproofing manufacturer Laurenco, ranges between a CSP level of 2 and 4 as defined by the International Concrete Repair Institute (ICRI) of technical guide

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See response to T-0370

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

"Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, and Polymer Overlays." The ICRI defines the levels of CSP as 1 (nearly flat) to CSP Level 9 (very rough). The Laurenco waterproofing system requires "a good wood screed or broom finish...often referred to as a 'sidewalk' finish..Do not use a steel trowel finish." See attached excerpt of the manufacturer specification.

1. Please confirm the specified ICRI CSP requirements as it relates to surface finish are to supersede the varying ASTM F-value requirements setforth in specification section 030300-3.6, B1 or provide a revised specification section 033000 incorporating the ICRI requirement.

2. Please confirm a wood screed or broom finish is accpetable for the mud slab.

SHIMM000-0008 **BGP - Geothermal Pipe Penetration Sleeves at the Manifolds** **Closed** **01/30/2013** **02/09/2013** **01/30/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Chris Williams **To:** Webcor Construction LP Lynn Kowallis **Answered By:** Webcor Construction LP Joanne Filipas

Co-Author:

REQUEST:

Reference Drawing: A1-8710

Per Detail 1 on plan sheet A1-8710, the pipe penetration sleeves are not to be anchored to any portion of the CDSM wall. The sole mounting connection for these pipe sleeves is the bitumen waterproofing membranes. The waterproofing membrane is not strong enough to use as anchorage for these sleeves even with temporary support. The likelihood of jeopardizing the membrane with the design in Detail 1 is high.

S3H proposes a constructable solution. Please find attached the details for a constructible design. This design eliminates the waterproofing anchorage support of the penetration sleeve. Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Reference Note 5 on Sheet M-0006 which states "The header pipes shall be installed up to the ceiling of the lower concourse level recessed in the face of the CDSM shoring wall. Prior to construction of the top of the foundation wall the pipes shall run to grade where they are capped with pressure gauges. During the forming of the final portion of the foundation wall, the headers are to be modified and installed in their final position through the foundation wall. In their final position the headers will be valved and capped with a pressure gauge."

SHIMM000-0009 **BGP - Geothermal Loop Soil Compaction** **Closed** **03/04/2013** **03/14/2013** **03/04/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Chris Williams **To:** Webcor Construction LP Robert Kjome **Answered By:** Webcor Construction LP Robert Kjome

Number	*Subject*	*Status*	*Date Created*	*Date Required*	*Date Answered*	*Cost Impact*	*Proceed*

Co-Author:

REQUEST:

After observing existing subgrade compactions varying from 88%-95%, it appears that the existing conditions of the soil could be below the 95% compaction requirement. In the case of a geothermal loop being installed in areas with existing soils below 95%, can the geothermal loop be compacted to the localized compaction level in accordance with ASTM Dl557? For example, if the first field has an existing condition of88% compaction, can the geothermal loop trenches be compacted to 88%? 95% compaction may not be possible with the existing soils and existing compaction in some areas.

Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See Response to RFI T-0387 and RFI T-0405.

SHIMM000-0010 **BGP - Schedule Dates for GLS/GLR Manifold Construction** **Closed** **03/05/2013** **03/15/2013** **03/05/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Chris Williams **To:** Webcor Construction LP Robert Kjome **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

Exhibit "I" of the TG06.1 bid package is a conceptual schedule. This schedule does not provide a date for the installation of the stainless steel geothermal manifold sleeve penetrations or manifolds themself. Please provide a date of installation for the sleeve penetrations and manifolds for each of the 15 fields.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to 01 13 10 .1.2.C & F. Provide a revised schedule showing activities pertaining to the installation and testing of the geothermal sleeve penetrations and manifolds. Note that the installation of this work cannot delay follow on trades (i.e. superstructure concrete, superstructure steel). Coordinate with W/O as to the timing of the installation of these systems so as not to affect follow on trades.

Please coordinate off of the P6 schedule that W/O sends to SCCI weekly.

SHIMM000-0011 **BGP - Geothermal Pipe Elevation** **Closed** **03/06/2013** **03/16/2013** **03/06/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Chris Williams **To:** Webcor Construction LP Robert Kjome **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

Reference Drawing: M-5002

Per drawing M-5002, Detail I, the GLS/GLR manifold

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per the 3/06/2013 Geothermal RFI meeting, install GLS/GLR manifold piping per M-5002.

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piping is above the TG06 SOW demarcation line. Due to constructability concerns of the manifold, is it acceptable to install the manifold at a lower elevation below the TG06 SOW demarcation line?

Please advise.

SHIMM000-0012 **BGP - Monitoring Instrument Penetrations** **Closed** **03/11/2013** **03/21/2013** **03/11/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Chris Williams **To:** Webcor Construction LP Robert Kjome **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

Reference Drawing: A1-8711

Per plan sheet A1-8711, Detail 3, the monitoring instrument penetration sleeve is to be place around the monitoring instrument itself. From the field, it appears that some of these monitoring instruments exist as drawn in Detail 3 (Picture 1) while others seem to be placed within an additional, larger sleeve (Picture 2) casing. This additional casing occurance isn't accounted for in the contract documents. Please advise to this type of sleeve dimensions and detail. Please note that one of these types of monitoring instrument sleeves is located in the first area to be water proofed and poured for the protection slab.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please reference BBII's dewatering/piezometer layout and Arup's Global Analyzer log in information for coordination of sleeves per detail 3 or detail 6 of A1-8711.

SHIMM000-0013 **BGP - Welding for Penetration Sleeves** **Closed** **03/12/2013** **03/22/2013** **03/12/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Andy Khuu **To:** Webcor Construction LP Robert Kjome **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

Reference RFI T-0411

The Engineer's response to RFI T-0411 states that the collar ring and cap plate cannot be shop welded prior to being installed and that the collar must be welded onto the sleeve prior to the mat slab pour for access purposes. However, in the submittal comments to SUB-TG0600-036, the Engineer clearly states

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Reference Drawings: 2/S1-3003, 5/S1-3003, 6/S1-3003.

Per detail 2, 5 and 6 on sheet S1-3003 the ring plates are shown to be field welded.

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that the "contract documents specify a field weld of the steel ring such that the pile can be cut and removed without the ring installed." Without access to weld the collar after the mat slab has been poured, it isn't possible to weld the assembly in the field. Additionally, if the collar is to be welded prior to the pile being cut, damage will most likely occur to the ring plate or sleeve during the cutting process as stated in the submittal comments. With the comments to submittal TG0600-036 and the response to RFI T -0411 clearly contradictive, please provide the necessary construction sequencing to avoid damage to the assembly in the field and enable a constructible design.

SHIMM000-0014 **BGP - Geothermal Risers in Leaking CDSM Wall** **Closed** **03/18/2013** **03/28/2013** **03/18/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Chris Williams **To:** Webcor Construction LP Robert Kjome **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

With water leakage throughout the CDSM wall at many different locations, the likelyhood of a geothermal loop riser being laid out in the location of a CDSM wall leak is high. In the event that the Geothermal Riser is located at the same location as a CDSM wall leak, what should S3H do? Should the riser be relocated to a portion of wall that isn't leaking? If the riser is to be embedded in the wall at the location of a leak, grouting the riser back into the wall will not be possible. Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Discussed in Geothermal RFI Meeting 3/06/2013.
Refer to follow up RFI SCI-087.

SHIMM000-0015 **BGP - Shoring Beam in Sump Pit** **Closed** **03/18/2013** **03/28/2013** **03/18/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Chris Williams **To:** Webcor Construction LP Robert Kjome **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

Reference Photo: attached

Please find attached a photo of the sump pit near J Line in the Geothermal Field 1. In the pit, there is a H-beam from a previous shoring wall. There is potential for this beam to

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please confirm that the H pile is in conflict with the geothermal loop.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

come in conflict with with geothermal loop. Is this beem to be removed? Please advise.

SHIMM000-0016 **BGP - Clarification of Mass Concrete Reporting Periods** **Closed** **03/25/2013** **04/04/2013** **03/25/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Robert Kjome **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

Please reference specification section 03 30 20.3. 11.A (pg 24).

CTL Group "Thennal Control Plan Model ing" Figure 3 (submittal TG0600-20 1.1 It em #033000-0 I 1.1 pg 8), illustrates the max temperature di fferential is reached and has begun to drop at approximately 8 calendar days.

SCCI will record temperature differentials at 6 hr intervals and report those readings on a daily (24 hr) basis. Is this acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Record temperature differentials per 03 30 20 3.11.A and submit to Webcor Obayashi with SCCIs daily reports.

SHIMM000-0017 **BGP - Concourse Slab Beams and Trestle Pile Conflicts** **Closed** **04/09/2013** **04/19/2013** **04/09/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Lynn Kowallis

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Ref: S1-2202 through S1-2210
Submittal TG0300-284.1 revision 7

Please reference attached drawings. SCCI has overlaid the locations of the trestle and bridge piles onto Contract Drawings S1-2202 through S1-2210, the Lower Concourse Slab Framing Plans. The locations of the piles were taken from BBII Submittal TG0300-284.1 revision 7. These are the most recent drawings SCCI has available for the actual locations of the piles. The attached drawings show the piles running vertically through 22 future Concourse Slab beams.
Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Pursuant to sheet note #9 on sheet S1-2052 for each pile conflict please provide the northern dimension to the nearest alphanumeric grid line and easting to the nearest numeric grid line.

Revise and resubmit.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
SHIMM000-0019	BGP - Foundation Wall and Internal Bracing Conflict	Closed	04/09/2013	04/19/2013	04/09/2013	Potentially	☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author:

REQUEST:

Ref: Sketch - SCI-103

Please reference attached sketch of the top of the foundation walls. At gridlines 1 thru 26, top of the foundation wall above the lower concourse level is in conflict with the shoring level A. The A level lookouts encroach into the top of the walls for approximately 8". For constructability of waterproofing, and reinforced foundation wall SCCI requires 12" minimum clearance above the top of
the wall. Conditions described herein do not allow top of foundation wall to be constructed per Contract Plans. Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to response provided in RFI RFI T-0527.2

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
SHIMM000-0020	BGP - Waterproofing and CJ Layout Conflict	Closed	04/10/2013	04/20/2013	04/10/2013	Potentially	☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Kirk Nielsen **Answered By:** Webcor Construction LP Kirk Nielsen

Co-Author:

REQUEST:

Please reference Al-2203 and Sl-3201ofthe Contract Plans and the attached drawings. The current elevation at the bottom ofthe 2nd level bracing lookouts is at approximately -5.13, WEST of Grid 9 (see concourse slab drawing). The proposed top of concourse slab elevation is to be -5.42, WEST of Grid 9. Per the WPM-1 waterproofing system, the minimum overall tie-in dimension needed for the succeeding lift is approximately 1 '-11" (see attached waterproofing drawing). The current elevation at the bottom of the 2nd level bracing lookouts is at approximately -6.15, EAST of Grid 9 (see concourse slab drawing). The proposed top of concourse slab elevation CJ is to be -7.67, EAST of Grid 9. Per the WPM-1 waterproofing system, the minimum overall tie-in dimension needed for the succeeding lift is approximately 1'-11" (see attached waterproofing drawing). In both locations, the minimum required dimension (1 '-11") to tie-in to the next lift of waterproofing can not be reached with the current location of the 2nd level bracing lookouts and the proposed concourse slab elevations. SCCI is restricted in location for the CJ due to the absolute concourse slab location and elevation.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Consistent with RFI response #SHIMM000-0002 dated 11/27/12, revise the proposed locations of the CJ's to accommodate / coordinate with all of SCCI's work consistent with the sheet note on 1/S1-3201.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Furthermore, a similar conflict exists in the 1st foundation wall lift and the 3rd level of bracing lookouts (see 1st wall lift drawing). With SCCI's current location of the CJ, there is virtually no room to allow for the waterproofing overlap to occur. SCCI fully understands its freedom to manipulate the location of the CJ's by lowering it approximately 2'. This will potentially change BBII's rebracing plans.

Please advise.

SHIMM000-0021 **BGP - Differential Movement in Waterproofing Layers** **Closed** **04/26/2013** **05/06/2013** **04/26/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Robert Kjome **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

Per the Engineer's response to Submittal TG0600-023.2, the Contractor is to install the waterproofing system to incorporate "provisions for differential movement". Please reference the contract documents that specify the design criteria for the differential movement of the structure. Please advise to a specification or drawing note that details such.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The submittal note states "...including provisions for differential movement between adjacent components as required by the membrane manufacturer" rather than any specification or drawing.

SHIMM000-0022 **BGP - Testing of WPM-1 Seams** **Closed** **04/26/2013** **05/06/2013** **04/26/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Robert Kjome **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

Reference Specification: 071210 - 3.5.B

The Specifications call for testing of"seams" independently by Applicator and Manufacturer. In the waterproofing pre-installation meeting on 3/27113, the Manufacturer (Laurenco) and the Architect stated that testing of seams is not required as this is not a single-ply system. Please define "seam" and advise if testing of seams is required or not, and if it is, then to what extent?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Specification 07 12 10 3.5.B remains unchanged. A seam is where any specified waterproofing component joins by overlapping.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
SHIMM000-0023	BGP - Carlisle Miradrain 9900 Drainage Composite	Closed	04/26/2013	05/06/2013	04/26/2013	Potentially	☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Robert Kjome **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

Reference Specification: 07 12 10 2.5.C

This section calls for "Drainage Composite: Three dimensional plastic rolls bonded to a geotextile on one or both faces: Mirafi Miradrain 9900, or equal with a minimum compressive strength of30,000 psi." The waterproofing membrane manufacturer (Laurenco) states that the specified product "Miradrain 9900" no longer meets the performance requirements of the specifications since the woven filter fabric is no longer bonded at every dimple of the molded polystyrene core. Best Contracting has contacted the drainage composite manufacturer and they have confirmed that the woven filter fabric is bonded at every fourth dimple. Best Contracting has also performed a shop "mock up" using the aforementioned composite which resulted in complete separation and failure upon the installation of the waterproofing membrane. Please provide direction.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Fully bonded Miradrain 9900 is available upon request of Carlisle. If Bestdoes not want to use Miradrain submit a request for substitution pursuant to specification section 011630 and 000440.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
SHIMM000-0024	BGP - Additional Fasteners for Protection Board Installation	Closed	05/02/2013	05/12/2013	05/02/2013	Potentially	☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Kirk Nielsen **Answered By:** Webcor Construction LP Kirk Nielsen

Co-Author:

REQUEST:

Please reference Spec Section 07 12 10 - 3.2.D. Spec Section 07 12 10 - 3.2.D states the following: "Secure 1/4" protection board to flanges of soldier piles with powder driven fasteners and washers spaced 12 inches o.c. Butt vertical joints . Maximum joint width : 1/4"..."

The manufacturer of membrane waterproofing system (Laurenco) has indicated that due to "out of plane" piles, and relaxation of CDSM substrate requirement, they are requiring intermediate fasteners to hold the 1/4" protection board tight to the CDSM wall. Please review and advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The pile plane always had a tolerance as was the CDSM surface was never continuously supported.

Consistent with John Laurence (Laurenco's) comments during the 4/30/13 waterproofing meeting the concern over the protection board deflecting can be mitigated by two methods:

1. Intermediate fasteners
2. Ensuring when placing concrete SCCI does not cause the protection board to excessively deflect.

This is a means and methods issue at the discretion and cost of the Trade Subcontractor.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
SHIMM000-0025	BGP -Request for Revit Model	Closed	05/02/2013	05/12/2013	05/02/2013	Potentially	☐

From: Shimmick Construction Company, Inc Andy Khuu **To:** Webcor Construction LP Robert Kjome **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

SCCI is requesting access to the latest, most up to date Structural and Architectural Revit models from the designers. The 3D database would be used for reference only and will not be used for construction. SCCI understands that the 3D Database is subject to change as the project design evolves. As a user of this 30 database, SCCI accepts the risk and acknowledge that the data is subject to change. SCCI also acknowledges the terms and conditions outlined in the Transbay Transit Specification Section 01 31 26.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Not proper use of an RFI as per specification section

Please

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
SHIMM000-0026	BGP-Geothermal Field Riser Pipe Termination	Closed	05/13/2013	05/23/2013	05/13/2013	Potentially	☐

From: Shimmick Construction Company, Inc John Berggren **To:** Webcor Construction LP Robert Kjome **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

Reference Specification: 23 57 34
Reference Drawing: A1-8712, M1-5002

Stainless sleeves as shown on A1-8712 and M1-5002 (copies attached) are not part of the S3H's scope of work. Reference is made to Note 1 and Note 2 on M-0006 (copy attached), the highlighted notes in Detail2 on A1-8712, and the SOW demarcation line in Detail A on M1-5002. S3H Inc. will terminate pipe at grade as shown in Detail A on M1-5002 with pressure guage to be modifed by Others. Please confirm.
[S3H RFI No. 36]

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Sleeves as shown on A1-8712 and M1-5002 are a part of S3H's scope of work. The grey SOW line on M1-5002 clearly stops short of the geothermal riser which continues into the manifold sleeves uninterrupted. Detail 3/M1-5002 also distinguishes the geothermal wall penetration as being apart of the TG06 scope of work.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
SHIMM000-0027	BGP - Temperature Probe Sleeve Penetration	Closed	05/13/2013	05/23/2013	05/13/2013	Potentially	☐

From: Shimmick Construction Company, Inc John Berggren **To:** Webcor Construction LP Robert Kjome **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

Reference is made to RFI T-0388.0 (copy attached) is stating the temperture probe piping shall be installed per Note 6 on Sheet M-0006. Per Note 2 on Sheet M-0006, the additional mechanical work shown above the demarcation line is for reference only and was not

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Install per RFI T-0338 response. The demarcation line does not exclude any the mechanical work referenced as it stops short of the geothermal piping.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

included in the TG06.1 package. Please confirm and clarify the design intent.

[S3H RFI No. 028]

SHIMM000-0028 **BGP - Mat Slab Elevator Opening Embed Dimensions** **Closed** **05/10/2013** **05/24/2013** **05/15/2013** **Potentially** ☐

From: Webcor Construction LP Ian Corcorran **To:** Webcor Construction LP Robert Kjome **Answered By:** Webcor Construction LP Robert Kjome

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Ref. RFI T-0439.1

TJPA's response to RFI T-0439.1 stated "Final elevator post locations shall be coordinated with elevator manufacturer." The response has a second option to use a continuous L8x4x1/2 in lieu of the 1'-2" base. Please provide the elevator post locations if an elevator manufacturer has been selected? If not, SCCI is requesting to use continuous embeds. Please advise if this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The elevator manufacturer will not be awarded a contract for over a year and a half.

SHIMM000-0029 **BGP - High Congestion Mockup Revit File** **Closed** **05/20/2013** **05/30/2013** **05/20/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Jesse Dillon **To:** Webcor Construction LP Robert Kjome **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

Gerdau is requesting the 3D Revit model of the isometric high congesting area shown in SI-3208/DI. This will allow Gerdau to determine conflicts prior to fabri cation of rebar for the upcoming mock up. Please provide Revit file showing this area.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per response to RFI T-0534, "The updated In-Progress Revit computer model will be issued to TJPA for review and comment on May 31, 2013". TJPA will forward this model to the Contractor for information, review, and comment."

W/O will share the model as necessary once the model has been recieved and reviewed.

SHIMM000-0030 **BGP - Lower Concourse and Mezzanine Plumbing** **Closed** **05/21/2013** **05/31/2013** **05/21/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Jesse Dillon **To:** Webcor Construction LP Robert Kjome **Answered By:** Webcor Construction LP Robert Kjome

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Please reference attached Contract Drawings PI-2202 IFB and PI-2202 IFC. Both IFB and IFC plumbing drawings have the callouts "BELOW GRADE PACKAGE FOR REFERENCE ONLY", "NOT FOR CONSTRUCTION" and do not contain the Architect's/Engineer's seal. This circumstance applies to all Lower Concourse Level and Mezzanine level Plumbing Contract Drawings, PI -2202 to PI-2211 and PI-2252. All Lower Concourse and Mezzanine plumbing depicted in these drawings is excluded from the Below Grade Package. The scope excluded from SCCI's work package includes, but is not limited to, floor drains, area drains, floor sinks and cleanouts. Please inform SCCI about which future package this scope is contained for coordination.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

TG06 scope of work for the lower concourse and mezzanine includes all sleeves and openings as per the contract drawings and specifications. The future package containing the floor drains, area drains, floor sinks, and cleanouts has not gone out to bid.

SHIMM000-0031 **BGP - S-3 Wall Stirrups Preassembled Using IDEA Machine** **Closed** **06/04/2013** **06/14/2013** **06/04/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Andy Khuu **To:** Webcor Construction LP Robert Kjome **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

Reference: RFI T -0340 and T -0526

Approval was provided to utilize the IDEA machine per the response to RFI T-0340. Since the issuance of this response, approval has also been provided to utilize an S-3 stirrup in lieu of the T-9 hairpin within the walls per RFI 0526. Please confirm that it is acceptable, following the same criteria as outlined in the response to RFI 0340, to use the machine/welded holding wires to pre-assemble the stirrups within the wall reinforcing.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Voided per SCCIs request.

SHIMM000-0032 **BGP - RFI 448.5, Dimension From Grid Line to Extent of Change** **Closed** **06/20/2013** **06/30/2013** **06/18/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Andy Khuu **To:** Webcor Construction LP Robert Kjome **Answered By:** Webcor Construction LP Michael Spillane

Co-Author:

REQUEST:

Reference: RFI T-0448.5

Within the response to RFI 448.5 the proposal indicates to

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The intent is to replace all the original reinforcement WR1 west of GL -06 as show on drawing S1-2060 with the modified reinforcement detail option One

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

utilize Option 1 between CDSM piles #733 - #772. No dimension for reference has been provided to layout the reinforcing details. Please provide a dimension from the nearest grid or column line to the Eastern most extent in which the wall change is required per RFI 448.5.

SHIMM000-0033 **Foundation Wall Conflicts with Level A Bracing** **Closed** **06/24/2013** **07/04/2013** **06/24/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Robert Kjome **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

See attached drawings CJ-35 and CJ-66. Per response to RFI T-0527.1, Wall lifts W326 and W350 are still in conflict with the shoring level A.
Please advise on how to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached response to RFI T-0527.2

SHIMM000-0034 **BGP - RFI T-0527.1, BSE- Revision to Zone 4 Bracing Elevations Level A-D, Clarific** **Closed** **07/02/2013** **07/12/2013** **07/02/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Andy Khuu **To:** Webcor Construction LP Michael Spillane **Answered By:** Webcor Construction LP Michael Spillane

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: RFI T-0527.1 - BSE -Revision to Zone 4 Bracing Elevations Level A-D

In the response to RFI T-0527.1, W/0 included a comment "The TG06 Trade Subcontractor is to provide a credit for, to include however not limited to, the concrete rebar and waterproofing which has been deleted from the TG06 scope of work." Please confirm if the intent of the RFI response is to eliminate the 4th lift ofwall reinforcing above the upper CJ as lowering the elevation of the CJ does not reduce the quantity of the reinforcing required.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The intent is to remove the 4th lift of wall reinforcement from the TG06 scope of work

---

SHIMM000-0035 **BGP - 'Intermediate' Base of Sleeve Flat Mud Slab Elevation for 8 Penetrations in F** **Closed** **07/08/2013** **07/18/2013** **08/16/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference: SK-2676,S

SCCI is in receipt of RFI T-0479.1 response outlining that there will be 8 additional areas requiring slab penetration detail per SKA-2676 and SKA-2677 (issued in original RFI#0479).
Please provide the elevations of 'intermediate' base of sleeve flat horizontal mud slab area for all 8 trestle piles, pin piles or bridge piers.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The elevations of the penetration sleeves have been coordinated per field walk between Jose Verduzco (W/O), Scott Bunnell (SCCI) and Don Muns (TCCO). Please coordinate all sleeve elevations for Zone 4.

SHIMM000-0036 **BGP - Area 3 Room Layout Discrepancies** **Closed** **07/16/2013** **07/26/2013** **07/16/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author:

REQUEST:

SCCI is in receipt of CR #071- ASI #104 on Jun 26th, 2013. This ASI #104 changes the layout of the room in area 3 mat slab. This changes the partition wall configuration and the dowels coming out of the mat slab that are required for the construction of the partition wall rebar.

SCCI is also in recipt of RFI response to T-0612 on July 2nd, 2013, after the issuance of ASI #104. In this RFI response, the layout of the rooms and partition walls, as well as updated wall, door opening, and control joint locations for the B2 Emergency Electrical Room B2880 shown in A1-9214 are altered with the issuance of SKA-2746 to 2750.

Please confirm which room layout, door opening, and control joint SCCI is to construct and install, especially the layout as shown on A1-9214. (E.G: Please provide the most final/ updated drawings)

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SCCI is to construct and install per RFI T-0612 response, which is the most up-to-date drawing.

SHIMM000-0037 **BGP - Mass Concrete Specifications** **Closed** **07/17/2013** **07/27/2013** **07/17/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Please reference attached letter published by Jon Feld, CTL Group, dated July 8, 2013. This letter contains further analysis of the "Perfomance-Based Temperature Differential Limit", also refered to as "Strength-Based Temperature Difference Limit", for Mat Slab mix # 1557204.

This additional analysis was prepared per RFI response T-0585, in which the reviewer found this PBTDL method to be acceptable based on satisfying four (4) conditions. See below:

I. The attached analysis was specifically developed for mix #1557204

2. SCCI confirms that all remaining mass concrete specification requirements shall still apply.

3. Shimmick Construction will be providing field quality control and the required concrete maturity measurements through the "Concrete Maturity HardTrack System". Reference attached HardTrack system data and example concrete maturity data. This system has been procured by Shimmick Construction, and has been sucessfully tested on multiple mock-ups.

4. It is confirmed that Shimmick Construction shall remain responsible for providing a mat foundation that meets requirements of the contract documents.

Please confirm conditions have been satisfied. This analysis will be submitted as a supplement to the Mass Concrete Plan (TG0600-20 1.1)

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The conditional requirements set forth in RFI T-0585 by George Metzger appear to be satisfied. Procedural requirements are approved via submittal. Please revise and resubmit via submittal package TG0600-201.X (TG0600-201.2, item # 033020-011.1.)

SHIMM000-0038 **BGP - Geothermal Loop Excavation in Zone 4** **Closed** **07/19/2013** **07/29/2013** **07/19/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Shimmick Construction Comp Ben Gordon **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author:

REQUEST:

Per discussions in the Trade subcontractor meeting with Turner, BBII, and WOJV, it is apparent that BBII has been directed to demo the buttress shafts in Zone 4 to bottom of

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

BBI's contract drawing GT-2103 and the Geothermal shop drawings (TG0600-065), indicate the excavation and demolition of the buttress is set to final subgrade

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

mud slab elevation. Per the geothermal trenching and backfill specification 31 23 34, 1.1.A.1, the only slot excavation in CDSM/concrete is to be in the wall panels. The specification does not require slot excavation/demolition for the horizontal field loops. Per Plan sheet GT-5201, the buttress shafts are to be demolished to a maximum of 4' below subgrade elevation (bottom of mud slab). The geothermal pipe is to be installed at 15" below the bottom of mud slab elevation, well within the 4 ' below mud slab demolition elevation. Please confirm that the geothermal loops in zone 4 will be trenched in soil like the rest of the project and as detail din the geothermal trenching and backfill specification (31 23 34).

elevation 41'-5" or bottom of the mud slab. SCCI¿s interpretation on plan sheet GT-5201 as it relates to demolition is incorrect. The note "...shafts shall be maximum 4 feet below, maximum 2 feet above subgrade elevation" is in reference to the parameters set for the concrete (high strength) being placed in relation to the CLSM mix. These parameters are not set as demolition or excavation bench marks.

SCCI to proceed with geothermal loops in Zone 4 as shown in the approved shop drawing TG0601-065 and conform to specification section 31 23 34. SCCI to remit request for backfill and excavation requirements per specification 31 23 34 at buttress locations.

SCCI to consider the following when re-submitting: Does SCCI plan to demo the buttress shafts down to the required 15",re-fill the area and meeting compaction requirements? or Does SCCI intend to seek a design variance by slot excavating through the buttress' and seek back-fill requirements within the buttress from the design team?

SHIMM000-0107 **BGP - Concourse Slab Embeds and Trestle Pile Conflicts** **Closed** **04/09/2013** **04/19/2013** **09/20/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author:

REQUEST:

Ref: S1-2202, S1-2203 and S1-2205

Please reference attached drawings S1-2202, S1-2203 and S1-2205 with pile locations overlaid. There are three locations where the trestle piles interfere with the embedded assemblies at elevator and escalator openings/pits.
Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please refer to WOJV RFI T-726. Further coodination is required to anlayize other conflicts.

SHIMM000-0141.1 **BGP - Moment Beam and Pile Conflicts** **Open** **07/29/2013** **08/08/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Reference: SCI RFI-141, RFI T-0510.1

Please reference SCCI RFI # 141 and W/O RFI T-0510.1. The response to T-0510.1 provided details for rectifying the MFB conflict at internal Bracing Pin Pile #8. It was made clear this solution could only be used at Pin Pile #8. No guidance was provided for the additional five MFB conflicts shown in SCCI RFI #141.

Please provide information for the five additional MFB and pile conflicts shown in SCCI RFI# 141.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SHIMM000-0203.1 **BGP - Blockout -Reinforcement and Size Detail Needed at Dewatering Well and Co Closed** **07/19/2013** **08/02/2013** **08/27/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author:

REQUEST:

As a follow up to RFI#T0584 response:

1. General note GR9 on S-005 is not applicable for wall block out. Please provide block out detail for the reinforcement on the partition wall for blockout for: Dewatering Well #1, #21 and #22
2. For dewatering well #3- please provide detail for blockout for reinforcing at shearwall
3. Please provide size and extent for blockouts for all 4 dewatering wells.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to response to RFI T-0584.2.

SHIMM000-0204.1 **BGP - Locations of Electrical Outlets, Equipment, and Fixtures** **Closed** **07/31/2013** **08/10/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

REQUEST:

Reference: Spec Section, 34 05 34

Per Specification Section 26 05 34, 3.2 B., the dimensions of the equipment fixtures and outlets are to be submitted via RFI for clarification pre pour. Attached is the layout for Electrical Room B2221 in the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

first Mat Slab pour.

Please confirm that these dimensions are acceptable so that the conduit can be laid out correctly.

SHIMM000-0204.2 **Locations of Electrical Outlets, Equiptment, and Fixtures.** **Closed** **08/23/2013** **09/03/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Chris Williams **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

REQUEST: **SUGGESTION:** **ANSWER:** **Accept Suggestion:** ☐

Please find attached the revised layout for Electrical Room B2221. Please confirm that the layout is acceptable.

SHIMM000-0204.4 **BGP - Locations of electrical Outlets, Equipment and Fixtures** **Accepted** **09/12/2013** **09/22/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

REQUEST: **SUGGESTION:** **ANSWER:** **Accept Suggestion:** ☐

Per the RFI response, please find attched the revised layout for the Electricl Room B2221. This revised layout shows the dimensions of the conduit locaitons in respec tto the interioor walls. Additionally, dimensions showing th eroom locaiton in respset to the grid lines are shown. please advise if it is acceptable.

SHIMM000-0233.1 **BGP Bracing Removal Sequence - Area 5-13** **Open** **07/30/2013** **08/09/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

REQUEST: **SUGGESTION:** **ANSWER:** **Accept Suggestion:** ☐

The latest Webcor's weekly update schedule received by SCCI (Data date 06.17.2013), shows that:

- Bracing Removal- Level D" (BGSOX-1120) is the driving predecessor to "Wall Waterproofing} st lift" (BGSOX-4000)- in each area.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

- Bracing Removal- Level C" (BGSOX-4100) is the predecessor to "Wall Waterproofing- 2nd lift" (BGSOX-4110)- in each area
- Bracing Removal- Level B" (BGSOX-6000) is the predecessor to "Wall Waterproofing- 3rd lift" (BGSOX-6010) in each area

Based on the current schedule logic, the bracing will need to be modified to allow the removal of walers and struts in each area, separately and independently from each other. E.g: Any walers spanning two areas will need to be cut during removal of bracing so SCCI can proceed with the waterproofing install in that area, without having to wait for the adjacent area. This is applicable to Bracing Removal level B, C and D. As requested in RFI#233 response, please find attached bracings that SCCI assumes are going to be removed/ cut prior to SCCI's specific wall pour.

Please confirm.

SHIMM000-0242.1 **BGP - 100% CD Phase 1 Documenation** **Accepted** **08/22/2013** **09/01/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

REQUEST: **SUGGESTION:** **ANSWER:** **Accept Suggestion:** ☐

The responses to SCCI's s RFI#0242/ WOJV RFI T-0633 refers to "100% CD Phase 1 Documentation"
for the drawings that have not been issued in ASI#104 SCCI does not have access to and has not received the following drawings that are needed to finalize the pricing of ASI#104:
A 1-2224-2231
A 1-2844-2846, 2848-2851
Please provide 1 00% CD Phase 1 Docs for the pages listed above

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SHIMM000-0252.1 **BGP - Geothermal Loop Excavation in Zone 4** **Accepted** **07/30/2013** **08/09/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference: Spec Section 31 23 34

SCCI received the response to RFI-252 regarding the excavation of the geothermal loops in Zone 4. The response directed SCCI to conform to specification senction 31 23 34 regarding the ptential section 31 21 34 that cover buttress concrete demolition for the geothermal loops. SCCi is aware of the CDSM wall excavation required for the geothermal field risers, but is not aware of a geothermal specification requiring buttress shaft dempition for the geothermal loop trenches. Specificaion 31 23 34, Section 3.2 is very clear i the ful scope of the gound excavation in soild and wall riser excavation in CDSM, but it does not cover trenching in buttress shaft concrete.

Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SHIMM000-0255 **BGP - Plumbing Scope Clarification ASI 104** **Closed** **07/26/2013** **07/27/2013** **07/26/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon

To: Webcor Construction LP Jackson Tukuafu

Answered By: Webcor Construction LP Jackson Tukuafu

Co-Author: Webcor Construction LP Jackson Tukuafu

REQUEST:

Reference: Drawing P1-6001, Spec Section 22 13 01

See attached marked up Rev 0 and Rev 1 Drawings P 1-6001. Pl-6001 Rev 1 is a revision per AST 104. Rev 1 of the noted drawing does not have any "for reference only" notations in the details.

Is the intent of the Designers to significantly change the scope of TG06 work?

Please clarify the scope of work, i.e. applicable and non applicable details of the CD P1-6001 for the TG06 package.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

As per the attached drawing:

1. Detail 1, 2 and 5 of drawing sheet P1-6001 (ASI #104) depict typical standpipe details. These details are not applicable to the TG06 package.
2. Detail 4/P1-6001 (ASI #104) depicts a change in the floor clean-out cover. This detail is applicable to the TG06 package where the floor drains are either at the concourse and mat slab level and the specific detail is called-out for "floor cleanout detail."
3. Detail 6/P1-6001 is applicable if below the concourse slab. Typ.
4. Detail 11 and 12 of sheet P1-6001 show sump pump details titled "Detail At Mech Pump Room B2230 and B2442." The applicable scope to TG06 includes embeded pipe in the mat slab or added pony wall, pony wall and pit opening.

WOJV welcomes a page-turner with SCCI for any

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

future clarifications.

SHIMM000-0261 **ASI#104- TG06's Scope Clarification** **Closed** **07/26/2013** **08/05/2013** **07/26/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor/Obayashi Joint Ventu Spencer Sayles **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author:

REQUEST:

There are multiple changes beween the Issued for Construction (IFC) drawings to the newly issued ASI #104 drawings. This RFI requests for information regarding TG06's scope of work that may or may not be added through the issuance of ASI #104 due to removed notations "For Reference Only " or similar.
Please provide clarifications of TG06's Scope per ASI #104 in the following drawings (also attached):

S1-7005, S1-7101, S1-7111, S1-7600, S1-7602, S1-7660, S1-9000, S1-9050 and S1-9051.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per the attached drawing:

1. Per drawing S1-7005 (ASI #104), exclude all steel/stair components, all other details are applicable. Show credits for wall removal etc. accordingly in pricing reviiew of ASI #014.
2. Per drawing S1-7101 (ASI #104), the only applicable detail is 1/S1-7101. All othe detail are shown to be on the ground level, second level and bus deck level. Please note, there will be no poured in place walls on the concourse level in the TG06 package; however, SCCI will provide the applicable dowels to accomodate the tie-in.
3. Per drawing S1-7111, the details in question are on the ground, second and bus deck level. Not applicable
4. Per drawing S1-7600, the details in questions are metal stair related. Not applicable.
5. Per drawing S1-7602, see item #4. Details are Slab On Metal Deck.
6. Per drawing S1-7660, all details in question are applicable to TGO6 trade package.
7. Per drawing S1-9000, the only applicable scope to TG06 package will be dowels for CMU tie-in
8. Per drawing S1-9050, see note 7.
9. Per drawing S1-9051, the detai lin question is applicable only if this detail occurs at the concourse slab and below.

SHIMM000-0263 **BGP - Revised Attached Method of Nelson Studs to the Elevator Pit Embedded An** **Closed** **07/24/2013** **08/03/2013** **08/05/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference: Spec Section 05 50 10

While attaching the 3/4" diameter by 8" Nelson Studs to the 8" X 4" X 1/2" angle it was determined the studs were not fusing to the base metal (angle). To maintain the procurement schedule of this fabrication needed for the Zone 1 - Area 03 Mat Slab placement, our fabricator (Gerlinger Steel) used the fillet weld method performed under the attached Welding Procedure Specifications (WPS) to attach studs to the angle(s). The welding was witnessed by the dispatched (IR #001459) ISI Shop CWI. Attached for the readers informationm and use are the shop fabrication drawing, the employed WPS, and photographs of the finished fabrication.

Is the alternate means of attaching the Nelson Studs to the angle, using the fillet weld method in lieu of the fusing method, acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The angled stud in the interior of the angle requires a different type of ferrule (heel) to address the angled condition. The alternate means used to attach Nelson studs for angles in this RFI is acceptable provided that at least 2 studs per angle have been verified by bend test per specification section 03 20 00 2.2.C.2, which references AWS D1.1-2010 (Paragraph 7.8 for testing requirements).

SHIMM000-0264 **BGP - Shear Wall Dowel and Shoring Pipe Bracing Conflict** **Closed** **07/24/2013** **08/03/2013** **08/07/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: Drawing S1-3001, Spec Section 03 30 20

A few potential conflicts exist between the typical shear wall vertical dowels and the 36" OD shoring Pipe Struts in Area 1. See attachement for locations of conflict.

Based on Detail A shown in S1-3260, the typical shear wall verts will be lap spliced.

Per the schedule in Detail 1-S1-3001, the #9 vertical shear wall reinforcement requires a 63" lap splice, which places the top of dowel at elevation -30'-5".

The centerline of Level D diagonal bracing atop Area 1 is shown to be at EL -29'-0" and the bottom of the 36" OD pipe strut at level D is at EL -30'-6".

The pipe strut will potenially encroach on the shear wall

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The contractor proposed lap splice length is acceptable only at locations where the conflict exists.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

dowels since the vertical spacing is #9 at 10" OC.

Please confirm that a 60" lap splice is acceptable at locations where conflicts exist, if not please provide soultions.

SHIMM000-0265 **BGP Embedded Conduits in Mat Slab for the Light Column** **Closed** **07/24/2013** **08/03/2013** **08/02/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please reference attached drawing E1-2205 and E1-4105.

Per the attached lighting plan drawings, there are no electrical conduits shown to be embedded exclusively for the Light Column on drawing S1-6005.

Please confirm that there are no conduits required for the light column in both the concourse slab and mat slab or provide the location, route and size of the conduit at each level.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

No, there are no embedded conduits required in lower concourse slab or mat slab.

SHIMM000-0266 **BGP - Temporary Perimeter Lighting** **Open** **07/24/2013** **08/03/2013** **07/30/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author:

REQUEST:

Per the TG06.0 pre bid Q&A TG06.0-0036 response dated 6/11/12 (attached), the temporary perimeter lighting drawings are to be issued to the trade subcontractor prior to the start of the work. When is this work scheduled to begin? Are the drawings and specifications for the perimeter lighting available?

Please provide the required documents or clarify when they will be provided.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SCCI to produce and provide all information including, but not limited to, product data and layout drawings necessary for installing and maintaining temporary lighting along the perimeter of the site at 50'-0" O.C. and installed in such a manner that it does not interfere with the structure and at all walkways utilized by the workers and the public, as required to provide code-minimum lighting at egress paths, as well as sufficient foot candle lighting levels to safely perform the work at all times.
SCCI is responsible for maintaining the temporary

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

lighting and related facilities until completion of the work.

SHIMM000-0267 **BGP - Mat Slab Conduits** **Closed** **07/24/2013** **08/03/2013** **08/13/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Chris Williams **To:** Webcor Construction LP Jackson Tukuafu **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-9204, E1-6001

The electrical conduit details on sheet A1-9204/Detail 1 and Detail 5 on E1-6001 regarding the electrical conduits on the columns are in conflict. Detail 1 on A1 -9204 indicates an embedded junction box in the long portions of the columns at Line D.8 above the Train Platform Level. Detail 5 on E1- 6001 indicates all conduits are to be stubbed up 12" at the face of the column. This Detail 5 shows all conduits (shown dashed) above the 12" stub up in the Mat Slab are to be installed in future phases outside of the TG06.0 contract. The columns are part of the TG06.0 scope.

1. Please clarify if these junction boxes and conduit are to be embedded in the columns or stubbed up through the slab at the face of each column at all four (4) locations..

2. If the conduits and boxes are to be embedded in the columns please provide a revised embedded conduit detail indicating conduits as part of TG06 Below Grade Scope.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The embedded junction box details on A1-9204 applies only to the flat surfaces (north and south sides) of the columns along GL D.8 of Platform 2 (refer to note on details 1 & 2 on A1-9204) and shall have embedded boxes and conduits. Locate the conduit and boxes such that the device faceplates will be finished flush to the finished column cladding.

The east and west sides of the columns indicated on the note shall have surface mounted junction boxes and conduits (refer to detail 1 on A1-9204).

For all other columns in the BGP, the junction boxes and conduits are typically surface mounted (refer to detail 5 of E1-6001).

SHIMM000-0268 **BGP - Column and Reshoring Struts Conflict** **Closed** **07/26/2013** **08/05/2013** **09/20/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author:

REQUEST:

Reference: Attached Drawings

The highlighted areas on the attached re-shoring drawings

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Further review and coordination of specific struts that are in conflict or in close proximity to formwork is required. Please submit as-built of all locations that

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

show re-shoring struts against some of the oval shaped columns. In order to construct the concrete columns SCCI will need at least 30" of clearance between the column face and the struts.

Please confirm that the reshoring struts will be moved enough to provide needed clearance.

are in concern.

SHIMM000-0269 **BGP - 1st Street 48" Bridge Pile Asbuilts** **Open** **07/25/2013** **08/04/2013** **07/31/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author:

REQUEST:

Reference: Drawing S1-3003

48" temporary bridge piles (00 1 through 010 in the drawing attached) under the 1st Street temporary bridge exceed the 48" diameter required per Detail 6 on Plan Sheet S 1-3003. The varying diameter of each temporary bridge pile is the result of the pile being a 48" CIDH concrete pile instead of a steel pile like the rest of the slab penetrations. As typical of a CIDH pile, the surface profile varies much greater than the 1 /2" gap tolerance required per Detail 6 on S 1-3003. Attached is an as built of the 48" piles with their varying diameters. In consequence the penetration sleeves will not fit the current conditions of the 48" piles.

Please advise how to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

BBI's temporary bridge detail drawing SH-5101, depicts the CIDH pile diameter at 48". Our review of the the Caltrans specification on CIDH piles indicate no reference to tolerances; therefore, we cannot ascertain any diameter larger than 48". SCCI to proceed as shown on the BBI and contract drawings with the CIDH pile at 48" in diameter. Please note, SCCI has ten (10) sleeves fabricated and onsite. The remaining sleeves are in fabrication at this time.

SHIMM000-0270 **BGP - Clear Cover to Mat Reinforcing at CDSM Pile Encroachment** **Closed** **07/30/2013** **08/09/2013** **08/07/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: Drawing S1-3201, Spec Section 03 30 20

Per Section 1 on S1-3201, the mat slab reinforcing is shown with 6" of clear cover from the outside face of the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Encroachment into the 6" clear dimension is acceptable as long as mat rebar does not conflict with the foundation wall vertical reinforcement at the outer face. To avoid this conflict, clear dimension between

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

concrete wall. When the outside face wall and mat foundation step in and out due to CDSM encroachment, the 6" clear dimension shown on 1/S1-3201 will be encroached upon.

Please confirm this is acceptable. This would apply in any area where the wall thickness is being reduced due to encroaching CDSM Pile.

the mat slab reinforcing and outer face of the concrete wall shall not be less than 4". For future reference, note that the condition at the embedded columns within the foundation walls is different. That condition is illustrated in detail 1/S1-3302 of the construction drawings and the question included in this RFI does not cover that condition.

SHIMM000-0272 **bgp - Pin Pile Encroachment** **Accepted** **08/23/2013** **09/02/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Filip Filipic **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

REQUEST:

See attached photo.

Pin pile No. 6 is encroaching into the future RCW. This RCW is not part of TG06 package, but the form savers fo rfuture walls are. With the pin pile in the way SCCI will not be able to install form savers in the area of encroachment.

Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SHIMM000-0274 **BGP - Rebracing Conflict RKB 15** **Open** **08/15/2013** **08/25/2013** **08/15/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Filip Filipic **To:** Webcor Construction LP Jackson Tukuafu **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author:

REQUEST:

Reference: PSK-2022, Spec Section 22 13 01

Please see attached.

After performed layout of the drainage system in the mechanical room SCCI has discovered that the reshoring raker base plate ofRKB#15 lands over the floor cleanout. Top of floor cleanout is supposed to be set to FFE (EL -35.42) which is 3" above the top of mat slab. Floor cleanout at this location will be protruding into the raker's base plate.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Reference: Attached RFI# PBA-172

Please see the internal RFI response from PB&A that allows the rakers to move as noted in the RFI.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please advise on how to proceed on this matter.

SHIMM000-0275 **BGP - Rebracing Conflict RKB 16** **Open** **08/15/2013** **08/25/2013** **08/15/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Filip Filipic **To:** Webcor Construction LP Jackson Tukuafu **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author:

REQUEST:

Reference: PSK-2022, Spec Section 22 13 01

Please see attached.

After performed layout of the drainage system in the mechanical room SCCI has discovered that the reshoring raker base plate ofRKB#l6 lands over the floor drain. Top of floor drain is supposed to be set to FFE (EL -35.42) which is 3" above the top of mat slab. Floor cleanout at this location will be protruding into the raker's base plate.

Please advise on how to proceed on this matter.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Reference: RFI# PBA-172

Please see the internal RFI response from PB&A that allows the raker to move as noted in the RFI.

SHIMM000-0279 **Placing Protection Slab on Sloped Surfaces of Pits** **Open** **08/21/2013** **08/21/2013** **08/21/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author:

REQUEST:

Please reference attached sketch SK-PSOOI.

Due to quality and constructability concerns of placing a 4" thick slab on the 45-degree plane of the pits, installed on waterproofing membrane, SCCI is proposing the option to pour the sloped plane of the pits with the mat slab. In order to provide protection from pit reinforcing steel, SCCl will place the protection slab in the bottom of the pit, 12" up the sloped plane on all sides, and the horizontal placement will stop at the top edge of the pit.

Per the Grace waterproofing requi rement that tbe membrane not be left exposed for more than 56 days al\er

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The proposed option is unacceptable. Without any protection on the sloped surfaces of the pits, iron workers may damage the waterproofing. Furthermore, once the rebar is installed it is very difficult to go inside these cages and perform an inspection on the waterproofing.

Other means and method options for SCCI to consider, include but not limited to:

1. Installing #3 rebars at 18" o.c. each way similar to what was done in the mud slab.
2. Use smaller aggregate 1/2" instead 1".

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

installation, SCCI will ensure that the membrane never exceeds the 56-day exposure limit.

Please confirm this option is acceptable?

3. Install top and bottom protection slab first and then pour this sloped surface after.
4. Try to pour concrete similar fashion it was poured at the steep pit mud slab. You may need to add more dobe's horizontally to allow the concrete to adhere to 1 1/2" space between bars and waterproofing. Rebar is more stronger than wire mesh for someone to climb up onto the surface.

SHIMM000-0282 **Temporary Power from Skids #3 and #4** **Open** **08/14/2013** **08/24/2013** **08/14/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Chris Williams **To:** Webcor/Obayashi Joint Ventu Spencer Sayles **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author:

REQUEST:

SCCI and Bass had planned to used Temporary Power "skids #3 & #4 for temporary power needs. Currently Skids #3 & #4 are not available and have been removed and are unavailable. Will these skids be up and running in time fto use for temporary power? If not, where should SCCI and BAss route temporary power from? Serving the projects temporary power needs from Skids #1 and #2 is not feasible.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please refer to Drawing SL-001 of Exhibit A.

Temporary power skids 3 & 4 are not represented in any of trade group package TG06 contract documents. As indicated in trade group package TG06 Exhibit A, SCCI is required to tie into the "nearest" power source; furthermore, the Site Logistics Plan drawing SL-001 show the location of three (3) skids (Skid 1, 2 and 5) to tie into. Servicing the projects temporary power needs is a means and methods by SCCI. Overcoming distance and circuitry limitations, include but not limited to, increasing the load capacity to each zone and/or using available Skid 5.

SHIMM000-0283 **BGP - Moment and Spandrel Beams 180 Degree Hooks Versus 135 Degree Hooks** **Accepted** **08/26/2013** **09/06/2013** **08/30/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

See attached Gerdau's RFI#068, S1-3600, S1-3410

At the contractor's option, Gerdau is requesting to change

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractors proposal to replace the 135 degree hooks with 180 degree hooks on the Lower Concourse Moment Frame Beam and Spandrel Beam Perimeter

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

the 135 degree hooks on the Moment Frame and the Sprandrel Beam sstirrups to 180 degree hooks. Please confirm this is acceptable.

Stirrups is acceptable.

SHIMM000-0284 **REBAR - Configuration at Moment Beam** **Closed** **08/13/2013** **08/23/2013** **08/13/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author:

REQUEST:

See attached Gerdau's RFI #066

Withing all of the Moment Frame Beam Sections found in the structural drawings, the T9 ties are depicted alternating. Gerdau is proposing to install the T9 ties within the Moment Frame Beams with all the 90 degree hoods at the bottom rather than alternating.

During the installation of the mock up, it was evident that the process of hooking the 135 degree hook around the bars at the bottom of the beam was problem due to the limited clearance (1.5") and the depth of the 135 hook (4.5"). By eliminating the alternating ends and only installing the 90 degree hook end down, it would resolve this situation.

Please confirm that this configuration is acceptable withing the Moment Frame Beams.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per meeting between TT, WOJV and SCCI on 08/08/2013, TT rejected the non-alternating configuration per code.

SHIMM000-0287 **BGP - North Shear Wall Concrete Mix** **Accepted** **08/21/2013** **08/31/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

REQUEST:

See attached drawing regarding the North shear wall. Due to the monolithic pours at the intersection of the shear wall, foundation wall and mat slab chamfer, there will be differentiating concrete mix uses. The attached drawing assigns the portions of this intersection with its corresponding concrete mix.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please verify the use of these concrete mixes at this location as acceptable.

SHIMM000-0290 **BGP - Couplers for Future Construction** **Accepted** **08/19/2013** **08/29/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Filip Filipic **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

REQUEST:

Reference drawings: S1-3001, S1-3206

See attached photo of the form savers that are going to be used for the couplers for future construction as depicted on Detail 4 of S1-3206, and Detail 6 of S1-3001. SCCI believes that Detail 6 on S1-3001 is not applicable due to the following:
1. As shown on the attached photo, epoxy coated form savers have tin cap incorporated into coupler's body. This tin cap will protect the rebar until the future construction.
2. Whatever tar intended to be used with form savers is not compatible with the Grace waterproofing.
3. Detail 6 on S1-3001 is a detail for the slabs, where future walls are to be constructed.

SCCI proposes to install the couplers for future construction as shown on Det. 4 S1-3206 with form savers set against the waterproofing membrane. Care shall be taken to ensure that waterproofing is not damaged.

Is this acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SHIMM000-0291 **BGP - FF&FL Values for Mat Slab and Concourse Slab** **Accepted** **08/23/2013** **09/03/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Don Muns **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

REQUEST:

1. Please confirm the contract documetns (TG06.0) do not specify a FF value for the Mat Slab.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

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2. Also, please reference ACI 302.1R and contract specification 033020.3.6.B. ACI 302.1R does not provide any recommendations on F-numbers for broomed surfaces. Furthermore, table 8.15.3.b of ACI 302.1R (page 46) demonstrates to achieve FF value of 20 for a slab on grade, it must be a smooth, floated surface.

Please clarify if the designer intends to have a rough broom/rake finish, or intends to have the concourse slab finished to a value of 20.

3. Please confirm the concrete finish within the train box

SHIMM000-0292.1 **Cast-In-Place Concrete - FF & FL Values for Concourse Slab** **Closed** **10/02/2013** **10/12/2013** **02/13/2014** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor/Obayashi Joint Ventu Spencer Sayles **Answered By:** Webcor Construction LP Ted Williams

Co-Author:

REQUEST:

This RFI is being submitted in resposne to RFI response T-0691. Please refernce TG0600 contract specificaiton section 033020.3.6.B. Section 3.6.B specifies a FF value of 20 for the surface of the lower concourse slab.

Table 8.15.3b of ACI 302.1R (page 46) statres that to achieve a surface with an FF value of 20, it must be a smooth floated surface. ACI 302.1R does not provide any recommendations of "F" numbers for broomed surfaces.

Please clarifiy if th edesigner intends to have a rough broom/rake finish, or intends to have the concourse slab finished to a FF value of 20.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to T-0777

SHIMM000-0293 **BGP - ASI-104 Electrical Clarifications** **Closed** **08/22/2013** **09/01/2013** **08/22/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Chris Williams **To:** Webcor Construction LP Jackson Tukuafu **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author:

REQUEST:

Note B on the SKE-01-3201, SKE-01-3202, & SKE-02-320l(from RFI T-0633 response) indicate that all electrical

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

All termination points, conduits and boxes shall be clearly identified and labeled for future connections to

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equipment shown in halftone is to be included in the later phase 2 construction (outside of TG06.0 scope). With that, there is extensive electrical equipment (switch gear, panels, etc) that are shown in full tone on the drawings. Please clarify whether or not this electrical equipment is to be
furnished and installed under the TG06.0 scope of work. Additionally, if it is required, please provide the specifications pertinent to the required equipment.

be performed by other trade subcontractors for the electrical equipment shown. All Electrical equipment shown in the attached sketches are excluded from trade package group TG06.0 and will be included in the phase 2 construction as noted..

SHIMM000-0294 **BGP - Rebar Configuration at Moment Beam with Incorporation of S-3 vs T-9 Ties** **Accepted** **08/23/2013** **09/03/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

REQUEST:

Please find attached Gerdau's RFI#70.

At the contractor's option, Gerdau would like to propose utilizing S-3 stirrups with only one T-9 tie (see attached sketch) for the vertical ties in the moment frame beam. This will be installed in lieu of installation all T-9 ties. This is done to avoid the constructability issues associated with alternating the hooks under the 1.5" of clear cover beneath the bottom beam bars.

Please confirm that the proposed reinforcing configuration is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SHIMM000-0296 **BGP - Drain Line and Micro Pile Conflict at K.5 5.5** **Accepted** **08/22/2013** **08/30/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Filip Filipic **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

REQUEST:

See attached photo and CD PI-2030.

After performed layout of the drainage line system around GL K5 SCCI has discovered that a row of micro piles is in conflict with the 4" cast iron pipe drain line. SCCI suggest

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

shifting the drain line run to clear the micro piles.

Is this acceptable?

SHIMM000-0297 **BGP - Drain Line conflict with reinforcement at GL K3** **Accepted** **08/22/2013** **08/30/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Filip Filipic **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

REQUEST:

See attached photos and CD P 1-2030.

Tails of the bottom rebar mat at the drainage pit are interfering with the construction of drainage lines and catch basin. SCCI proposes following:
1. Shift the catch basin to where it clears the reinforcement tails.
2. Cut the rebar tails to allow installation of the drainage lines and the catch basin.

Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SHIMM000-0298 **Additional Rebar Conflict for Plumbing Trim at GL2/D.4** **Accepted** **08/23/2013** **09/03/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

REQUEST:

Due to the density or the typical N-S top mat bars (#10) and additional bars (#11) near the elevator pit at Gridlines 2 and D.4, the additional trim rebar per 1/S1-3501 for interrupting the bars over the plumbing opening cannot be installed to the East of the plumbing opening within 3" of the opening. The alternative solution would be to install the additional steel in a new layer below the top mat; however, due to proximity of the piping to the steel the bars cannot be placed below the top mat. Gerdau proposes the folloing options:

A. Omit the additional trim bars to the East of the trimmed opening.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

B. Relocate the additional trim bars approximately 3'-0" East of the opening where the rebar spacing would allow for additional steel.

Please advise if proposed options are acceptable.
(see attached SKS-1)

SHIMM000-0299 **BGP - Additional Rebar Conflict for Floor Sink Trim GL B.7/2.7** **Accepted** **08/23/2013** **09/02/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

REQUEST:

See attached Gerdau's RFI#72

Due to the density of the typical N-S top mat bars (#10), additional N-S top mat bars (#11) and pin pile trim steel (#11 with lap splices directly over floor sink) near the floor sink at Gridlines 2.7 and B.7, the additional trim rebar per 1/S1-3501 for interrupting the bars over the plumbing opening cannot be installed on either side of the plumbing opening. The alternative solution would be to install the additional steel in a new layer below the top mat; however, due to the proximity of the plumbing piping to the steel the additional bars cannot be placed below the top mat. Also, the additional bar to the East of the opening would conflict with the pin pile. Gerdau proposes to cut top mat bars to allow for the floor sink installation and omit the additional trim bars.

Please advise if the proposed solution is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SHIMM000-0300 **BGP - Glass Guard Rail Attachment by Others Clarification** **Open** **09/12/2013** **09/26/2013** **09/20/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author:

REQUEST:

Refer to drawing S1-3410.

Please reference attached detail 7, S1-3410. Please

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed. Tabs will be included in the scope for that "future" contractor, when that connection of the glass guardrail is finalized in Phase 2 per coordination with

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

confirm SCCI is to provide 3/8x7xcontinuous plate only, and no tthe tabs shown at 5'-0" OC.

the preconstruction team.

SHIMM000-0301 **BGP - Vehicle/Bike Beam End Suppoert Embed** **Accepted** **08/27/2013** **09/09/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

REQUEST:

Please reference attached drawing S1-3411 .

Detail I calls for a W'x4"x 18" embed plate at the toe of the corbel. 1D/S1-3411 details this embed and shows it as 24" rather than 18".

Please clarify the correct dimensions for this embed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SHIMM000-0302 **BGP - Catch Basin Requirements** **Accepted** **08/27/2013** **09/06/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Filip Filipic **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

REQUEST:

See attached page from DBI's standard catch basin detail, and reference drawings P1-6001 and P1-2022 thru 2030.

On 08/26/2013 during pressure testing inspection of the drainage lines in mat slab areas 1 and 2, DBI Plumbing Inspector has pointed out that all catch basins in the mat slab should be constructed per attached detail.

Contract drawings do not show catch basins details with cleanouts, vents and trap primer connections. Constructing the catch basins per attached sheets constitutes a compensable change.

Please provide details and direction for construction of the catch basins.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

☐

Number	*Subject*	*Status*	*Date Created*	*Date Required*	*Date Answered*	*Cost Impact*	*Proceed*
SHIMM000-0303	**BGP - Chamfer Bar Top Hook**	**Closed**	**08/29/2013**	**09/08/2013**	**08/29/2013**	**Potentially**	

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

See attached Gerdau's RFI#74.
See attached SKS-74

In an effor to prevent the chamfer bar from encroaching on the existing shoring waler beams, Gerdau would like to propose over bending the top hook and turning it into a standard 180 degree hook as shown on the attached sketch.

Please advise if this is acceptable

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractor-proposed 180 degree hook for the chamfer bars that are in conflict with double shoring walers is acceptable for bars that have not been fabricated. The radius point for the bend shall remain located as originally detailed on 1/S1-3201.

SHIMM000-0304	**BGP - Drainage Conflicts with Reinforcement**	**Accepted**	**08/29/2013**	**09/08/2013**		**Potentially**	☐

From: Shimmick Construction Company, Inc Filip Filipic **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

REQUEST:

See attached marked up contract drawings PSK-2022 and S1-3005

Some of the drainage lines and fixtures are designed to be constructed in close proximity of the concrete columns, similarly S1-3005 depicts typicall mat shar reinforcement schedule and details. Some of these shear reinforcement bars will be interfering with the drainage lines and fixtures. SCCI suggest to displace these shear reinforcement bars where conflicts occur. Displacement would occur lateraly, in 8'' increments, governed by the grid of the mat slab main reinforcement bars.

Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SHIMM000-0305	**BGP - Haunch Reinforcement at Double Waler Condition**	**Closed**	**08/29/2013**	**09/08/2013**	**09/02/2013**	**Potentially**	☐

From: Shimmick Construction Company, Inc John Berggren **To:** Webcor Construction LP Jackson Tukuafu **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Gerdau RFI No. 075 dated August 29th, 2013

This RFI is to confirm the resolution as proposed in the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The revised haunch reinforcement clear cover as described in the RFI per field coordination is confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

field. At the double shoring waler condition, where the waler web is lower that that of a single waler, the tail of the #10@8" (10C262 on BM-3t) haunch reinforcement interferes with the web of the shoring waler. The condition was observed at Grid 2/ A and will likely repeat at other double waler locations. The resolution to the condition shall be to adjust the position, where required, so that the interfering tail clears the double waler web. As a result the 1-1/2" clear cover will deviate up to 4-112" of clear cover. The plan loaction of the tail shall remain as close as possible per the placement drawings. See the attached sketch for further details. The 1-1/2" clear spacing shall remain at locations unaffected by the reduced clearance of the double-wlaer. For pieces not yet fabricated and delieverd, Gerdau has submitted in [Gerdau] RFI #074 {SCCI #303} a proposed solution to conform to the 1-1/2" clear cover.

Is this confirming RFI accurate and acceptable?

SHIMM000-0307 **BGP - Jitter Bug Finish on Mat Slab Surface** **Accepted** **09/03/2013** **09/13/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

REQUEST: **SUGGESTION:** **ANSWER:** **Accept Suggestion:** ☐

Reference Spec Section 033020.3.6.B.l.c.
See attached photos for a visual reference.

Please reference TG06.0, BGP contract specifications 033020.3.6.B.l.c. SCCI is proposing to finish the top surface of the Mat foundation Slab, as a "Jitter Bug" finish. All other finishing requirements will remain the same.

Is this acceptable?

SHIMM000-0308 **BGP - Haunch Reinforcement Atlernative Detail** **Accepted** **08/30/2013** **09/16/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Filip Filipic **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference Drawing: S1 -3201
Reference Spec: 03 20 00
Attached Gerdau Sketch: SKS-76.1, SKS-76.2, SKS-76.3

A portion of the #10 @ 8" haunch bars cannot be installed as fabricated due to conflicts with overhead obstructions (shoring walers and struts) and the dewatering well sleeves. Per discussions with Sean McNeil where bars cannot be installed due to the obstructions, a modified #1 0 haunch bar with an HRC 555 head can be installed in place ofthe typical haunch bar. The attached sketches (SKS-76.1 and SKS-76.2) depict the magnitude ofthe obstructions at the dewatering wells in Area 3.

Please confirm if this is acceptable.

Additionally, please provide the required embedment length for the headed tail of the modified haunch bar.

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

SHIMM000-0308.1 **BGP - Haunch Reinforcement Alternative Detail** **Accepted** **09/03/2013** **09/13/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Shimmick Construction Comp Ben Gordon **Answered By:**

Co-Author:

REQUEST:

See attached Gerdau's RFI #79.

The RFI Response to RFI T -0702 stated that the 180 degree hook chamfer bars are acceptable where the bars conflict with the double shoring walers. The intent of the RFI was to request the use of the 180- degree hook for the chamfer bars throughout the structure regardless of whether or not the bars were below a double or single walers.

Please confirm that this is acceptable.

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

SHIMM000-0309 **BGP - Mat Slab Added Steel Interference** **Accepted** **08/31/2013** **09/16/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Filip Filipic **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

Number	*Subject*	*Status*	*Date Created*	*Date Required*	*Date Answered*	*Cost Impact*	*Proceed*

REQUEST:

Reference Drawing S1-3003 and Spec Section 03 20 00
See attached Gerdau Sketch SK-77, BM-3b, BM-3t

Due to the location of select trestle and pin piles, the #9@16" (bottom mat) and #11@16" (top mat) added North-South layer reinforcement cannot be installed at the desired spacing. The proposed solution is to cut the added #9 or #11 bars, where interrupted by a pile, and add a hook of equal size or greater (#11 hook max) with a lap splice similar to the hooks used for the trestle and pin pile trim steel.

Please confirm if this is acceptable.

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

SHIMM000-0310 **BGP - Area 3- Partition Wall Pier Rebar Conflict With Plumbing Near GL3/C.3** **Closed** **09/03/2013** **09/13/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

REQUEST:

See attached Gerdau's RFI #078.

Near Gridlines 3/C.3, there is a conflict between the partition wall pier dowels and the installed 6" pluming pipe (8" with insulation). The wall pier currently overlaps with the plumbing pipe by approximately 6". Gerdau proposes to move the wall pier to the East, or West to allow the dowels to clear the pipe.

Please provide the acceptable direction (East or West) to shift the wall pier.

Please note that there are conduits stub up on the East side that would need to be moved, should the opening is shifted towards the East.

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

SHIMM000-0311 **BGP - Couplers for Future Walls** **Accepted** **09/03/2013** **09/13/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Filip Filipic **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference Det. 6 on S1-3001
See attached photo of the form savers that are going to be used as couplers for future walls.

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

SHIMM000-0312 **NW Corner Wall intersection Horizontal and Haunch - Area 3** **Closed** **09/04/2013** **09/14/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

REQUEST:

Reference Drawing: 3/S 1-3001
Reference Spec: 03 20 00

Per field coordination with the on-site structural engineer the following conditions are to be confirmed as acceptable:

1. In the Northwest comer of Area 3, comer bars matching the size, spacing and lap splices of typical horizontal reinforcing are installed in-lieu ofbent typical horizontal bars. See Bar A in sketch FC-1

2. In-lieu of hooked haunch horizontal bars, straight bars of the same size have been installed with the required embedment. See Bar B in sketch FC-1.

3. At the intersection of the North and West haunch bars, the haunch bars along the North (Bar D) wall have been trimmed at the approximate intersection with the West (Bar C) haunch bars. Reference sketch FC-2. The observed condition is acceptable, but at future locations within the intersection of two haunches the detail for BarE will be used unless BarD already has 42" of embedment.

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

SHIMM000-0313 **BGP - Haunch Reinforcing Intersection with Dewatering Wells** **Closed** **09/04/2013** **09/04/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

REQUEST:

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Reference drawing: 1/S1-3201
Reference spec: 03 20 00

Per field coordination with the on-site structural engineer the following conditions are to be confirmed as acceptable:

1. In Area 3 along Gridline A, the haunch bars have been trimmed at the approximate intersections with the bottom mat. See sketch FC-3

2. In Area 3 along Gridline 1, (2) haunch bas have been trimmed at the approximate intersection with the top mat with no embedment. See sketch FC-4.

At future locations where dewatering wells interrupt haunch bars, use detail for bar E in sketches FC-3 or FC-4 if the haunch bars do not have 42" of embedment into the mat slab.

SHIMM000-0315 **BGP - Extended Time for Concrete Delivery - Protection Slab** **Open** **09/10/2013** **09/20/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

REQUEST: **SUGGESTION:** **ANSWER:** **Accept Suggestion:** ☐

Cemex has performed the set time test to evaluate the time at which the onset of hydration occurs for mix #1557217 (Protection Slab Mix).

For the mix referenced herein, is it acceptable to extend the concrete delivery time to (2) hours?

SHIMM000-0316 **BGP - Column Shear Rinforcement and Bump-Out Pile Interference** **Accepted** **09/10/2013** **09/20/2013** **Potentially** ☐

From: Webcor/Obayashi Joint Venture Bob Garcia **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

REQUEST: **SUGGESTION:** **ANSWER:** **Accept Suggestion:** ☐

Please refer to attached drawing S1-2024 (dated 11/27/12), S1-3005 and attached sketch SK-SCCI 316.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Per field measurements, the 36" bump out trestle pile near gridlines F.7/15 interfere with the nearby column shear reinforcement at gridlines G/15.

Due to the size of trestle pile, the adjustment of the shear head locations, as provided in RFI T-0703, cannot be achieved . Please provide direction on how to proceed.

SHIMM000-0317 **BGP - Trim Steel Requirements for Mat Slab** **Open** **09/10/2013** **09/20/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

REQUEST:

Per field instructions, to help alleviate congestion in the mat reinforcing, and in particular, congestion resulting from add bars due to openings and penetrations, please confirm the following:

1. Details 4 and 7 on Sheet S1-3009 in so far as they apply to trestle piles, pin piles, dewatering wells and piezometric pipes can be relaxed in terms of additional bars. For an even number of bars interrupted (typical bars and add bars) the number of bars added on either side of the opening can be (number of interrupted bars)/2. For an odd number of bars interrupted (typical bars and add bars) the number of bars added on either side of the opening can be (number of interrupted bars +1)/2.
2. Detail 1 on Sheet S1-3501, which applies to sinks, can be relaxed in terms of additional bars. For an even number of bars interrupted (typical bars and add bars) the number of bars added on either side of the opening can be (number of interrupted bars)/2. For an odd number of bars interrupted (typical bars and add bars) the number of bars added on either side of the opening can be (number of interrupted bars +1)/2. The minimum requirement of 2 bars on either side of the opening need not apply.
3. The number of bars and maintenance of clear spacing will take precedence over 8¿ or 4¿ module spacing as to minimize the number of potential bar interruptions (and minimize resulting add bars). Any bar may be displaced to avoid conflict. The maximum center-to-center spacing of

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

any two adjacent bars may be as large as 16¿. Clear spacing of 1 bar diameter shall be maintained between bars where bar relocation necessarily reduces spacing in the vicinity of relocation. Where bar relocation affects a lap splice, noncontact lap splices will be allowed up to 6¿ for #10 and #11 bars. This remedy shall apply in particular when seeking to avoid interruptions at small penetrations such as risers, vents, sinks and conduits.
4. Clear spacing of 1db minimum shall be maintained in all mat reinforcing except for contact lap splices.5. Measures to reduce congestion at other locations such as catch basins, sump pits, elevator pits, shoring bracing and bridge piers will be considered on a case-by-case basis during field coordination with Thornton Tomasetti¿s field representative.

SHIMM000-0318 **BGP - Mat Slab CJ Layout Areas 2/4, 6** **Accepted** **09/10/2013** **09/20/2013** **09/10/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author:

REQUEST:

Please reference the attached CJ layout drawing, CJ-04, regarding the proposed CJ layout for Areas 2/4 and Area 6. These changes are to eliminate conflict with diagonal pit rebar as well as micro piles. Please verify that these changes are acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The requested approval must be submitted via submittal process. Please re-send using the next submittal package designated for this shop drawing: Submittal TG0600-0030.3 and item number 033000-030.3.

SHIMM000-0320 **BGP - Sump Pump Conduit Terminations Between Grid Lines 1 & 12** **Open** **09/12/2013** **09/22/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Chris Williams **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

REQUEST:

Per Detail 7 on plan sheet E1-6001, sump pump conduits for the below grade package are to be terminated 12" above the mat slab directly adjacent to the future train platform wall. With the train platform wall beginning at grid line 12 and moving east, where are the conduit terminations for the sumps to be installed west of grid line

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

12 where there is not a train platform? Is there a set dimenion the conduit should be set away from the sump when the train platform is not present? Please advise. Please note that for the two sumps that have been poured

in Area 3, the conduits were placed roughly 9' to the north of each sump opening to avoid the future train tracks. There are 8 total sumps west of grid line 12 with 6 ofthem left to be placed.

SHIMM000-0321 **BGP - Pit Detail Near Grid E/34.5** **Open** **09/17/2013** **09/27/2013** **Potentially** ☐

From: Webcor/Obayashi Joint Venture Bob Garcia **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

REQUEST:

The bridge pier pile (4'-0" diameter) near grid E/34.5 is shown in Sl-2057 to be offset from the typical row ofpiles show along gridline 34.7. In addition, detaill /Sl-3007 depicts the pile being located within the pit that is located at gridline E/34.5. Based on field observations, it appears that the pile in question has been installed in line with the other piles on gridline 34.7 which could possibly result in the pile being outside of the pit.

Please confirm if the pile is located within the pit as shown in S12057 and 1/Sl-3007. If not, then please provide an alternative detail to 1/Sl-3007.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SHIMM000-0322 **BGP - Mat slab, Grade 75 #11 Reinforcing** **Open** **09/17/2013** **09/27/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

REQUEST:

Due to mill shortages of grade 75 #10 reinforcing please confirm that at no cost to the Owner the implementation of grade 75 #11 reinforcing where required will be acceptable for use within the typical mat reinforcing installed at 8" O.C.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

The use of the grade 75 # 11 rebar is expected to supplement the typical #1 0 bar in the following locations, 3rd and 4th layer of Area 6, and 4th layer of Area 7.

SHIMM000-0323 **BGP - Column C16 and Knock-Out Corbel - West Throat** **Open** **09/17/2013** **09/27/2013** **09/18/2013** **Potentially** ☐

From: Webcor/Obayashi Joint Venture Bob Garcia **To:** Webcor Construction LP Jackson Tukuafu **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Per previous discussion with TT field engineer, in the West throat shearwalls which contain integrated Cl6 columns and vertical corbels to restrain the knock-out walls, only the Cl6 column ties are required to penetrate the mat at the designated spacing for a distance of at least 12" below the lowest top mat elevation. The ties associated with the corbel are not required to penetrate the mat slab. This RFI confirms that the column and corbel ties, as placed, are acceptable based on the observation by the TT field engineer.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
9/17/2013
RESPONSE:
Column C16 is a boundary element in the West Throat Shearwall. Integral to the column (and the wall) is a vertical corbel that restrains the knock-out wall. Ties are indicated for both the column and the corbel. Only the column ties are required to penetrate the mat at the designated spacing for a distance of at least 12¿ below the lowest top mat elevation. The ties associated with the vertical corbel are not.

As the corbel ties are not required below the mat, the corbel ties observed in the field are necessarily confirmed as acceptable.

The column ties, which are required to penetrate the mat, shall be placed per the contract drawings. This RFI response does NOT confirm the placement or spacing of the column ties observed in the field.

SHIMM000-0324 **BGP - Area 1- Confirming RFI- Knock Out Corbel and Haunch at SW Corner** **Closed** **09/17/2013** **09/27/2013** **09/18/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Per field coordination with TT field engineer, please confirm it is acceptable to omit the pilaster ties of Detail 2/S1-

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
9/17/2013
RESPONSE:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

3204 within the body of the haunch provided that:
¿ The pilaster West corner bar (Bar A in attached photo) is tied with 135 hooks in both directions
¿ Ties shall be #4 bars spaced at 4" o.c.
¿ The tie perpendicular to the South wall shall be developed a minimum of 14" into the South wall beyond the
haunch.
¿ The tie parallel to the South wall shall be hooked around the pilaster East corner bar (Bar B in attached photo).
¿ In lieu of two individual ties, it is also acceptable to combine the ties into a single shape with a 90 degree bend
at Bar A.
¿ The extent of the ties shall be from the top of the mat to the top of the haunch, after which Detail 2/S1-3204 will resume.
¿ The horizontal haunch bars shall terminate with a spliced matching hook.
¿ The horizontal formsaver bars for the future train tunnel shall be #7 @ 6" O.C. on the inside and outside face of the 3'-0" foundation wall.

The pilaster detailing as described in the RFI is acceptable within the body of the haunch.

SHIMM000-0325 **BGP - Area 6 CJ Layout Modifications** **Open** **09/18/2013** **09/28/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Filip Filipic **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

REQUEST:

See attached photos of the construction joint at mat slab area 6 South, near grid line 8.5, and CJ layout drawings.

Due to congestion and access SCCI would like to shift the walls and concourse joints at this location 14.5"' to the East. This adjustment does not affect any other structure's elements and complies with the CJ parameters outlined in the contract specifications.

Is this acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SHIMM000-0327 **BGP - Area 6 East Bulkhead and Catch Basin Conflic** **Open** **09/20/2013** **09/30/2013** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Shimmick Construction Company, Inc Filip Filipic **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

REQUEST:

See attachments.

SCCI had to shift the construction joint between mat slab areas 6 and 7 Eastward due to the interference with the micropiles and trestle piles. THis shif i nt ht eCJ puts the bulkhead against the catch basin near GL G11.

in order to mitigate this conflict SCCI propose shifting the catch basin location 24" +/- (in East/Wet direction), on either side of the bulkhead/CJ.

Is this acceptable.

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

SHIMM000-0328 **BGP - Structural Slurry Primer in Mat Slab** **Open** **09/24/2013** **10/04/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

REQUEST:

Please refer to the attached letter, authored by Rober Foley (CEMEX QC), dated September 17, 2013.

With limited site access, many Mat Slab pours will require a larger than normal amount of slick-line. To ensure that no slick-line gets plugged, SCCI is proposing to prime the slick-line with a structural slurry that will reach and exceed the specified design strength for the Mat Slab. A miniscule percentage of this primer will be deposited into the mat slab. This percentage would amount to .01 to .02 percent by volume.

Please confirm the proposed SCCI method of slick-line priming is acceptable.

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

SHIMM000-0329 **BGP - Internal Bracing Level D Removal** **Open** **09/24/2013** **10/10/2013** **09/30/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Webcor Construction LP Jackson Tukuafu **Answered By:** Shimmick Construction Cc Filip Filipic

Co-Author:

REQUEST:

Compiled concrete maturity data and break results from

SUGGESTION:

ANSWER:

Per email...

Accept Suggestion: ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

teh first mat slab pour show that after two weeks mat slab reaches between 4.5 and 5 KSI, this is approximeateley the end of the thermal control fo rthe mass concrete, as well.

SCCI requests design team to allow TG03 Trade Contractor to remove level Dinterior bracing when mat slab concrete reaches 4.5 KSI.

Is this acceptable.

Spencer,

We're retracting SCCI RFI # 329.
Concrete maturity data from the mat slabs will be available for everyones use and interpretation.
Changing the terms/specifications/scope of bracing removal is for WOJV/BBII/Designer coordination.

For the benefit of the Projects progress I suggest pursuing the concept of our, now voided, RFI 329 and Ryan's e-mail below.

If you have any questions, please let me know.

Regards,

Filip Filipic

SHIMM000-0330 **BGP - Haunch Bar Grade and Size Increase** **Open** **09/25/2013** **10/05/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

REQUEST:

Please confirm if it is acceptable to utilize Grade 75 #10 or #11 rebar in-lieu of the Grade 60 #10 rebar for the 3'-0" haunch.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SHIMM000-0331 **BGP - Geothermal Fields 11, 12, & 13 Layout in Zone 4** **Closed** **09/30/2013** **10/10/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Chris Williams **To:** Webcor/Obayashi Joint Ventu Spencer Sayles **Answered By:**

Co-Author:

REQUEST:

Attached are the two proposal drawings fo rthe geothermal layout in zone 4. Please confirm which layout is acceptable, Option #! or Option #2.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	*Subject*	*Status*	*Date Created*	*Date Required*	*Date Answered*	*Cost Impact*	*Proceed*
SHIMM000-0332	**BGP - Mat Slab Construction Joint Between Area 2 and Area 4**	**Closed**	**10/01/2013**	**10/11/2013**		**Potentially**	☐

From: Shimmick Construction Company, Inc Filip Filipic **To:** Webcor/Obayashi Joint Ventu Spencer Sayles **Answered By:**

Co-Author:

REQUEST:

Reference TG0600-30.2 Submittal.

As discussed in the prior progress meetings, SCCI plans to combine slab pours S102 and S104 into one pour without bulkhead forms in between. Is this acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SHIMM000-0333	**Loc. of Electrical Equipment and boxes for Elec. Room B2560**	**Open**	**10/02/2013**	**10/02/2013**		**Potentially**	☐

From: Shimmick Construction Company, Inc Chris Williams **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST:

Please find attached the revised layout for Electrical Room B2560 in Mat Slab Area 8. Please confirm that the layout is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SHIMM000-0333.1	**Loc. of Electrical Equipment and Boxes for Elec. Room B2560**	**Open**	**10/28/2013**	**11/07/2013**		**Potentially**	☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST:

Please reference RFI #T-0782, drawing El-2025, Al-2105, and Spec Section 26 05 34.

RFI #T -0782 response proposes layout for electrical equipment and box layout in Electrical Room B2560 - Area I 0 in CAD format. See attached.

Please confirm that the layout is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SHIMM000-0333.2	**BGP - Loc. of Electrical Equipment and Boxes for Elec. Room B2560**	**Closed**	**11/25/2013**	**11/25/2013**		**Potentially**	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Shimmick Construction Comp Sylvia Hartanto **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author:

REQUEST:

The response to RFI 0782.1 stated that the walls in the attached CAD layout were not properly coordinated and

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The layout provided appears to be satisfactory; however, the final layout should be coordinated with

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

included an AAI mark-up. Per 1/A1-9225 which was provided in the response to RFI T-0899, the walls between the mat slab and conccouse level are knee walls with a 4" lip. As shown and laid out, the knee wall lip will be 4 3/8" on three sides and 4 3/4" on the wall nearest to GL 19.9. This area will be included in the pour on 12/07/2013 and the form savers and conduits ha ve already been installed, therefore any layout changes will incur additional costs.

Please confirm layout as shown is acceptable.

latest direction in RFI T-0899 and submitted via submittal shop drawing for review.

SHIMM000-0334 **Locc. of Electrical Equipment and boxes for Elec. Room B2441** **Open** **10/02/2013** **10/12/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Chris Williams **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST:

Please find attached the revised layout for Electrical Room B2441 in Mat Slab Area 9. Please confirm that the layout is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SHIMM000-0334.1 **Loc. of Electrical Equipment and Boxes for Elec. Room 82441** **Open** **10/28/2013** **11/07/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST:

Please reference RFI #T-0781, drawings El-2024 and Al-2104 and Spec Section 26 05 34.

RFI #T-0781 response proposes layout for electrical equipment box layout in Electrical Room B2441 - Area 09 in CAD format. See attached.

Please confirm that the layout is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SHIMM000-0334.2 **BGP - Loc. of Electrical Equipment and Boxes for Elec. Room B2441** **Closed** **11/25/2013** **12/05/2013** **11/25/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Shimmick Construction Comp Sylvia Hartanto **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

The response to RFI 0781.1 stated that the walls in the attached CAD layout were not properly coordinated and included an AAI mark-up. The AAI mark-up shows the incorrect gridline location for Electrical Room B2640. In addition, due to the fact that the walls at this location are knee walls with a 4" lip per 1/A1-9225 that was provided to SCCI in RFI T-0899 response received on 11/15; the walls submitted in RFI T-0781.1 are indeed coordinated correctly per the sketch dimensions (AAI sketch is based on platform drawing, not mat slab drawing room which SCCI based the layout from). This area will be included in the pour on 11/23/13 and the form savers and conduits have already been installed; there any layout changes incur additional costs.

Please confirm layout as shown is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The latest layout and/or revisions to the aforementioned Electrical Room was provided in RFI T-0899 on 11/15/2013. Please submit the as-built layout as coordinated with RFI T-0899. Submit layout via submittal shop drawing package as directed in RFI T-0781.1 for review.

SHIMM000-0335 **Location of Electrical Equipment and Boxes for Electrical Room B2460** **Open** **10/02/2013** **10/12/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Chris Williams **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST:

Please find attached the revised layout for Electrical Room B2460 in Mat Slab Area 15. Please confirm that the layout is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SHIMM000-0335.1 **Loc. of Electrical Equipment and Boxes for Elec. Room B2460** **Open** **10/28/2013** **11/07/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST:

Please reference RFI #T-0780, drawings El-2026 and Al-2104, and Spec Section 26 05 34.

RFI #T -0780 response proposes layout for electrical equipment and box layout in Electrical Room B2460 - Area 08 in CAD format. See attached.

Please confirm that the layout is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
SHIMM000-0335.2	BGP - Loc. of Electrical Equipment and Boxes for Elec. Room B2460	Closed	11/25/2013	12/05/2013	11/25/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Shimmick Construction Comp Sylvia Hartanto **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author:

REQUEST:

The response to RFI 0780.1 stated that the walls in the attached CAD layout were not properly coordinated and included an AAI mark-up. The AAI mark-up shows the incorrect gridline location for Electrical Room B2640. In addition, due to the fact that the walls at this location are knee walls with a 4" lip per 1/A1-9225 that was provided to SCCI in RFI T-0899 response received on 11/15; the walls submitted in RFI T-0780.1 are indeed coordinated correctly per the sketch dimensions (AAI sketch is based on platform drawing, not mat slab drawing room which SCCI based the layout from). This area has already been poured with the form savers positioned per the CAD layout and as shown per ASI 107 Architectural drawings. Any changes in the layout of this area ill incur additional costs.

Please confirm layout as shown is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The layout provided in your RFI appears to be satisfactory; however, please submit the layout as coordinated with RFI T-0899. Submit layout via submittal shop drawing package as directed in RFI T-0780.1 for review and approval.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
SHIMM000-0336	Locations of Electrical Equipment and Boxes for Electrical Room B2461	Open	10/02/2013	10/12/2013		Potentially	☐

From: Shimmick Construction Company, Inc Chris Williams **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST:

Please find attached the revised layout for Electrical Room B2461 in Mat Slab Area 8. Please confirm that the layout is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
SHIMM000-0336.1	Loc. of Electrical Equipment and Boxes for Elec_ Room B2461	Open	10/28/2013	11/07/2013		Potentially	☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST:

Please reference RFI #T-0779, drawing EI-2024, and Spec Section 26 05 34.

RFI #T - 0779 response proposes layout for electrical equipment and box layout in Electrical Room B2461 - Area 08 in CAD format. See attached.

Please confirm layout is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
SHIMM000-0336.2	BGP - Loc. of Electrical Equipment and Boxes for Elec. Room B2461	Closed	11/25/2013	11/25/2013	11/25/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Shimmick Construction Comp Sylvia Hartanto **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author:

REQUEST:

The response to RFI 0779.1 stated that the walls in the attached CAD layout were not properly coordinated and included an AAI mark-up. The AAI mark-up shows the incorrect gridline location for Electrical Room B2640. In addition, due to the fact that the walls at this location are knee walls with a 4" lip per 1/A1-9225 that was provided to SCCI in RFI T-0899 response received on 11/15; the walls submitted in RFI T-0779.1 are indeed coordinated correctly per the sketch dimensions (AAI sketch is based on platform drawing, not mat slab drawing room which SCCI based the layout from). This area has already been poured with the form savers positioned per the CAD layout and as shown per ASI 107 Architectural drawings. Any changes in the layout of this area ill incur additional costs.

Please confirm layout as shown is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The layout provided in your RFI appears to be satisfactory; however, please submit the layout as coordinated with RFI T-0899. Submit layout via submittal shop drawing package as directed in RFI T-0779.1 for review and approval.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
SHIMM000-0337	Loc. of Electrical Equipment and boxes for Elec. Room B2640	Open	10/02/2013	10/12/2013		Potentially	☐

From: Shimmick Construction Company, Inc Chris Williams **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST:

Please find attached the revised layout for Electrical Room B2640 in Mat Slab Area 8. Please confirm that the layout is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
SHIMM000-0337.2	BGP - Loc. of Electrical Equipment and Boxes for Elec. Room B2640	Closed	11/19/2013	12/05/2013	11/25/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Shimmick Construction Comp Sylvia Hartanto **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author:

REQUEST:

The response to RFI 0778.1 stated that the walls in the attached CAD layout were not properly coordinated and included an AAI mark-up. The AAI mark-up shows the incorrect gridline location for Electrical Room B2640. In addition, due to the fact that the walls at this location are knee walls with a 4" lip per 1/A1-9225 that was provided to SCCI in RFI T-0899 response received on 11/15; the walls submitted in RFI T-0778.1 are indeed coordinated

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The layout provided in your RFI appears to be satisfactory; however, please submit the layout as coordinated with RFI T-0899. Submit layout via submittal shop drawing package as directed in RFI T-0778.1

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

correctly per the sketch dimensions (AAI sketch is based on platform drawing, not mat slab drawing room which SCCI based the layout from).

Please confirm layout as shown is acceptable.

SHIMM000-0338 **Clarification of Vehicle/Bike Beam End Supports** **Open** **10/02/2013** **10/12/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST:

This RFI is being submitted in response to RFI resonse T-0453.1. Please confirm the Vehicle/Bike Ramp end support angles. Confirm the acute angle is 56 degrees and obtuse angle is 124 degrees.

SUGGESTION: **ANSWER:** **Accept Suggestion:** ☐

SHIMM000-0339 **Type C31/D22 Coupler Stagger** **Open** **10/03/2013** **10/03/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST:

Detail 1/S1-3301 requires the couplers for the adjacent column vertical bars be staggered with a vertical distance of 24" or more; however, due to the pattern and spacing of vertical bars for the type C31/D22 detailed on S1-3306, the condition cannot be met.

Attached is a sketch of a proposed pattern for the vertical bars in the type C1/D22 columns, please confirm if it is acceptable.

SUGGESTION: **ANSWER:** **Accept Suggestion:** ☐

SHIMM000-0340 **Areas 5 and 6 EW Top Mat Reinforcing at South Wall Radius** **Open** **10/04/2013** **10/14/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Filip Filipic **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST:

SUGGESTION: **ANSWER:** **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Refer to the attached sketch 131003_S105-S106 South Radius.

In Areas S105 and S106, EW top mat reinforcing makes an increasingly acute angle with the south wall. This eventually prevents the reinforcing from penetrating the haunch and wall reinforcing curtains to reach the edge of the mat.

Per field coordination, it is acceptable to terminate EW top mat reinforcing in a hook prior to reaching the edge of the mat slab. The provisions are as follows:

¿ All terminating EW top mat reinforcing shall be hooked
¿ Where the angle becomes such that the mat reinforcing cannot penetrate the inner wall reinforcing. The reinforcing may terminate immediately in front of the wall reinforcing inside the haunch. This is labeled Zone 1 in the sketch.
¿ In Zone 1, single haunch bars that interfere with penetration of mat reinforcing into the haunch shall be relocated to allow penetration. Relocation will be to the nearest adjacent placement opportunity without regard to the 8" spacing module. Clear spacing, however, between haunch bars shall be maintained.
¿ The total number of haunch bars will remain unchanged.
¿ In Zone 1, provide a curved band of reinforcing at the typical size and spacing of the mat within the wall.
¿ Where the angle becomes such that the mat reinforcing cannot penetrate the haunch without relocating more than one haunch bar, reinforcing may terminate at the toe of the haunch. This is labeled Zone 2 in the sketch.
¿ In Zone 2, provide a curved band of reinforcing at the typical size and spacing of the mat within the haunch.
¿ Zone 1 and Zone 2 bands will overlap typical reinforcing by the distance LTS.

SHIMM000-0341 **Mat Slab S108 East Construction Joint Modifications** **Open** **10/08/2013** **10/18/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Filip Filipic **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

Number	*Subject*	*Status*	*Date Created*	*Date Required*	*Date Answered*	*Cost Impact*	*Proceed*

REQUEST:

See Attachments.

After the layout of the East construction joint in the mat slab area 8, SCCI discovered several constructability issues with the mat keyway and other project structure elements.

1. East construction joint in area 8 falls within th erow of micropiles. For this area, SCCI intends to jog the joint 12" +/- to the East to clear the mimcropile conflict.
2. CJ at area 8 East runs thru the thickened slab section at GL 1.6G.3. In this area SCCI intends to shift the joint Eastward to capture the thickened section within the area 8 pour.

Is this acceptable?

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

SHIMM000-0342 **Mat Slab S109 East Construction Joint Modifications** **Open** **10/08/2013** **10/18/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Filip Filipic **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST:

See Attachments.

After the layout of the East construction joint in mat slab area 9 SCCI discovered several constructability issues with the mat keyway and other project structure elements.

SCCI proposes to install the CJ between area 9 and 10 as shown on the attached sketches.

Is this acceptable?

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

SHIMM000-0343 **Partition Wall Pilaster and Plumbing Conflict at GL C.5/4.8** **Open** **10/08/2013** **10/18/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST:

The reinforcement fo rthe partition wall pilaster at

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

approximeately GL C.5/4.8 is in conflict with the drainage pipe below. Per not 3 on detail 0/S1-9050 the ties will be installed if possible.

Two veritcal bars in teh pilaster will have to bent in ordre to clear the pipe and two others will have to be slightly displaced to clear the pipe.

See the attached sketch for details. Please confirm if this is acceptable.

SHIMM000-0344 **Haunch Hook Embedment** **Open** **10/08/2013** **10/18/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST: **SUGGESTION:** **ANSWER:** **Accept Suggestion:** ☐

Perr discussions with TT Field Engineer, the embedment lengths of the haunch hooks (see RFI T-716) provided average 35", but are no less than 29", as measured from their intersection with the wall
interior reinforcing curtain. See sketch for more details. Please confirm if this is acceptable.

SHIMM000-0345 **Mat Slab S110 East Construction Joint Modificaitons** **Open** **10/08/2013** **10/18/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Filip Filipic **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST: **SUGGESTION:** **ANSWER:** **Accept Suggestion:** ☐

See attachmaents.

After th elayout of the East construciton joint in mat slab area 10 SCCI discovered several constructability issues wih the mat keyway and other project structure elements. SCCI proposed to install the CJ between area 10 and 11 as shown on the attached sketches. Is this acceptable?

SHIMM000-0346 **Follow-up and Field Adjustmetn to RFI T-0627.1 - Area 6 CDSM** **Open** **10/10/2013** **10/20/2013** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST:

During field layout of CDSM encoachment in Area 6, the follwoing extend of encroachment has been moved:

-For encroachment at SP696, we have moved the East extent to SP694, this is due to SP695 encroaching during the buried bar layout. This accounts for 4' additional wall length with 33-5/8" due to CDSM encroachment.

- For encroachment at SP104, the West extent of encroachment was moved to SP102. The rebar option 1 for SK1 with #11 rebar @ 6" OC will be used from SK102 to the West Extent of WR2 at Gridline 11

Please confirm that this deviation from RFI T-0627.1 response is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SHIMM000-0347 **Area 4 Wall Vertical Reinforcement Spacing** **Open** **10/10/2013** **10/20/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST:

Reference: RFI T-0622 and RFI T-0622.1.

The Area 4 wall vertical reinforcement has been installed different from the layout in RFI T-0622.1.

Please confirm if the spacing of wall vertical reinforcement, as shown in the attached sketch, is acceptable. Note that the wall thicknesses remain the same as approved in RFI T-0622.1.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SHIMM000-0348 **Area 2 Foundation Wall Vertical Spacing** **Open** **10/10/2013** **10/20/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST:

A 16ft portion of the Area 2 wall vertical reinforcement, between GL 6 and 7, has been installed at 6" OC instead of the required WR1 spacing (8" OC). Please confirm if the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

spacing of wall vertical reinforcement, as shown in the attached sketch, is acceptable.

SHIMM000-0349 **Top Mat Reinforcement Placement Tolerance** **Open** **10/10/2013** **10/20/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST:

Reference: ACI 117.

Per discussions with TT Field Representative, please confirm if it is acceptable to increase the top mat slab reinforcement placement tolerance from +/-1/2" to +1/2" and -1". This would also change the concrete cover tolerance from -1/2" to +/-1/2".

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SHIMM000-0350 **Seismic Joint Drawing Discprepanices in Contract Drawings** **Open** **10/14/2013** **10/14/2013** **10/14/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Webcor Construction LP Spencer Sayles **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author:

REQUEST:

Please reference detail 7/A1-8881 and 4/S1-3010 of the contract drawings.

1. Detail 7/A1-881 shows several elements that are not shown on the structural drawing (highlighted in red). Please confirm these are required in the assembly and provide details for tabs, bolts and welds.

2. The same detail depicts a "y" shaped object protruding from the seismic embed. What are these objects and what is their function?

3. Detail 4/S1-3010 depicts a 3/4" diameter stud that is not shown on the Architectural drawings. Please clarify.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. The current contract drawing details differ from those provided and referenced in the RFI. Refer to architectural drawing A1-8881 dated 07/17/13 and structural drawing S1-3010 dated 11/12/27.

2. See response to Item #1 above.

3. See response to Item #1 above.

SHIMM000-0351 **5/8"x6' Galvanized Steel Plate at Seismic Joint** **Open** **10/14/2013** **10/24/2013** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Shimmick Construction Company, Inc Scott Bunnell **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST:

Please reference Detail 7/A1-8881 and 4/S1-3010 of the Contract Documents.

1. Detail 7/A1-8881 (and other details on A1-8881) call for a 5/8"x6' galvanized steel plate secued to mud slab and soldier piles. This plate does not appear on the structural details for the seismic joint. What is the function of this plate?

2. How is the plate secured ot the mud slab? How is it secured to the soldier beams? There does not appear to be access to weld directly to soldier beam.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SHIMM000-0352 **BGP - Temporary Power Route from Skid #5 to Zone #5** **Closed** **10/16/2013** **10/26/2013** **10/16/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Chris Williams **To:** Webcor Construction LP Spencer Sayles **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author:

REQUEST:

Please find attached a drawing of the proposed Temporary Power route from Skid #5 to Zone #5. Is this routing acceptable? Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This should not be an RFI but reviewed via the submittal process. The proposed route should include but not limited to, elevation of proposed route across the pedestrian walkway, attachment method of conduit to Beale St. bridge, detail of conduit at shoring wall and product data to support installation.

The following submittal package and item # are available for use: TG0600-089 - BGP - Temp Power to Zone 4 Drawing Layout, Item # 011500-01 - Temp Power Route Drawing and Product Data at Zone 4..

SHIMM000-0353 **U-Bar at CDSM Encroachment Near GL 16.9/J** **Open** **10/17/2013** **10/27/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST:

Reference: RFI T-0742 - CDSM Soldier Pile Encroachment Area 9.

Per the response to RFI T-0742, the spacing of the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

verticals in the C21 embedded column at Gridlines 16.9/J was changed from 6" OC to 5" OC due to the CDSM soldier pile encroachment. As a result, there is an odd number (19) of verticals per layer which would leave one row of verticals to not be straddled by a U-bar. Gerdau proposes to widen the final U-bar in the embedded column and straddle
3 rows of vertical bars. See attached sketch for details. Please confirm if this is acceptable.

SHIMM000-0354 **BGP - Concourse Elevator Pit Sill Plates** **Open** **10/16/2013** **10/26/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST: **SUGGESTION:** **ANSWER:** **Accept Suggestion:** ☐

Please reference A1-2824 through A1-2847 (BGP TG06.0 Contract Drawings). Please confirm all delvator it sill plates are not int he TG06.0 scope of work.

SHIMM000-0355 **BGP - Concourse Opening Dimension Clarification** **Open** **10/16/2013** **10/26/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST: **SUGGESTION:** **ANSWER:** **Accept Suggestion:** ☐

Please reference A1-2844 and S1-2204 (BGP TG06.0 Contract Drawings). Please clarify North-South concourse opening dimension at gridlines 13/C. 8'-8 3/4" or 7'-7"?

SHIMM000-0356 **BGP - Elevator Rail Supports Dimension** **Open** **10/16/2013** **10/26/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST: **SUGGESTION:** **ANSWER:** **Accept Suggestion:** ☐

Please reference attached detail 4, S1-7630. Please confirm length of embed dimension is 2-7", as shown in red.

Number	*Subject*	*Status*	*Date Created*	*Date Required*	*Date Answered*	*Cost Impact*	*Proceed*
SHIMM000-0357	**BGP - Structural Steel Embeds in Concourse Slab/Columns**	**Open**	**10/17/2013**	**10/27/2013**		**Potentially**	☐

From: Shimmick Construction Company, Inc Chris Williams **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST:

Attached is a rebar congestion model of the concourse slab and column C2 at C24.9. As is apparent, the structural steel shear lug portion of the plate embed is in conflict with the reinforcing steel and will not fit with required rebar spacing. The rebar conflicts with he shear lug and blockout that are present, include but are not limited to:

- Typical MFB Beam at C24.9 (blue colored bars in model)
- B-68 Beam (yellow colored bars in model)
- Main concourse slab (pink colored bars in model)
- Column C-2 vertical T-Heads (purple colored bars in model)

Please provide a solution that will provide a constructible blockout and embediment of the structural steel plate.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SHIMM000-0358	**Sump Pit Rebar Tail and Trestle Pile @ GL 18.5/E - Area 9**	**Open**	**10/17/2013**	**10/27/2013**		**Potentially**	☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST:

Reference: RFI T-0644

Three of the sump pit lower mat #11 tails near grid line 18.5/E are in conflict wit the nearby trestle pile. The bars have been trimmed to clear the trestle pile and provide an LTE of 34" instead of 60" as required per plans.

Typically, a bent bar would be spliced to the interrupted bar as required in SKS-0281 in the response to RFI T-066; however, the trimmed bars have a 70" length which would not beet the 78" LTS requirement. Gerdau propose to leave the 3 ea trimmed bars as-is and not incoporate an additional spliced bent bar. Please confirm if this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SHIMM000-0359	**Vehicle Ramp Beam and Wall Support Embeds Clarification**	**Open**	**10/17/2013**	**10/27/2013**		**Potentially**	☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Please reference attached TG06.0 contract drawings S1-2251, A1-7401, S1-3411, S1-3203 and S1-3204.

1. Please confirm embed locations as shown on attached S1-2251 (reference drawings for description of embeds).

2. Please provide angles for embeds highlighted on A1-7401 (4 total embeds, with acute and obtuse angle for each embed); (similar to RFI Response T-0453.2)

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

SHIMM000-0362 **Area 11 to 16 Mat Slab Layer 3 Lap Splice Relocation** **Open** **10/21/2013** **10/31/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST:

Due to limited access between the waterproofing and access trestle, Gerdau proposes to shorten the mat slab typical layer three (North-South) 67'-0" bars at Areas 11 through 16. This requires the lap splice location to be moved from the center of column line, as specified on Note 1 of the Mat Top Bar Notes in S1-2052, to the location shown in the attached sketch.

Please confirm if this is acceptable.

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

SHIMM000-0363 **Lower Concourse Construction Live Load Variance** **Open** **10/23/2013** **11/02/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Scott Bunnell **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST:

Please reference Specification Section 03 10 00 - 3.2.A.2 and the attached project spreadsheet. This spec section calls for a minimum construction live load of 50 psf without referencing or indicating before or after concrete is placed. According to D.H. Charles (shoring designer), falsework projects of this application typically approach the falsework design for 50 psf before concrete is placed and 20 psf afterwards, while always maintaining a minimum design load (dead + live) of at least 100 psf. See attached D.H.

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Charles project history spreadsheet using this same design approach. Falsework calculations to follow. Is this design criteria acceptable?

SHIMM000-0364 **Lower Concourse Slab Edge Dimensions** **Open** **11/04/2013** **11/14/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST:

The structural drawings for the lower concourse (Sl-2202 through Sl-2207, framing plans) do not include dimensions for the slab openings. Scaled dimensions from these drawings conflict with many of the dimensions provided on the architectural slab edge plans (Al-2842 through Al-2847).

Please see attached for observed conflicts (highlighted). Please confirm that the dimensions shown on the architectural plans at the slab openings are correct.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SHIMM000-0365 **TG0600-103 Interior Wall Thickness Change Clarification** **Open** **10/28/2013** **11/07/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST:

Reference: Submittal TG0600-0103
Per the submittal review notes for TG0600-0103, the train platform future interior wall thicknesses are increased in Areas 8 and 11. The reviewer has included a note "For 1'-4" walls use same coupler reinf as 14" walls. Coordinate with RFI T-0587." The note does not include 12" walls which were previously 10". Please confirm if the now 12" wall is to use the same coupler reinforcing as the 10" walls.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SHIMM000-0366 **Vehicle Ramp Wall Embedded Supports** **Open** **11/05/2013** **11/15/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Please reference attached detail6 S1-3203, attached detail10 S1-3204, RFI Response T-0453.1, RFI Response T-0835 and attached SKA-2863.
RFI Response T-0835 confirmed that the vehicle bike ramp wall intersects the foundation wall at a 97 degree angle. Where this ramp wall intersects the foundation wall, embeds per detail 6 on S 1-3203 and detail 10 S 1-3204 are required. SCCI and its embed supplier has a constructability concern with these embeds. A similar constructability concern was brought up in RFI T -0453.1, stating that if an angle
member of such thickness is bent to achieve an angle other than that member's stock angle, it will structurally stress that member.

1. Please confirm it is acceptable to weld two (2) 8"x24"x1" plates together in order to achieve angle prescribed in RFI Response T-0835. Reference SKA-2863 for the acute and obtuse angles required. Forthcoming shop drawings will show all welds.

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

SHIMM000-0367 **Receptacles at Elevator Pits 19E and 20G** **Open** **11/04/2013** **11/14/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST:

There are elevator pits in the mat slab at approximate grid lines 19/E and 20/G. The drawings E1-2024 and E1-2025 do not show any receptacles being supplied to these pits. Please confirm this is correct.

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

SHIMM000-0368 **Conflict of elevator Opening Embed and Future Walls** **Open** **11/04/2013** **11/14/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST:

Please reference attached Detail4 on Sl-7630, attached Al-2202 thru Al-2205 and Al-2207, Sl-2202 thru Sl-2205 and Sl-2207, Sl-7130, Sl-7132, Sl-7134, Sl-7136 and Sl-

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

7139.

Please confirm no conflict exists between embed Detail 4 on S 1-7630 and future walls highlighted on attached architectural drawings.

SHIMM000-0369 **Column Tie Change from T9 to T12** **Open** **11/05/2013** **11/15/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST:

Please confirm if it is acceptable to replace the typical T9 column ties (90° or 135° bend on either end) with Tl2 ties (135° bends on both ends). See the attached sketch for further details.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SHIMM000-0374 **BGP - Horizontal Cast-In Inserts: Walls 111,165, 164** **Open** **02/13/2014** **02/13/2014** **02/13/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Webcor Construction LP Claude Titche **Answered By:** Webcor Construction LP Claude Titche

Co-Author:

REQUEST:

l. Horizontal Cast-In inserts in !st lift foundation wall 111 & 165, elevations -22.25, -27.08 and-31.92, were installed at elvations -22.08, -26.91 and-31.75 respectively. Please confirm this is acceptable? See attached sketch.

2. Horizontal Cast-In insert in !st lift foundation wall 164, elevation -27.08, 13'-10" in length from East end ofWl64, was installed at elevation -27.20. Please confirm this is acceptable? Please note the remainder of the Cast-In insert in wall 164 was installed at elevation -27.08. See attached sketch.

Please note all other Horizontal Cast-In Inserts will be installed per approved comprehensive lift drawings.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SCCI is to construct and install per RFI T0599.1, which is the most up-to-date drawing.

☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
SHIMM000-0376	**BGP - ASI 107 - Concrete Curb and RCW - Concourse Level**	**Open**	**11/11/2013**	**11/21/2013**	**11/11/2013**	**Potentially**	

From: Webcor Construction LP Jackson Tukuafu **To:** Shimmick Construction Comp Sylvia Hartanto **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author:

REQUEST:

1. ASI #107 reissues A1-2222 to A1-2227 with changed note at the top right of page. Previously, CC= concrete curb were stated as "CC- Cone curb not in TG06". In ASI107, this note was revised to "Cone curb ref to A-00022 for cone curb schedule. Ref to structural dwgs for coupler details". Is it the intent to add the concrete curb scope into TG06 contract by the issuance of ASI 107?

2. On the same changed note, RCW Previously stated "Reinf conc wall not in TG06 ref to structural dwgs". In ASI 107, this note is changed to RCW : "Reinf cone wall ref to structural dwgs". Is the intent to add the RCW scope into TG06 contract thru the issuance of ASI 107?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please prepare and submit a cost proposal for revisions: 1. Concrete Curbs (CC) and 2. Reinforced Concrete Walls (RCW) as released in ASI 107.

Please itemize the aforementioned scope items as in your proposal for CR U-089 - ASI 107.

SHIMM000-0377	**ASI 107- Cone Curb and RCW- Concourse Level- Follow up to RFI SHIMM-00376**	**Open**	**11/14/2013**	**11/24/2013**		**Potentially**	☐

From: Shimmick Construction Company, Inc Sylvia Hartanto **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST:

SCCI is in receipt of response to RFI SHIM000-0376 in which WOJV requests SCCI to submit a cost proposal for revisions:1 Concrete curbs (CC) and 2. Reinforced Concrete Walls (RCW) as released in ASI 107. Please clarify the following:
1. SCCI to to price the construction of the concrete partitions (shown as 'ghost lines' in Architectural drawings) to the full height up to the ground level. This means that the construction of the concrete wall at concourse level cannot take place until level A bracing and Rebracing RA is taken out (after TG07.2 contractor build the ground level).
2. Since the RCW I concrete wall is now to be installed by TG06 contractor, dowels are to be installed (similar to platform rebar dowels in Area 3), instead offormsavers. Please confirm that this will not create inefficiency with TG06 or TG07 contractor.
3. 3.ASI 107 new notes on A1 -2222-A1-2231 state: "CC-Cone Curb- Refto A-0022 for concrete curb schedule- refer to struct dwgs for coupler details." Please provide the most recent copy of A-0022. SCCI has

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

not been able to locate concrete curb schedule in the most current A-0022
copy (IFC). Please provide curb reinforcing detail as well
4. Dwg AI-2222-AI-2223 also contain walls noted as "cone wall". Please confirm that SCCI is to
treat these walls as RCW.

SHIMM000-0380 **Seismic Joint Clarifications** **Open** **11/14/2013** **11/24/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Sylvia Hartanto **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST:

Please reference attached Details 7/AI-8881 (ASI #107) and 4/S1-301 0 (ASI #100).
1. Detail 7/A1-8881 calls for a "neoprene gasket compressed by bar and bolt typ". Please provide sizes for tabs and bolts. Also, provide welding instructions (if necessary).
2. The same detail shows pipe penetrations through the seismic joint at both levels. Plumbing drawings show a 4" "SAN/ AD" running parallel to the seismic joint. Please confirm this pipe penetrates the joint. If so, provide locations off of grid and pipe sleeve dimensions. Also, provide details on how to seal this penetration (watertight).
3. Detail4/S1-301 0 shows a 3/4" Dia Headed Stud at 12" oc with 6" embed. Is this to be one row as the drawing shows?
4. Detai14/S 1-3010 also calls for 4" diameter hole at 2'-0" oc. What is the purpose of these holes? If the clamping system is continuous, then what will support the rod at the hole locations? Please clarify.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SHIMM000-0381 **Seismic Joint Specification Clarifications** **Open** **11/14/2013** **11/24/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Sylvia Hartanto **To:** Webcor Construction LP Spencer Sayles **Answered By:**

Co-Author:

REQUEST:

Please reference Specifications Section 07 09 16 - 2.6.A.l.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Section states "Provide joint assemblies in single lengths between changes in direction with vulcanized, mitered comers where joint changes directions or abuts other materials."
I. Please confirm that this is in reference to the Omega Seal gasket, and not the clamping system and embedded steel.
2. Please confirm that it is acceptable to use clamping components with 4'-0" maximum lengths with butt joints not to exceed 1/8".
3. Please confirm that it is acceptable to use 14' max lengths on steel embed with butt joints not to exceed 1/8".

SHIMM000-0404 **BGP - Geothermal Riser Pressure Gauge Location** **Open** **12/20/2013** **12/30/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Sylvia Hartanto **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

REQUEST:

Previous geothermal fields and risers had a "cat walk" behind the risers at grade. Additional pipe and 90s were added to bring the gauges up to grade to allow for pressure monitoring from this "catwalk." At fields 09-15 no cat walk exists, thus no location to access these gauges from.

Please provide the location for the geothermal riser gauges for inspection from Field 09 through Field 15.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SHIMM000-204.3 **BGP - Locations of Electrical Outlets, Equipment, and Fixtures** **Rejected** **08/30/2013** **09/09/2013** **09/05/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Chris Williams **To:** Webcor Construction LP Jackson Tukuafu **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author:

REQUEST:

Per the RFI response, please find attached the revised layout for the Electrical Room B2221. This revised layout shows the dimensions off of the interior walls as requested.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The sketch included with this RFI is not acceptable for submission. Refer to the response to RFI T-0655.1 and T-0655.

- It is nearly illegible.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please advise if it is acceptable.

- Comments from the previous revisions of this RFI instruct the contractor to coordinate with architectural wall dimensions. It looks like they have just removed any room dimensions previously included on the sketch.
- This is not submitted on current contract document backgrounds as instructed in the last revision of the RFI.
- Fire was indicated on the color key but no fire lines are included.

Please provide an acceptable sketch before this will be processed any further.

SHIMM000-314.1 **BGP - Embedded Conduits in Columns** **Closed** **09/04/2013** **09/14/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Chris Williams **To:** Webcor Construction LP Jackson Tukuafu **Answered By:**

Co-Author:

REQUEST:

In the MEP meeting on 9/4/13, the response to RFI T-0693 was clarified. To confirm conversations with the WSP Electrical Design representative, the only conduits to be embedded in columns per the RFI T-0693 response are to be fire management conduits per the locations depicted in the response. All other conduits (power recepticals etc) are to be stubbed up on the face of the columns and are not to be embedded in the column.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SKAN000-385 **SSS - Embedded Plate Scope Clarification** **Closed** **03/03/2014** **03/13/2014** **03/03/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Webcor Construction LP Jeff Galoyan **Answered By:** Webcor Construction LP Gregory Kemerer

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

1. Please confirm the embedded steel in the following details which is not connected to any TG07.1R steel is not in TG07.1R scope and will be supplied and installed by others: 4 & 5/S1-3002; 4 & 6/S1-3203; 2, 3, 6 & 7/S1-3205; 2/S1-3207; 3, 5 & 7/S1-3210; 4/S1-3281; 1/S1-

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed that embedded steel not connected to TG07.1R steel is not in TG07.1R scope. However, several details listed by Skanska appear to be connected to TG07.1R steel (3 & 6/S1-3412, 3 & 8/S1-7631, 8/S1-7602, 1/S1-3705, 9 & 11/S1-7600) and are

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

3282; 1 & 10/S1-3411; 3 & 6/S1-3412; 6/S1-3502; 6/S1-3503; 2A/S1-3706; 4 & 7/S1-7604; 3 & 8/S1-7631; 5 & 9/S1-7660 and 6, 7 & 9/S1-9052.
2. Please confirm the embedded steel in 8/S1-7602 which is clearly indicated below the scope delineation line is not in TG07.1R scope and will be supplied and installed by others. Skanska will field weld the 3/8" plate to the embed steel as indicated on see SK1.
3. Please confirm the embedded plate and angle in detail 1/S1-3705 will be supplied and installed by TG06 and Skanska will field weld the double angle connection to the embedded plate as indicated on SK2.
4. Details 9 & 11/S1-7600 indicate the top and bottom connections for stair 202 & 403 between the Train Platform Level and the bottom of the Lower Concourse slab. As the scope delineation line clearly shows the embedded plates will be supplied and installed by TG06. Once these embeds are poured in place the HSS post cannot be installed as detailed. Please confirm these HSS post will be supplied and installed by TG06 after the platform slab has been poured and before the Lower Concourse slab. See SK3 for clarification.

included in Skanska's scope. Detail 2A/S1-3706 is an edge of metal deck support, and is included in Skanska's scope.
2) See response to item #1
3) See response to item #1
4) See response to item #1

SKAN000-385.1 **SSS - Embedded Plate - Scope Clarification** **Closed** **03/25/2014** **04/04/2014** **03/25/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Webcor Construction LP Jeff Galoyan **Answered By:** Webcor Construction LP Gregory Kemerer

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

As per SK RFI 385 response, Skanska has the following comments on the details WO indicated are included in TG07.1R scope:

1) 3 & 6/S1-3412: As no clear scope delineation line is indicated on these two details and the embeds are attached to TG07.1R steel, Skanska will provide the embedded plates for others to install as detailed on 3 & 6/S1-3412 SK1.

2) 3 & 8/S1-7631: Drawing S1-7102 partial plan at Roof Park level has not been issued to date. Therefore framing steel and decking at top of steel elevation 86' 1-1/4" was not included in our bid. Please provide this drawing and

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) OK
2) Drawing S1-7102 has not been issued for construction by the design team. It is currently listed as issued for bid. The attached S1-7102 is provided for your reference only.
3) Skanska to field weld 3/8" plate to embedded angle. Embedded angle to be provided and installed by others.
4) OK
5) Details 9 & 11/S1-7600 are not included in Skanska's scope. These embeds noted are to be provided and installed by others. W/O confirms that the train platform level referenced in detail 1/S1-7016 has not been poured yet.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

allocate a CO number for this work.

3) 8/S1-7602: Although the embedded plate is clearly indicated below the scope delineation line, for erection purposes Skanska will supply the angle with welded connection plate for TG06 to install as per SK2.

4) 1/S1-3705: As no clear scope delineation line is indicated and the embedded plate is attached to TG07.1R steel, Skanska will provide the embedded plate and angle for others to install as detailed as per SK3.

5) 9 & 11/S1-7600: In RFI SK 385 Skanska questioned the scope and erectability of the HHS posts as detailed in 9&11/S1-7600. The scope of the embedded angles was already confirmed by WO as not in TG07.1R scope in RFI T-1067 #6. As 11/S1-7600 occurs between GL1.4 & 2 at the train platform level which has already been poured WO should verify this embed has been installed by TG06 as detailed.

Skanska to include all embeds connecting to structural steel in their Erection Drawings, including embeds provided and installed by others. Please denote "by others" adjacent to embeds not provided by Skanska to facilitate coordination with other contractors. Shear plates and other attachments to embeds provided "by others" are to be provided by Skanska as field welded.

SKAN000-399 **SSS - Non-Structural Steel Scope** **Closed** **03/17/2014** **03/27/2014** **03/17/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Webcor Construction LP Jeff Galoyan **Answered By:** Webcor Construction LP Gregory Kemerer

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

1) Drawings S1-2406 & S1-9101 indicated the scope of the OCS support steel (highlighted in green) including additional scope added as per ASI106. Please confirm all other OCS support steel (highlighted in yellow) is not in TG07.1R scope and will be supplied and installed by others.

2) On drawing S1-9102 please confirm all steel indicated is not in TG07.1R scope and will be supplied and installed by others.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed. However, note that the stiffeners highlighted in the attached sketch are included in the TG07.1R scope.

2) Mechanical support and bracing shown on S1-9102 is to be provided by others.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

11(see drawings attached for reference)

SKAN000-465 **SSS - BOD Manufacturer for Standard Paint System** **Closed** **04/11/2014** **04/21/2014** **04/11/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Webcor Construction LP Gregory Kemerer

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

It is understood through review of the TG07.1R package that no applications of standard paint systems on structural
steel are required at this time. However, in preparation for potential future changes, Skanska is collecting product information for standard paint systems for potential use on the project.

Specification section 05 10 00-2.2.A.1 lists general requirements for structural steel standard primer, but does not list
the basis of design manufacturer(s) for this system. This section refers to the Division 9 specification; however, Skanska has only been issued the high performance coating specification within Division 9. Please provide the basis of
design manufacturer(s) approved for structural steel standard paint coating systems on this project.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please reference the specifications issued along with TRANSBAY FIELD ORDER 00027 - 100% Main Package Drawings, "Issued for Construction" dated 3/31/14.

SKAN000-478 **SSS - Lift Eyes on Ground Cast Nodes** **Closed** **03/21/2014** **03/31/2014** **03/21/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Webcor Construction LP Jeff Galoyan **Answered By:** Webcor Construction LP Gregory Kemerer

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

The contract drawings indicate that lift eyes will be provided for shop handling. The lift eyes that were cast into the back side of the ground level cast nodes have now been machined off by Bradken, leaving only the lift eyes inside the nozzles. In order to safely handle these castings, new lift features need to be added to the back side to replace those that were machined off.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Note 6 on the Cast Connex drawings indicates "PICKING EYE(S) TO BE LOCATED WITHIN THE INTERIOR OF THE CASTING'S NOZZLE(S)."

Removal of additional lift eyes not within the cast node nozzles is in line with this note. Please note that the picking eyes provided are intended for use in lifting the weight of the cast nodes only, and are not intended to

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

It is requested that drilled and tapped holes be added to the back side of the ground cast nodes by Bradken to facilitate safe and efficient shop handling as indicated by the contract drawings.

support the weight of any additional material attached subsequently.

SKAN000-655.1 **SSS - Field Drill Final Bolt Size and Location** **Closed** **08/13/2014** **08/23/2014** **08/13/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Webcor Construction LP Jeff Galoyan **Answered By:** Webcor Construction LP Jeff Galoyan

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please confirm that per RFI response T-1486 below, Skanska will leave the beam blank for the W-1 design-build
contractor to field drill.

"SKS 2, 3, 4 - Preliminary bolt sizes given on sheets S1-6092, 6093, 6094, included in superstructure package for information only. Final bolt sizes and location of bolt holes can only be determined by the W-1 design-build contractor

after analysis of value engineered W-1 geometry."

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed. W-1 connection holes will be field drilled by the W-1 install contractor. Skanska to provide a credit for the associated work now being performed by an alternate contractor.

SKAN000-727.1 **SSS - Shaw Alley Bridge Concrete Edge Plate Scope Clarification** **Closed** **08/25/2014** **09/04/2014** **08/25/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Webcor Construction LP Gregory Kemerer

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 533 SK1 for the following:

Please confirm that the ½" edge plates and temporary support angle are not in TG07.1R's scope of work, and in the
follow-on concrete trade subcontractor's scope of work.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

PL½" is part of the Shaw Alley bridge structure as shown on structural drawings and is to be provided by Skanska along with the metal deck. Temporary support angles are at Skanska's and metal deck subcontractor's option. Rebar, DBAs and metal deck shoring are by others.

SKAN000-751.1 **SSS - ST601 Above Roof Park Level Scope Clarification** **Closed** **09/10/2014** **09/20/2014** **09/10/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Webcor Construction LP Jeff Galoyan **Answered By:** Webcor Construction LP Gregory Kemerer

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Skanska USA Civil West California Dis Ryan Clayton

REQUEST:
Please confirm that the four HSS 10x8x1/2 for landing steel shown on 4/S1-7013 - which are solely anchored into the concrete structure above the elevation of the Structural Framing at Roof Park Level - are not in TG07.1R scope, and are in the follow-on Stair Subcontractor's scope of work.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
Confirmed.

SKANS360-0001 **test** **Closed** **01/13/2014** **01/23/2014** **Potentially** ☐

From: Skanska USA Civil West California Dis Ryan Clayton **To:** Webcor Construction LP Gregory Kemerer **Answered By:**

Co-Author:

REQUEST:
See attached CD RFI # 183.1 SK1A, SK1B, SK2A & SK2B for items 1 & 2:
1.) Confirm the elevator rail support connection with erection aids is acceptable as shown.
2.) Confirm the elevator rail support connection with erection aids is acceptable as shown.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T- 0851 **BGP - Lower Concourse Shoring/Reshoring Calculation for Construction Live Loa** **Closed** **10/23/2013** **11/02/2013** **11/05/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Scott Bunnell

REQUEST:
Please refer to attached excerpt of Specification Section 03 10 00 - Concrete Formwork - Below Grade Package.

Per Article 3.2, Section A.2 of Spec Section 031000, the minimum construction live load design criteria for shoring and reshoring is 50 psf. The specification section is unclear whether the live load of 50psf is prior to or post concrete placement.

According to D.H. Charles (SCCI shoring designer), falsework projects of this application typically approach the falsework design for 50 psf before concrete is placed and 20 psf afterwards, while always maintaining a minimum design load (dead + live) of at least 100 psf. The attached list of of D.H. Charles project used the this same design

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
George Metzger
11/4/2013
RESPONSE:
Specification 03 10 00: Design of formwork is the responsibility of the contractor. See Section 1.3C for formwork design requirements that include conformance with SEI/ASCE-37 and ACI 347. See Section 3.2 for Shores and Reshores including conformance with ACI 347.2R.

ACI 347.2R typically assumes that the Live Load is associated with the placement of fresh concrete and that the Live Load is removed upon the completion of placement. Depending on the contractors planned use of "working surfaces" and the particular shoring/

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approach. Falsework calculations are to follow.

Is the D.H. Charles design criteria acceptable?

reshoring scheme, the Live Load may be more or may be less than the 50psf minimum after placement operations.

Unless measures are taken restrict construction access to specific areas, it is assumed that the entire Lower Concourse will be a working surface and that the contractor will assign an Operational Class per SEI/ASCE-37 Section 4.8.1. Justification for the assumed uniform load will form part of the required submittal.

T-0004.1 **Transbay Project Signs** **Closed** **04/01/2011** **04/11/2011** **04/12/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Transbay PMPC Alfred Lau

Co-Author:

REQUEST:

Reference: RFI T-0004
Spec Section: 01 15 01

Response to RFI T-0004 read "Graphics for Project ID Signs specified per 01 15 01 will be issued to CMGC as soon as the names for mayor and SFCTA Board members are confirmed in early January, 2011. Information for locations will be issued prior to installation."

In a follow up to this RFI, Webcor/Obayashi's is initiating project sign procurement and will require the artwork and locations for four 4x8 post mounted signs. What are required graphics/logo's for sign fabrication and where shall each sign be located.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Unfortunately that the name for one of the TJPA Board seat (PJP seat) is still not confirmed at this time, and it may be at least another month before that can be resolved. TJPA/PMPC will ensure this issue is resolved as expedited as possible and inform the Contractor immediately after the information is anounced.

T-0013 **BSE IFC Table of Contents Discrepancy** **Closed** **01/05/2011** **01/15/2011** **01/11/2011** **Potentially** ☐

From: Webcor Construction LP Joanne Filipas **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Transbay PMPC Alfred Lau

Co-Author:

REQUEST:

Ref IFC TOC dated 12/15/10 (attached)

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. 00 01 10 Rev 3 and 00 01 15 were released to

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

We have received the revised Issued for Construction (IFC) drawings and specifications for the BSE package. The table of contents has check marks to indicate added specification sections. Specification section 02 41 19, Pile Removal is not noted with a check mark but a revised specification was issued. The excavation and backfilll (31 23 10) section was not re-issued, however, a check mark is next to it.

Also, the revision logs at the end of each section need to be revised to show only the revision number and dates.

Please advise and re-issue.

W/O on 07JAN2011, rectifying issues cited in the RFI.

2. Since it is TJPA/PMPC's opinion that the formatting of the revision box for the technical sections is adequate and appropriate as is. Change to match the abbreviated version of the Div. 00 and 01 sections should be formally requested by W/O such that Design Team and TJPA/PMPC could fully review that and agreed to from a QA/QC point of view.

T-0014 **TG03 BSE IFC Drawing Set** **Closed** **01/06/2011** **01/16/2011** **01/07/2011** **Potentially** ☐

From: Webcor/Obayashi Joint Venture Masashi Kojima **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Transbay PMPC Alfred Lau

Co-Author:

REQUEST:

We received multiple versions of PDF Drawings G-0000, A-0000, A-0005, and A-0010 (see the attached images) for TG03 IFC Drawing Set.
Please confirm the following answer from PMPC via email on 1/5/2011.
"Use the 1/3/2011 CD for the PDF files. Use the 1/4/2011 CD for the DWG and DWF files. Disregard the PDFs on the 1/4/2011 CD."

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirm that "Use the 1/3/2011 CD for the PDF files. Use the 1/4/2011 CD for
the DWG and DWF files. Disregard the PDFs on the 1/4/2011 CD."

T-0015 **301 Mission Wall - Concrete Mix Design** **Closed** **01/07/2011** **01/17/2011** **01/13/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Kevin Chiu **Answered By:** URS Corporation David Fyfe

Co-Author:

REQUEST:

Reference: Attached submittal package TG1901-001 review comments and letter from concrete supplier

Per the comments received on the concrete mix design submitted in submittal package TG1901-001, please

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Comply with contract documents "Concrete and Reinforcing" Note number 6 on Sheet S-0001, which states:

"Maximum water/cement ratio shall not exceed 0.45

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confirm that the admixture for air entrainment shall be compliant with ASTM C260.

Transworld has been informed by their concrete supplier that ASTM C260 requires a mix of 6% air entrainment and such amounts of air entrainment are specified only in freeze/thaw areas for durability. The Bay Area is generally not considered a freeze/thaw area and therefore a mix with 6% air entrainment is not typically used. The concrete supplier, Bode Concrete, has provided a letter from BASF related to this specific issue.

by weight, slump shall be two to six (2"-6") inches. A water reducer or superplasticizer may be added on site after the slump is verified by inspector. Entrained Air: 6% +/- 1-1/2% for durability."

T-0016 **BSE - Current Trainbox Structural Drawings** **Closed** **01/14/2011** **01/24/2011** **01/18/2011** **Potentially** ☐

From: Webcor/Obayashi Joint Venture Masashi Kojima **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

In order to accurately design and locate elements of the bracing, trestle and bridges, please provide the most up-to-date and reliable architectural and structural drawings (including cad files). Also, drawings (including CAD files) of the train box and any other component of the transit center that has the potential to conflict with the BSE scope of work.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See Issued for Construction - Buttress/Shoring/Excavation documents dated 12/10/10.

T-0017 **BSE - CDSM Wall Alignment** **Closed** **01/14/2011** **01/24/2011** **01/21/2011** **Potentially** ☐

From: Webcor/Obayashi Joint Venture Masashi Kojima **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

The response to pre-bid RFI #177 indicated that the CDSM shoring line alignment is expected to change "prior to installation". We request the revised re-alignment be provided to us as soon as possible. We are currently designing and issuing steel mill orders based on the current alignment. If the revision comes after mill orders are finalized we risk missing our rolling schedule thereby losing our bid date pricing.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per TJPA's direction, the Trainbox plan and extent have been modified at the Southwest corner of the site. See the attached sketch SKGT-0001-R1, that show the revised shoring wall alignment.
For your reference, see the attached structural sketches that indicate the revised in-progress Trainbox structural columns and shearwalls that will be issued for construction in the future. These sketches are: SKS -0088 Foundation Level - Zone 02 Plan

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Phase 1, SKS- 0089 Foundation Level - Zone 03 Plan
Phase 1, SKS-0090 Foundation Level - Zone 07 Plan
Phase 1, SKS-0091 Foundation Level - Zone 10 Plan
Phase 1, and SKS-0092 Lower Concourse Level - Partial Plans Phase 1.

T-0017.1 **BSE - CDSM South Wall Alignment Construction Drawings** **Closed** **09/22/2011** **10/02/2011** **10/04/2011** **Potentially** ☐

From: Webcor Construction LP Joanne Filipas **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference RFI T-0017 and attached Sketches

Please confirm the attached sketches issued and approved with CR T-005B are "For Construction" and the notes indicating "draft in progress" and "not for regulatory approval, permitting or construction" will be removed on a future issuance of these sheets.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The sketches attached to previous RFI's reflect the confirmed CDSM shoring alignment.

Text indicating "draft in progress" and "not for regulatory approval, permitting or construction" shall not be transferred to revised "Issued for Construction" drawings.

Documents that are included in Change Orders shall be considered a Contract Document.

T-0018 **BSE - Waler to CDSM Wall spacing** **Closed** **01/14/2011** **01/24/2011** **01/24/2011** **Potentially** ☐

From: Webcor/Obayashi Joint Venture Masashi Kojima **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

There may be a potential conflict with the walers and the train box reinforcement. Spec 31-55-00 allows 6" minimum spacing from CDSM Wall to face of waler, but based upon Balfour Beatty past experience with a very similar situation, it is felt that the 6" space is not sufficient because of the following:

1. There does not appear to be enough room between the bottom of the waler and the CJ for a lap splice of the vertical reinforcing as depicted on sheet S -3201. Reference the attached drawing.
2. The 6" gap is difficult to snake reinforcement through

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Thornton Tomasetti Response: It is permissible to use mechanical couplers for the vertical reinforcement interrupted by the whaler for the condition where whaler is 6" min away from CDSM wall.
The proposed increase in whaler to CDSM wall spacing concept is acceptable by TT regarding the Trainbox wall, pending Arup's evaluation/comments. Submit details of revised scheme for review.
ARUP Response: The design team cannot comment on the impact of the Contractor's proposal, without seeing more details of the shoring wall internal bracing system and associated proposed details.

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without damaging the waterproofing attached to the wall.

BBI recommends making the space between the face of the CDSM wall and the waler equal to the wall thickness. This would eliminate conflicts with the rebar and walers, reduce reinforcement splicing and reinforcing congestion.

Additionally attached is an example where the space behind the waler was equal to the wall thickness.

Please advise whether to continue the design with the current 6" minimum space or advise if the space increases.

Adamson Associates Response: The proposal cannot be evaluated based on the limited documents submitted. However, it appears that the bracing and attachments shown in the drawing attached to this RFI will need to be modified to allow for the waterproofing system to be appropriately installed as the Wale system is removed.

T-0019 **301 Mission Wall - Stone Panel Anchorage to 301 Mission's Screen Wall** **Closed** **01/18/2011** **01/28/2011** **01/31/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Kevin Chiu **Answered By:** URS Corporation David Fyfe

Co-Author:

REQUEST:

Reference: Attached pages from the 2008 Building Code

After removing stone panels in the demolition of the original 301 Mission Wall, the existing system of the stone panels does not utilize an anchoring system for mounting the stone panels to the wall. In addition, section 6.2.2.4 of the 2008 Building code does not specify mechanical fasteners for masonry less than 2-5/8" thick. The stone thickness used on the new wall will match the thickness of the existing, which is approx 10mm thick. Therefore, according to section 6.3 of the 2008 Building Code, the stone panel system for the Transbay Interim Screen Wall that should be used is the adhesion application.

Please confirm that Transworld can use the adhered method for the stone panels in lieu of mechanical fasteners.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Proposed anchorage system can not be evaluated prior to inspection of the retained stone sample.

Please provide retained samples of stone from the demolished 301 Mission Street Screen Wall in order to confirm dimensions of the existing stone and evaluate proposed anchorage system.

T-0019.1 **301 Mission Wall - Stone Panel Anchorage to 301 Mission's Screen Wall** **Closed** **02/07/2011** **02/17/2011** **02/10/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Kevin Chiu **Answered By:** URS Corporation David Fyfe

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Reference: RFI T-0019 and attached photos

RFI T-0019 requested samples of stone from the demolished 301 Mission Street Screen Wall in order to verify thickness of the stone that will be used on the wall, and confirm that a mechanical system had not been used to mount the stone. A sample has been shown to URS and pictures of that sample are attached to this RFI. Please confirm that mechanically fastened panels are not necessary and that a thin set adhesive application will be an acceptable means to setting the stone on the new screen wall.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Mechanical fastening of matching stone panels is not required. Location of face of stone as shown on A-6000 detail D is a contract requirement. Please provide complete detailing of proposed attachment of stone and how the location of the face of stone will be achieved using thinset.

T-0020 **BSE - Demo Contract Shoring Wall and Bracing** **Closed** **01/27/2011** **02/07/2011** **02/02/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran

To: Turner Construction Compan Daphne Faulkner

Answered By: Turner Construction Comp Daphne Faulkner

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet D-2203 and Specification Section 02 41 01

The BSE contract drawings shows a temporary shoring and bracing that is installed by the demo contract and subsequently removed by the BSE contract. In order for Balfour Beatty to properly plan their work, they request the following information:

1 - The shoring design drawings for the shoring wall on the east side of Fremont St. (shown on D-2203) that was submitted by the Demo Contractor.

2 - As-built location of the above mentioned shoring wall.

3 - Bracing drawings and details that submitted for the basement wall rakers that are schematically shown on detail 1 of sheet D-5100 and details 1 & 2 on sheet D-5102

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1 - Approved Shop Drawings Submital #312000-01.3 - Interim Shoring Wall REV 3 will be transmitted through Constructware today 2/2/11.

2 - Wall is currently being constructed in the location indicated on the approved shop drawings.

3 - Bracing drawings are not currently available for transmission. They will be transmitted to W/O when available.

T-0021 **BSE - Existing Unknown Concrete Wall** **Closed** **01/27/2011** **02/07/2011** **02/04/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran

To: Turner Construction Compan Daphne Faulkner

Answered By: URS Corporation David Fyfe

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Drawing Set D and Specification Section 02 41 01

Based upon Balfour Beatty observations of the site, there appears to be a concrete wall approximately 18in wide that is outside of the existing terminal basement walls adjacent to the 301 Mission Property line and the east side of Fremont St. that is not shown on BSE contract drawings or the existing Terminal drawings.

Does this wall continue around the entire perimeter of the Zone 4 basement?

Will this wall be removed by the demo contract prior to BSE NTP #02?

Please provide as-builts of the wall location if is to remain.

Does a similar wall exist around the basement walls in Zone 2 and 3?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Full extent of unforeseen concrete foundation wall not confirmed.

Existing Terminal and Ramps Demolition Project contractor (EBI) has been directed to remove extents of unforeseen foundation wall that are within limits of removal as shown in contract documents to a depth consistent with removal of adjacent structures (pile caps/footings).

Portion of unforeseen concrete foundation wall within Fremont Street to remain in place. Portions of unforeseen concrete foundation wall that are exposed but that are to remain in place are to be documented via as-builts. As-builts will be provided as completed.

Existence of similar walls in Zone 2 and 3 not confirmed. Attached San Francisco-Oakland Bay Bridge, Department of Trinagulation and Surveys, San Francisco Topography Maps dated August 1934 (pages 27-32) are the best available information at this time and have been provided for your information.

T-0021.1 **BSE - As Built Location of Concrete Foundation Wall Along Fremont St.** **Closed** **03/01/2011** **03/11/2011** **03/15/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI #T-0021 (BBI #005) and Drawing Set D

Please provide BBII with as-built locations of the unforeseen concrete foundation wall within Fremont Street which is to remain in place. Please also provide as-built locations for the soldier pile & tie back wall which parallels Fremont Street adjacent to the Buttress. BBII and BECHO want to confirm that there is enough room for their equipment to drill the Buttress Shafts along Fremont Street, and to identify any potential conflicts.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Portion of unforeseen concrete foundation wall within Fremont Street to remain in place as shown on attached. The attached San Francisco-Oakland Bay Bridge, Department of Triangulation and Surveys, San Francisco Topography Maps dated August 1934 are the best available information at this time were provided in RFI T-0021 Rev.0. This is believed to be existing concrete full basement wall extending under the sidewalks remaining from pre Transbay factory/businesses.

As-Built Fremont St. Shoring wall installed by Evans Bros/Malcolm Inc. the soldier pile and tie back wall is also attached. Survey points for the I-Beams was

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previously transmitted to Webcor-Obayashi Transmittal No. 140-00650.

T-0022 **Quality Management System - Org. Chart** **Closed** **01/28/2011** **02/07/2011** **02/08/2011** **Potentially** ☐

From: Webcor Construction LP Joanne Filipas **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Transbay PMPC Jim Coughlin

Co-Author:

REQUEST:

Ref - Attached Org. Chart

Please identify the appropriate personnel associated with the attached org. chart found the in the program Quality Management System.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

A revised PMPC organization chart is with TJPA for review. However, I don't understand why this is an RFI. What W/O activity requires this information? The organization chart in the QMS is deliberately generic (titles only) and we have no intention of changing it.

T-0023 **Construction Manager Quality Plan** **Closed** **01/31/2011** **02/10/2011** **02/07/2011** **Potentially** ☐

From: Webcor/Obayashi Joint Venture Bob Garcia **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author:

REQUEST:

Page 30 Paragraph 8.5.5 of the QMS manual makes reference to "the construction management consultant's quality plan". Please advise when the Construction Managers Quality Plan for the TTC will be issued?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractually - the Draft Quality Plan from CMO Construction Manager Oversight is due 2/14/11. Final Quality Plan is due 3/28/11.

T-0024 **Re-bracing for Revised SW Corner Alignment** **Closed** **02/02/2011** **02/11/2011** **02/11/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet GT-1112 and Specification Section 31 55 00

The response to RFI T-0017 showed a revised CDSM wall

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

The use of rakers as rebracing is acceptable provided the design criteria specified in the construction

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

alignment at the SW corner of zone 1 and the addition of the structural shear walls on wall X1-1. The RFI response implied that BBII's cross-lot bracing needed to be re-designed so there are no conflicts with the concrete columns and shear walls. In order to minimize the cost and impacts as a result of this change, BBII suggests using rakers for the re-bracing in this corner.

The cross lot bracing would be installed as specified for the initial excavation (ref stage 10 on GT-1112) similar to the layout shown on the attached sketch #1.

Then for the re-bracing stage 12 and stage 15 rakers could be used in locations shown in attachment sketch #2.

Would a design based on this concept be acceptable?

If not, BBII is available and willing to brainstorm additional ideas.

documents is satisfied. This includes, but is not limited to, the bracing stiffness requirements. The

effective stiffness of the rakers will be affected by the stiffness of the permanent train box wall and

mat slab and tiedowns.

The response to this RFI must include input from Thornton Tomasetti regarding the impact on the

permanent structural elements.

As discussed at the Feb 9, 2011 TG03 BSE Subcontractor - Design Team Coordination Meeting, it

may be possible to reduce the requirement for rebracing if the permanent trainbox shear walls can

be built sequentially and their construction coordinated with the removal of struts. Arup suggests a

meeting with Arup, the Contractor, and Thornton Tomasetti as this requires an understanding of the

proposed construction sequence and an evaluation of the permanent structural elements.

Thornton Tomasetti (TT) Response: We have review the response by Arup, and found this is consistent with our prior discussion with Arup. No further comment from TT is needed.

T-0025 **BSE - Request for Recent Groundwater Monitoring Data** **Closed** **02/02/2011** **02/12/2011** **02/11/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 31 55 00 and GDR Table 7-2 (attached)

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached T0025-SK01 for groundwater readings.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

The Project GDR table 7-2 shows the last GW level reading in Feb of 2010. Can BBII receive a copy of any readings taken within the last year?

T-0026 **301 Mission Wall - Sample chip of paint color for exposed concrete** **Closed** **02/07/2011** **02/17/2011** **02/10/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Kevin Chiu **Answered By:** URS Corporation David Fyfe

Co-Author:

REQUEST:

Reference: A-5000 note 6

Note 6 on sheet A-5000 states, "Color of paint for exposed concrete to match sample chip provided by TJPA representative". Please provide color sample chip per this note.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Omit note 6 on sheet A-5000. Color of paint for exposed concrete wall shall match color of paint provided on existing exposed planter boxes.

T-0027 **301 Mission Screen Wall - Dowels for Screen Wall** **Closed** **02/08/2011** **02/18/2011** **02/18/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Kevin Chiu **Answered By:** URS Corporation David Fyfe

Co-Author:

REQUEST:

Reference: Attached pictures

Upon laying out the dowel embedment locations for the new concrete wall, the locations are very close to the edge of the existing manholes and vault lids. Transworld is concerned that the location of the doweling is too close to these existing items and does not believe it to be the intent. Please see attached pictures showing the areas of concern. Please respond ASAP with direction on where to place the dowels, as Transworld has no slack in the schedule to accomodate any stoppage of work.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The final condition for the dowels drilled into the 301 Mission existing basement perimeter wall is shown on attached sketch. Dowels shall be drilled 6 inches from exterior face of existing basement perimeter wall. Verify location of existing basement perimeter wall prior to drilling. These dowels remain within 1 inch of centerline of the new concrete wall.

See attached RFI coordination sketch.

T-0027.1 **301 Mission Screen Wall - Dowels for Concrete Wall: Layout Acceptance** **Closed** **03/29/2011** **04/08/2011** **04/05/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** URS Corporation David Fyfe

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference: RFI T-0027

Please confirm that per site walk on 03/22/11 with Danny Lo and Erik Liu of Transworld, David Hungerford with Webcor-Obayashi, and David Fyfe and Christine Baudier of URS, that the layout of the core holes for the #8 dowels in the concrete wall are acceptable.

RFI T-0027 included a response sketch directing dowels to be in line and set 6" from the south face of the existing wall below. Due to the existing condition of the wall below, which was poured aginst a shoring wall and therefore not exactly straight, the dowels are laid out to be in line with each other and therefore vary in dimension measured off of the south face of the existing basement wall below. Please confirm, as it is understood, that the existing layout is acceptable. Dowels are being set in epoxy today, so an immediate response is requested.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It was verified in the field that #8 dowels were drilled approximately 6" from the exterior face of the existing vault wall and that #8 dowels will have a minimum 2" concrete cover.

The layout of the #8 dowels is acceptable.

T-0028 **BSE - Bracing Stiffness Calculation Confirmation** **Closed** **02/08/2011** **02/18/2011** **02/09/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

To: Turner Construction Compan Daphne Faulkner

Answered By: Arup Kevin Clinch

REQUEST:

Reference Specification Section 31 55 00 and attached sample calculations

The response to pre-bid RFI #TG0300-058 provided an equation for calculating the stiffness of the bracing system. Attached is BBII's designer's sample "template" calculation for stiffness for the proposed waler and strut bracing system.

BBII requests a confirmation that the designer's interpretation and use of the provided stiffness calculation is correct, prior to progressing further submittal calculations and procuring steel bracing members.

Additionally, BBII requests an expedited response to this RFI.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The methodology shown in these calculations for determining the internal bracing system stiffness is consistent with that shown in response to pre-bid RFI #TG0300-058.

Complete details of the internal bracing system were not included in the RFI. It is therefore not possible to conclude that all elements affecting the stiffness of the internal bracing system have been considered and included in the analysis.

These calculations have not been reviewed for conformance with other design criteria. A more complete review will be undertaken when the calculations are issued as a submittal.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0029	301 Mission Screen Wall - Sub Surface Structure Conflict with New Wall Location	Closed	02/09/2011	02/19/2011	02/18/2011	Potentially	☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Kevin Chiu **Answered By:** URS Corporation David Fyfe

Co-Author:

REQUEST:

Reference: Photograph attachments 1-8

In laying out the location of the new concrete wall, Transworld has determined that the new concrete wall will extend over existing sub-surface structures, which is not per the contract documents. Please reference attached photos.

First, there are two manhole covers that are incorporated in concrete rings. These rings conflict with the location of the new wall and are included in photographed attachments. Due to the size of these concrete rings, a portion of the ring will be buried by the new wall. Second, the steel frame of the existing electrical vault doors is of similar condition as the manhole covers; this condition can also be seen in the photographed attachments.

Please confirm that Transworld is to proceed with the plan location of the new concrete wall which will cover and bury a portin of these existing sub-surface structures.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

To accommodate unforeseen location of existing structures, new concrete wall to be shifted south so that the south face of new concrete wall is flush with the exterior face of the existing 301 Mission street basement perimeter wall.

Interfering regions of existing sub-surface structures (manhole rings and vault sides) at the base of new concrete wall shall be incorporated into new concrete wall. All surfaces of interfering concrete regions to be incorporated into new concrete wall shall be prepared as bonded construction joints. Verify functioning of manhole and vault lids/openings are not obstructed by new concrete.

Contractor to provide chalk line at updated south and north faces of new concrete wall for verification of updated location in field by TJPA representative prior to construction of new concrete wall.

See attached RFI coordination sketch.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0030	301 Mission Screen Wall - Detail required for concrete sleeve installation	Closed	02/09/2011	02/19/2011	02/18/2011	Potentially	☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Kevin Chiu **Answered By:** URS Corporation David Fyfe

Co-Author:

REQUEST:

Reference: Attached 1/C-5001 and photo

The existing condition of the manhole covers are not consistent with the contract documents. Detail 1/C - 5001 indicates that the existing manhole sits above an existing concrete slab, to which is to be drilled into with 1 inch embedment. However, please refer to the attached photograph in attachment 1 which shows the manhole cover is actually a part of a subsurface concrete ring assembly, and wrapped with waterproofing. Please provide a new detail and instructions for the installation of the required concrete sleeve and a detail for penetrating the existing waterproofing.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per contract documents;

Remove manhole lid;

Retain existing concrete and steel collar/frame;

Dowel into existing concrete collar/frame (1" max) with #3 hoops @ 10" O.C.;

Prepare existing concrete surfaces to be incorporated into new sleeve as bonded construction joints;

Cast in place 6" thick concrete sleeve directly over

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

manhole (concrete and steel collar/frame);

Provide Kadee SS 1/8" circular grate satin finish.

T-0030.1 **301 Mission Screen Wall - Concrete sleeve installation** **Closed** **02/24/2011** **03/06/2011** **03/03/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** URS Corporation David Fyfe

Co-Author:

REQUEST:

Reference: RFI T-0030

The final measurement from the edge of the steel collar/frame at the existing manholes to the face of new wall is (+/-) 4-3/4", this dimension less form material (+/-) 3/4" to 1", results in the new cast in place concrete sleeve to be 4" thick at the point closest to the wall . Response to RFI T-0030 notes that the sleeve is to be 6" thick. Please clarify if the 4" thickness is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

4" minimum thickness acceptable only where new CIP concrete sleeve is in conflict with new interim screen wall. Remaining portions of new CIP concrete sleeve not in conflict with new interim screen wall shall be 6" thick per contract documents.

Contractor shall provide 3/8" expansion joint material between face of new interim screen wall and outside face of new CIP concrete sleeve.

See attached coordination sketch.

T-0031 **301 Mission Screen Wall - In-ground lighting** **Closed** **02/09/2011** **02/19/2011** **02/21/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Kevin Chiu **Answered By:** URS Corporation David Fyfe

Co-Author:

REQUEST:

Reference: Note 10 on C-2000

The new in-ground lighting as anticipated in plans and note 10 on page C - 2000 must be substituted because the contract design cannot be accommodated in the new construction. The contract design requires:
1) that the new lighting match the existing with the same model and size.
The issue here is that the existing light fixtures are larger than can be accommodated within the thickness of the new construction.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Additional information is required to understand/interpret existing conditions and facilitate a response to this RFI.

Please provide all available information on existing conditions that pertain to this RFI, including but not limited to the following;

1. type, model, size and manufacturer of existing light fixtures;
2. type and size of existing electrical

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

2) that the existing electrical lines servicing the existing lights be disconnected so that it is reconnected to the new lights.
The issue here is that the electrical lines for the existing light fixtures are embedded in the concrete curb that is to be removed. Upon removal of the existing concrete curb, there will be no existing electrical lines to reconnect for the new lighting power.

Please provide a new detail and instructions for the in-ground lighting.

conduit/conductor;
3. sketch illustrating alignment of existing electrical conduit/conductor, including junction boxes, termination points and power source; and,
4. sketch illustrating thickness of existing/new construction where new lights are to be set/placed.

T-0031.1 **301 Mission Wall - In-ground lighting** **Closed** **03/31/2011** **04/10/2011** **04/06/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** URS Corporation David Fyfe

Co-Author:

REQUEST:

Reference: Attached photos and sketch

Response to RFI T-0031 requested additional information.

1. See the attached pictures for the information known about the lights that were removed.
2. The existing conduit is 3/4"
3. Attached is a sketch and a photo showing the approximate location of the existing conduit.

There is one existing conduit on the south side of the wall protruding from the soil coming from the basement wall. The electrical conduit is approximately 6 feet east from the western transformer vault vent opening. Attached you can see the pictures of this conduit that is currently sticking out below the scaffolding planking.

4. Please advise the location and mounting details for the new lights.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

We note that the Contractor has installed new electrical conduit and outlet boxes within the new concrete wall.

To document the as-built conditions of all work and to verify conformance with all applicable codes and standards, Contractor shall submit drawing(s) illustrating full routing of all conduit(s), including alignment, conduit material type, couplings/fittings, outlet boxes, etc. Drawings shall detail the connection between existing electrical line and new electrical line and connection between new electrical line and new lights/fixtures.

Drawings shall be sufficiently detailed to document all electrical work is in conformance with all applicable codes and standards, and shall be sufficient for permitting and/or inspection of electrical work.

All conduit and/or boxes shall be set so as to provide minimum 1¿ clear from all rebar, anchor bolts or other embedded structural steel items. Outlet boxes located in new concrete wall shall be fully coordinated for direct connection with the new light(s)/fixture(s).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

It is our understanding that the existing 301 Mission driveway/roadway section (approximately 3¿ paver over 1¿ sand bed over 4¿ to 8¿ concrete topping slab) does not allow use of new lights/fixtures matching original lights/fixtures. It is recommended use of the Ligman Paragon square 186mm (50338-N-35) light/fixture, or approved equal, in lieu of the original light/fixture (Hydrel M9410). The new Ligman Paragon square light fixture (or equivalent fixture) shall be placed adjacent to new concrete wall and shall be mounted exposed above ground (not in ground) with the base of new light fixture located aligned to top of paver(s). See attached coordination sketch.

Please confirm the use of Ligman Paragon square 186mm (50338-N-35) light(s)/fixture(s) can be fully coordinated with all work.

See attached product data for Ligman Paragon square 186mm (50338-N-35) light/fixture.

In addition, in response to item 2 of RFI No.T-0031, Contractor please coordinate with 301 Mission Building management to ensure that the new light shall be connected correctly to the existing power supply.

T-0031.2 **301 Mission Wall - Light Fixtures** **Closed** **06/29/2011** **07/09/2011** **07/13/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** URS Corporation David Fyfe

Co-Author:

REQUEST:

Reference: Attached light specs

Per field conversations with 301 Mission staff, the light fixture proposed in response to RFI T-0031.1 is not acceptable. Webcor-Obayashi has coordinated with 301 Mission management personnel and the lighting attachment to this RFI has been requested by 301 Mission. Confirm that the attached light specs are to be

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

URS provided four lighting options to Webcor-Obayashi on April 22, 2011 to coordinate with 301 Mission management personnel. It is noted that the lighting attachment to this RFI (Allscape BL-81) is similar to one of the four lighting options provided by URS (Allscape BL-80).

The Allscape BL-80 model (with 39 watt/240 volt,

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

installed at the stucco slot locations.

metal halide lamp and prismatic tempered glass lens) was selected by URS because it provides photometric qualities and operating electrical amperage comparable to the original lighting fixture (Hydrel M9410, 35 watts/277 volt, metal halide lamp).

It is noted that the lighting attachment to this RFI, Allscape BL-81 model (with 150 watt/277 volt, metal halide lamp and prismatic tempered glass lens) may provide photometric qualities and operating electrical amperage not similar to the original lighting fixture. It is also noted that the Allscape BL-81 model luminaire is 14.5" wide, which is greater than the 14" width stucco slot(s) specified in the contract documents.

Prior to order and/or installation of the lighting attachment to this RFI (Allscape BL-81, 150 watt/277 volt metal halide lamp) Contractor to confirm the following;

301 Mission building existing electrical circuit/feed that is to be used is sufficient to handle electrical load required by the Allscape BL-81, 150 watt/277 volt metal halide lamp(s);
14.5" width of the BL-81 luminaire(s) can fit within the stucco slot(s) constructed, note contract documents specify 14" wide stucco slot(s); and
photometric qualities of 150 watt lamp (e.g. lighting intensity/brightness) is acceptable to/preferred by 301 Mission management personnel.

T-0032 **301 Mission Screen Wall - Tie Beam Below Grade Conection to Screen Wall** **Closed** **02/09/2011** **02/19/2011** **02/23/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Kevin Chiu **Answered By:** URS Corporation David Fyfe

Co-Author:

REQUEST:

Reference: Attached photo

See attached picture of 301 Mission Screen Wall construction in progress. This picture was taken Nov of 2008, and shows a lateral support tie beam below grade

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

RESPONSE 02/16/2011 per David Fyfe

Tie beams shall be saw cut cleanly at exterior face of existing 301 Mission street basement perimeter wall.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

connected to each vertical steel member of the screen wall. These tie beams are not shown on the plans and need to be cut so that the existing wall can be removed by others, as this scope is below and out of Transworld's contract. Please provide details for this condition.

Restoration of waterproofing is required.

Detail 1 on attached 301 Mission Street drawing S3-3.13 (rev 6, 04/04/2008) is the best available information at this time and has been provided for your information.

RESPONSE 02/23/2011 per Kevin Chiu

Pending approval by the TJPA, a CR will be issued.

T-0033 **301 Mission Screen Wall - Concrete Demo Scope of Work Clarification** **Closed** **02/14/2011** **02/24/2011** **02/25/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author:

REQUEST:

Reference: attached text document

Please see attached text document explaining Transworld's request.

Transworld Construction requests that TJPA, Turner Construction, and Webcor-Obayashi make a final determination as to work scope based on the documents and discussions provided herein. It is Transworld's contention and belief that the 301 Mission wall relocation work scope does not require Transworld to remove the (e) concrete structure below the dark gray colored curb. For clarity see Exhibit D, page 1 and page 2.

Attached please see text explanation and Exhibits A, B, C, and D.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Response from David Fyfe on 2/23/11:
Removal of element is in scope per contract documents, see detail B on sheet C-5000.

Response from John Adams on 2/24/11:
1. Demolition scope Utility Vault "foundation" to be demolished by Evans Bros see attached sketch C-5000 Detail A.
2. Existing "Concrete Slab" in accord with attached sketch C-5000 Detail B - this element is in scope and is to be removed by Transworld per C-5000 Detail B including concrete as shown.
3. Demolition scope "unforeseen grade beam" to be severed by Evans Bros see attached sketch C-5000 Detail B.

T-0034 **301 Mission Screen Wall - Change of walkway from original logistics** **Closed** **02/14/2011** **02/24/2011** **02/22/2011** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** URS Corporation David Fyfe

Co-Author:

REQUEST:

The conditions of the worksite have changed significantly from what Transworld originally bid and have changed the entire logistical plan for the execution of this contract work. The original logistics plan, as well as the contract documents, show a walkway along the South side of the original existing screen wall. Now, the entire walkway has been removed and nothing exists except an open pit. Please see all four pages of Exhibit A that is attached to this RFI. This change of condition affects Transworld's ability to execute the contract work. There is no longer available workspace to erect the structural steel and the South side finishes. This condition now requires a modification to our contract such that Transworld may use the parking/driveway on the North side of current barricaded area. The exact impact is not yet fully developed because there are ongoing discussions related to further demolition and removal of concrete structures that currently exist for our construction work. If the current and remaining working areas are further deteriorated by additional demolition, even greater challenges will arise. Transworld Construction requests reasonable accommodations for access to the worksite from the parking/driveway that is North of the currently erected temporary barricade wall.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

301 Mission Street driveway shall remain open to building tenants/occupants for through traffic at all times.

Per 2/17/11 field meeting, if coordinated with and approved by 301 Mission Street property owner in advance, one lane of driveway may be temporarily used short term by contractor for deliveries.

Contractor shall prepare and submit a Logistics Plan to the TJPA Representative and 301 Mission Street property owner for review and approval prior to use of driveway. At a minimum Logistics plan shall include the following;

- scheduled dates and duration of driveway use;
- traffic control plan/sketch (including extent of driveway to be used, proposed/required signs, barricades, flagmen, etc.); and,
- extent of temporary barricade wall dismantling and restoration.

Contractor shall provide all necessary traffic control measures (signs, barricades, fencing, flagmen, etc.) during use of driveway as directed by the TJPA Representative and/or 301 Mission Street property owner.

Contractor shall restore temporary barricade wall at end of each day if dismantled.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0035	BSE - Additional Trainbox Drawings	Closed	02/16/2011	02/26/2011	02/22/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet S-3201 and Specification Section 31 55 00

BBII believes that they do not have enough detailed drawings of the Train Box to properly design a conflict-free bracing system. BBII states that the architectural sections

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The design of the permanent structure inside the shoring wall is in progress and subject to change. At 50% Construction Documents on December 20, 2010 an in-progress 3D REVIT Program Computer Model was issued to TJPA and TJPA shared this model with W/O for informational purposes on the progress of the

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

A1-6000 through A1-6231 lack detail regarding dimensions of structural components (i.e. beams, walls, ramps and etc.). The only structural section BBII currently has is on S-3201 and there appears to be a beam running along C line, however that beam is not identified in the table.

BBII is requesting additional structural section and elevation drawings, specifically:
- A dimensioned longitudinal elevation of the entire trainbox, showing the most current location and depths of beams.
- Full cross section of typical trainbox as well as any other non typical section. Shown any cross slopes, high and low points of concrete.
- Detailed sections of the SW corner showing dimensions and elevations of any ramps or locations where there are on ground floor slabs.

BBII would prefer CAD files if possible, however hardcopies will work.

permanent structure design. We suggest that for reference only, W/O review the possible locations for shoring struts with the in-progress 3D REVIT Program Computer Model. This 3D REVIT Program Computer Model provides more information than you would receive in the limited number of sections requested above.

T-0035.1 **BSE - Request Structure Section Drawings** **Closed** **03/15/2011** **03/25/2011** **03/23/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

To: Turner Construction Compan Daphne Faulkner

Answered By: Adamson Associates, Inc George Metzger

REQUEST:

Reference attached sheet

As discussed in 03/09/11 TG03 Design Team meeting, AAI said they would provide sections of the trainbox structure if BBII indentified where to take the cuts. Below is a list and the attached shows where BBII would like these taken

CUT # - DESCRIPTION

1.A - Full length section along Grid A
1.E - Full length section along Grid E
1.J - Full length section along Grid J unfolded along wall alignment
2 - Full width section at Column Line 3

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See the attached in-progress design documents at the requested locations. This information is being provided as reference information for use in determining possible locations for the shoring struts and is not issued as a construction document.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

3 - Full width section at Column Line 7
4 - Full width section at Column Line 10.5
5 - Full width section at Column Line 18 (CL First St)
6 - Full width section at Column Line 23
7 - Full width section at Column Line 26 (CL Freemont St)
8 - Full width section at Column Line 30
9 - Full width section at Column Line 34.5 (Beale St.)
10 - Section at "flare?"
11 - Section at "flare?"

Please provide either electronic 2D CAD files at for each section where BBII can dimension, or hardcopy drawings that are fully dimensioned.

T-0036 **BSE - Bracing Load Discrepancy** **Closed** **02/16/2011** **02/26/2011** **02/18/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran
To: Turner Construction Compan Daphne Faulkner
Answered By: Adamson Associates, Inc George Metzger
Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet GT-1110, Specification Section 31 55 00, and attached memo

Please see the attached memo from BBII's bracing design engineer, PB&A.

PB&A are finding more than a slight discrepancy between the bracing loads given in the tables of GT-1110 when compared to loads they calculated using the "design profile" earth pressured diagram as shown on the same sheet.

As required by note 6 on GT-1110, BBII is continuing their design with the forces given in the tables, however BBII feels it is prudent to note the variances.

BBII requests confirmation that the forces given in the tables of GT-1110 are correct.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See the attached reply.

Attached Response from ARUP - 02/18/2011 Kevin Clinch

The internal bracing system shall be designed to satisfy the criteria specified in the contract documents including the strut loads given in the tables on GT-1110.

Our review of the calculations included with the RFI was limited to that necessary to understand the Contractor¿s questions. The calculations have not been reviewed for conformance with the contract documents. A more complete review will be undertaken when the calculations are issued as a submittal. Additional calculation documentation and / or a meeting with the Contractor¿s engineer will be required for us to interpret the software output and to facilitate our review.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0037	BSE - Request for Utility As-Builts	Closed	02/17/2011	02/28/2011	03/01/2011	Potentially	☐

From: Webcor Construction LP — Nhi Tran
To: Turner Construction Compan — Daphne Faulkner
Answered By: AECOM Technical Servic — Eric Zagol
Co-Author: Balfour Beatty Infrastructure, Inc. — Ural Yal

REQUEST:

Reference Sheets U-2021 to U-2023, U-4005

BBII is requesting as-built data for the phase 1 electrical ductbanks at First St. and Fremont St. BBII is particularly interested in receiving the coordinates, elevations, width and depths of the ductbank where they intersect the CDSM wall as shown on utility drawings U-2021 through U-2023

Additionally, BBII would like to receive more info on the phase 2 utilities shown in section X&Y on U-4005:
- What material are these ducts and are they encased?
- Can the spacing shown on U-4005 be shifted to accommodate bridge girder spacing?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Phase I electrical ducts as shown on the AECOM Relocation of Utilities Project (RUP) Plans sheets U-2020, U-2021, U-2022 and U-2023 on First and Fremont streets have been constructed or will be constructed by PG&E. AECOM has requested as-built information from PG&E on what has been constructed to date and will provide upon receipt.

Sections X and Y on RUP sheet U-4005 shows utilities in the proposed final locations following construction of the Transit Center substructure and permanent utility corridors on First and Fremont streets. Not all utilities shown need to be incorporated and supported by the interim bridge structures on First and Fremont streets.

Only PG&E and Verizon Phase II utilities need to be incorporated and supported from the interim bridge structure. The remaining utilities i.e. AT&T, TCG and PG&E "NIP" (PG&E New Bushiness) indicated in section, will be constructed following construction of the Transit Center substructure and permanent utility corridors.

PG&E has proposed steel conduit for the ducts to be supported by the interim bridge structures. Verizon has proposed PVC conduits.

Proposed modifications to utility alignments (horizontal and vertical) and conduit configuration may be acceptable upon review and acceptance by AECOM and the private utility. AECOM suggests a coordination meeting between BBII, AECOM and the private utilities to help facilitate the interim bridge and utilities support design.

T-0037.1	BSE - Request for Utility As-Builts	Closed	03/24/2011	04/04/2011	04/13/2011	Potentially	☐

From: Webcor Construction LP — Nhi Tran
To: Turner Construction Compan — Daphne Faulkner
Answered By: AECOM Technical Servic — Eric Zagol
Co-Author: Balfour Beatty Infrastructure, Inc. — Ural Yal

REQUEST:

Reference RFI #T-0037 and Sheets U-2020, U-2021, U-2022 and U-2023

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

PG&E's substructure work on First and Fremont Streets is scheduled to be complete by April 28, 2011.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please provide BBI with as-built information from PG&E on what has been constructed to date, as mentioned in the response to RFI #T-0037

PG&E will provide as-built drawings following completion of their work.

T-0037.2 **BSE - Request for Utility As-Builts** **Closed** **03/24/2011** **04/28/2011** **04/25/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran

To: Turner Construction Compan Daphne Faulkner

Answered By: Turner Construction Comp Daphne Faulkner

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI #T-0037.1

Please provide BBI with as-built information from PG&E on what has been constructed to date, as mentioned in the response to RFI #T-0037 and RFI#T-0037.1

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please see response to RFI #T0037.1. Asbuilts will be available once received from PGE. This issue has being denoted in the open issues log and does not require an open RFI to track the issuance of the asbuilts.

T-0038 **BSE - Shear Walls for Rebracing** **Closed** **02/17/2011** **02/27/2011** **02/22/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran

To: Turner Construction Compan Daphne Faulkner

Answered By: Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference response to RFI #T-0024, Sheet GT-1112, and attached drawing

The response to RFI #T-0024 noted discussions that took place during the TG03 BSE Trade Subcontractor - Design Team Coordination Meeting, about utilizing the permanent shear wall as re-bracing during the train box build out.

Attached is a sketch showing a staged wall construction and strut removal sequence that BBII believes would eliminate the need for re-bracing along the SW Wall.

Is this sequence acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Thornton Tomasetti Response:

The conditions depicted in Stage 12 & 13 of sketch GT-1112 for shearwalls to be used as re-brace elements will cause overstressing of the mat slab and excessive movement of the Trainbox wall, and therefore, is not acceptable. Note however, that once the Lower Concourse slab is constructed and develops the design strength, the upper portion of the shearwall above the Lower Concourse slab can be used as re-braces. See attached SKS-0101 that illustrates the load path of the shearwall.

ARUP Response:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

The use of the permanent concrete shearwalls as bracing is acceptable provided the design criteria specified in the construction documents is satisfied. This includes, but is not limited to, the bracing stiffness requirements. The effective stiffness of the shear walls will be affected by the stiffness of the permanent train box wall and mat slab and tiedowns.

The response to this RFI must include input from Thornton Tomasetti regarding the impact on the permanent structural elements.

T-0039 **301 Mission Screen Wall - Base Plate Dimensions** **Closed** **02/17/2011** **02/27/2011** **02/23/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** URS Corporation David Fyfe

Co-Author:

REQUEST:

Reference: 2/S-5000, D/S-5000, attached sketches

See the 301 Mission Screen Wall drawings, specifically details 2 and D/S-5000. Is it acceptable to use a base plate with dimensions 14" x 14", in lieu of the 14" x 18" per plan below the HSS 10" x 10"? See attached sketches of proposed anchor bolt mounting options A and B. If acceptable, please choose the detail you prefer.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Neither options A nor B are acceptable for the anchor bolt mounting system. Provide a base plate as detailed on S-5000 that has the dimensions of 14" by 18".

T-0040 **BSE - Proposed Bracing Removal Sequence** **Closed** **02/22/2011** **03/04/2011** **02/23/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet GT-1112 and attached proposal

Attached is a proposed sequence for bracing removal that involves removing the two lower layers of bracing after the structural slab and fillets are poured. BBII's shoring designer has done analysis at each stage of construction (see attached). The results show that removal of the two lower levels after the slab has been poured produces less

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

The question in this RFI is a substitution request and should be submitted following the appropriate procedures outlined in the specifications.

Considerable time and coordination between the design team members is required to properly evaluate

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

deflection than the fully excavated condition. The results are summarized for case west and case east on page 18 and 36 respectively.

BBII believes this proposed sequence provides a tremendous value to the overall project by:
- Eliminating the coordination between the bracing and concrete trade subcontractors during the construction of the lower walls and concourse slab
- Eliminates a horizontal construction joint in the lower wall which significantly reduces construction cost and duration.
- Allows for better waterproofing product, by eliminating a construction joint and reduces patching of the membrane around shoring elements
- Allows for unobstructed construction of the lower walls and soffit shoring of the concourse level slab, which also reduces construction cost and duration

BBII is requesting evaluation by TJPA's design team to determine if this sequence is acceptable.

the suggestion. Arup will continue to study the issue. We understand it will be a topic of discussion at the March 1 TG03 BSE Subcontractor - Design Team Coordination Meeting.

T-0041 **BSE - COR and PCO Forms** **Closed** **02/23/2011** **03/05/2011** **03/16/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Daphne Faulkner

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Spec. Section 00 07 00, 6.03E,

Per section 00 07 00, 6.03E, BBII requests for the form as mentioned to be supplied by TJPA, preferably in editable electronic format.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

There are no forms provided by TJPA. Webcor/Obayashi has established an acceptable summary cover sheet for change proposals.

T-0042 **301 Mission Screen Wall - Elevation of concrete wall** **Closed** **02/24/2011** **03/06/2011** **03/10/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** URS Corporation David Fyfe

Co-Author:

REQUEST:

Please clarify the following information regarding the field elevation of the new concrete wall. Detail A/S-4000

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

New concrete wall height of 20.5" above the existing embed plate on west end is not acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

indicates that the concrete foundation wall height shall be +/- 2'- 2" to 2'- 8". Based on this reference the tallest part of the concrete wall will be the East point of the wall. The height of the wall will then decrease as the wall moves west towards Fremont St. (the west side). If we use a wall height of 2'- 8" at its tallest point (the east side), that would result in a wall height of 20.5 inches at Fremont Street (the west end). This is less than 2'-2" as indicated in the contract drawings; therefore please confirm that Transworld will be building a concrete wall height between 20.5 inches to 2'- 8". As a point of comparison, the original existing screen wall had this exact same dimension of 20.5 inches at the low and 2'- 8" at the high.

Contract documents show the new concrete wall height varies from 2'-2" +/- to 2'-8" +/-. This is based on the driveway elevations shown on the existing plans provided by Millennium Partners, developer for 301 Mission Street, and allowing for a code required minimum 18" high concrete wall from top of paver/driving surface for vehicle safety. As noted on A/S-4000, "Top of (E) Vault Wall Elevation may Vary, Contractor to VIF, Adjust Concrete Wall Accordingly", please adjust top of concrete wall to be minimum 18" above top of paver/driving surface (approximately 2'-4" +/- to 3'-4" +/- in wall height).

See attached coordination sketch.

T-0043 **301 Mission Screen Wall - Temporary Vault Plug at Utility Vault Opening** **Closed** **02/25/2011** **03/07/2011** **03/23/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** URS Corporation David Fyfe

Co-Author:

REQUEST:

Regarding the transformer vault plug as shown on page C-5000; Transworld has been asked to submit some proposals as to how a plug should be installed. The original existing ventilation for the vault was open to the air at the original planters. This original ventilation was completely open and secured only by a metal grate to prevent access, but not water or air. As located on page C-5000, Transworld construction proposes to install 2 x 4 backing studs attached to the left and right vertical walls of the existing opening. These 2 x 4 backing studs will be adhered with powder actuated nails. Spanning across the backing studs Transworld construction proposes to install two 2 x 4 crossmembers which will be nailed to the 2 x 4 backing studs. This assembly can be seen in the attached pictures pages 1 and 2.

The assemblly noted above is option 1.
Option 2- Added additionall 2x4 crossmembers which would further restrict air flow to the (e) vault.
Option 3- Nail on a plywood sheet that would enclose the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractor shall provide the transformer vault plug based on the Option 4 solution with the following amendments;

1. Provide 2x4 cross members at max. 12" o.c. spacing;
2. Face of all 2x4 members shall be flush with outside face of existing vault wall to facilitate extension of plywood sheet beyond ventilation opening (see number 5 below);
3. Plywood sheet shall be two layers of 5/8" for a total of 1.25" thick, laminate plywood layers with waterproof adhesives;
4. Secure plywood to 2x4 members with galvanized nails or screws at min. 6" spacing;
5. Extend plywood sheet min. 6" beyond edge of ventilation opening (all four sides); and,
6. Seal perimeter of plywood sheet and existing concrete vault wall with appropriate sealant to ensure weather tightness (all four sides).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

entire vault vent opening.
Option 4 - Nail on a plywood sheet and waterproof the plywood to prevent water intrusion as well.

Note: Transworld Construction is concerned about restricting airflow into a vault that originally was designed to have this open vent. We are not familiar with any impact sealing this vent will have on the existing equipment.

In addition, Contractor is required to ensure sufficient air flow is provided to existing underground vault/electrical equipment at all times. Existing ventilation openings (one per vault) shall not be plugged until new ventilated manhole covers per C-5000/C-5001 are installed. The new ventilated manhole covers must be protected from damage and/or soiling from concreting activities of the adjacent stem wall. The existing ventilation openings must be plugged prior to start of BSE activities to restrict entry of water and/or construction debris into the existing underground vault/transformer spaces.

T-0044 **BSE - Pile Mat Slab Connection** **Closed** **02/25/2011** **03/07/2011** **03/02/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet S-3003

Reference Detail 2 on S-3003 - "Slip Detail @ Trestle Pile Mat Connection"
Please confirm that this detail only applies to the trestle and not the bridge as stated.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

TT Reply: The trestle supports the bridge, therefore detail 2/S-3003 does apply to the bridge.

T-0045 **301 Mission Screen Wall - Void Below Existing Embed** **Closed** **03/02/2011** **03/12/2011** **03/17/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** URS Corporation David Fyfe

Co-Author:

REQUEST:

Reference: Attached pictures

The new 301 Mission screen wall location is to be laid out over an existing embed plate. At that plate #8 rebars are to be epoxied per RFI T-0027. Currently in the field the embed has been cut where the dowels are to be installed and holes are being drilled to the required 30" depth. It has

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Voids below the existing embed plate shall be filled by use of grouting applied by use of low pressure grouting methods to deliver grout into void spaces. The result following grouting shall be that all voids are fully grouted. All grout materials shall be non-shrink grout. Pressure grouting shall be performed by qualified personnel who have experience in low

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

been discovered that there are voids below the exitsing embed plate of up to 1.5". See attached pictures for some locations where this condition occurs. Please advise if this void is to be filled.

pressure grouting steel plates. Contractor shall submit qualifications in the form of resumes identifying project experience utilizing low pressure grouting for personnel performing the work.

The Contractor shall provide a submittal identifying the non-shrink grout mix proposed for use and a narrative providing a full description of the means and methods proposed to result in grout flow from input point to output point including methods to result in prevention of trapped air (air is to be displaced by grout flow). A narrative describing means and methods shall specifically include identification of proposed equipment and the proposed porting and venting to allow installation of non-shrink grout and displacement of trapped air.

Where the embedded plate is not continuous (where the plate is not provided), the existing concrete surface shall be prepared meeting all requirements of a bonded construction joint.
- David Fyfe 03/16/2011

==========Additional Response==========
Pending approval by the TJPA, a CR will be issued.
- Kevin Chiu 03/17/2011

T-0046 **BSE - CLSM Slump** **Closed** **03/03/2011** **03/13/2011** **03/07/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran
To: Turner Construction Compan Daphne Faulkner
Answered By: Adamson Associates, Inc George Metzger
Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 03 30 01

The CLSM slump range for the Buttress Shoring Excavation Work is listed between 10" to 12". BBII has concerns about the CLSM mix segregating during placement with such a high slump. Please confirm if it is acceptable to provide a CLSM mix with a slump range of 7" +/- 1" in lieu of the 10" to 12" called for in the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

03/03/2011 Kevin Clinch

ARUP Response - A CLSM mix with a slump range of 7" +/- 1" is acceptable pending our review of the Contractor's mix design. Arup will work with the Owner's Testing Agency to refine the Field Quality Control procedures for checking slump and segregation of the CLSM.

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Specification.

T-0047 **BSE - Joint Preconstruction Survey** **Closed** **03/03/2011** **03/13/2011** **03/11/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Transbay PMPC Alfred Lau

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 01 15 40 and attached list

Attached is the list of buildings that BBI has identified for joint survey, in accordance with specification section 01 15 40. BBI requests confirmation of this list.

Please provide BBI a contact for coordinating the joint survey effort. BBI would like to do this work on the week of March 14, 2011.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Arup has been, and will continue, performing interior preconstruction surveys at the properties listed by BBI. Arup will share the information with contractors as it becomes available. A representative from BBI may accompany Arup at the remaining site surveys. Contact Stephanie Reichin 415.227.9700 for a schedule of the remaining site visits.

T-0047.1 **BSE - Preconstruction Joint Survey Exteriors of Buildings** **Closed** **03/21/2011** **03/31/2011** **03/28/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Transbay PMPC Alfred Lau

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI #T-0047 and attached email

Please confirm the exterior of the building, in accordance with item 1.5 D in the specification 01 15 40 Joint Survey, is also covered by the response of RFI T-0047 as well as the interior of the building.

If not, please contact "property owners within 25 feet of the construction excavation" and arrange the joint survey immediately.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Response to RFI T-0047 was specific to the query posed relating to the preconstruction survey of adjacent building interiors (basements) that Arup is conducting and the feasibility for the contractor joining Arup for any future visits.

For the pre-construction joint-examination and photographing of adjacent building exteriors per 01 15 40 - 1.5.D, please coordinate with Turner (CMO), who will coordinate with Singer Assoc, TJPA's outreach consultant, to invite and/or coordinate the possible attendance of adjacent property owners. Please submit a list of properties and planned schedule of the examination/photography activities ASAP for record and for coordination.

Number	*Subject*	*Status*	*Date Created*	*Date Required*	*Date Answered*	*Cost Impact*	*Proceed*
T-0048	**BSE - Building Demolition in Zone 1**	**Closed**	**03/03/2011**	**03/13/2011**	**03/10/2011**	**Potentially**	☐

From: Webcor Construction LP — Nhi Tran
To: Turner Construction Compan — Daphne Faulkner
Answered By: Turner Construction Comp — Jack Adams
Co-Author: Balfour Beatty Infrastructure, Inc. — Ural Yal

REQUEST:

Reference CR-T-005 and Sheet SKGT-0001-R1

CR T-005 appears to require additional building demolition. Please provide a schedule for this demolition work and an estimated completion date as this will potentially impact BBI's schedule and work sequence.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The "Eminent Domain" legal process is incomplete at this time - estimated completion date is 5/29/11. Therefore the demolition contract for 60 Tehama, 85 Natoma, 564 Howard and 568 Howard has not been issued and a schedule cannot be provided. The estimated demolition completion date is between 7/29/11 and 8/29/11.

T-0049	**BSE - Constructware**	**Closed**	**03/03/2011**	**03/13/2011**	**03/03/2011**	**Potentially**	☐

From: Webcor Construction LP — Nhi Tran
To: Turner Construction Compan — Daphne Faulkner
Answered By: Turner Construction Comp — Daphne Faulkner
Co-Author: Balfour Beatty Infrastructure, Inc. — Ural Yal

REQUEST:

Reference Specification Section 01 10 40

Specification Section 01 10 40 Article 1.6 B4 states: "TJPA will provide Trade Subcontractors with the necessary training and access to Constructware"

BBI would like to schedule this training and make arrangements for access. Please provide a contact to get this process started.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Trade contractors will be given "View Only" access to Constructware. Contact Turner to schedule access and training. W/O is still responsible for managing the information flow to and from their trade contractors. TJPA will not accept information entered by trade contractors. All trade RFIs and submittals are to be reviewed by W/O prior to submission to TJPA.

T-0050	**BSE - Revised Plans for CR T-005B**	**Closed**	**03/07/2011**	**03/17/2011**	**03/14/2011**	**Potentially**	☐

From: Webcor Construction LP — Nhi Tran
To: Turner Construction Compan — Daphne Faulkner
Answered By: Turner Construction Comp — Daphne Faulkner
Co-Author: Balfour Beatty Infrastructure, Inc. — Ural Yal

REQUEST:

Reference CR T-005B

As BBII has explained at the TG03 Trade Subcontractor - Design Team Coordination Meeting No. 3, held on February 23, 2011, in order for BBII to provide meaningful pricing and make preparations to order materials that will be required for the changed work, BBII is respectfully

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

URS will issue a revised D-2200 drawing this week.

03/10/2011 - George Metzger

Some parts of the question need to be answered by

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

requesting revised contract documents for all work that is impacted by this change, specifically including, but not limited to, geotechnical and demolition drawings.

These drawings will allow BBII to accurately identify the changes and provide pricing that complies with Section 6 of the General Conditions.

In addition, due to increasing steel prices and long lead times, BBII proposes a revision to CR T-005B to allow for the ordering of additional shoring wall beams prior to the rest of the Change Order being negotiated. BBII believes this will reduce the overall cost of this change. Upon receipt of the revised drawings that include the new shoring wall beam table (GT-5101), BBII will be able to receive quotes for this work and finalize an order.

URS/PMPC/TJPA/Turner.

ARUP Response:

Arup's response regarding the request for geotechnical drawings and the soldier pile schedule is as follows: the "CDSM Shoring Wall Schedule" on GT-5101 does not change. The wall segments shown on the plan were simply extended to include the increased wall length. It is possible that the top of wall elevation may change +/- 1 ft once the finish grade is established following demolition of the buildings. The length of the soldier pile and the depth of the drilled hole from the ground surface will not change from that shown on the schedule.

In addition to GT-2101 which was issued as SKGT-0001-R1 in response to RFI-017, the change order will include the following drawings: GT-0000 (the drawing index will be clouded to show the affected drawings); GT-0100, GT-1110, GT-2000 (the shoring wall layout will be revised as shown and detailed on SKGT-0001-R1); and GT-5105 (the sections at 564 and 568 Howard will be deleted as these buildings will be demolished; a section will be added at 580 Howard showing the approximate distance to the building corner). Aside from the changes to GT-2101 which have been issued as SKGT-0001-R1, We consider the above described drawing changes to have no cost impact and therefor have not yet been issued.

T-0051 **Returned Submittal Comments** **Closed** **02/16/2011** **02/26/2011** **03/10/2011** **Potentially** ☐

From: Webcor Construction LP Daniel Foudy **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Daphne Faulkner

Co-Author:

REQUEST:

Ref Spec section 01 13 10

According to the Action and Distribution (section 1.11) of the submittal specifications, Submittals shall be returned

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

These responses are acceptable and will be incorporated into a revised specification section 01 13 10 to be issued in the future.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

indicating one of the following:

No Exceptions Taken

Make Corrections Noted

Revise and Resubmit

Rejected

We have received submittals back as "Not Reviewed" or "For Record Only". Please confirm these responses are acceptable and should be incorporated into the specifications.

T-0052 **BSE - P Parcel** **Closed** **03/09/2011** **03/19/2011** **03/10/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 01 14 19, 1.4

According to the referenced specification section, Parcel P is available as of November 1, 2010 and will be available until 2013. BBI was informed that this parcel will not be available for this contract.

Please confirm.

If this parcel is not available, are there any alternative parcels that will be available for construction staging?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Parcel P is available for Webcor-Obayashi use in accord with Spec. 01-14-19 - see attached sketch for shared use with TJPA.

T-0053 **BSE - Waler Standoff** **Closed** **03/09/2011** **03/19/2011** **03/14/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet GT-1110, RFI #T-0018, and attached

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

photos and drawings

Previous RFI #T-0018 - BSE - Waler to CDSM Wall spacing addressed BBI's concern with only having 6" clear between the face of the CDSM Wall and the Waler. Conversations in the weekly TG03 BSE Design Team Coordination meetings have re-raised the issue and BBI believes it requires additional consideration. The response in RFI #T-0018 said that rebar couplers in the wall verticals (in the next contract) would be used to eliminate the conflict. BBI believes that this seems to be impractical and not cost effective for over 3000 lf feet of wall and 4 levels of walers. Providing a standoff equal to the wall thickness would be an additional cost to the BSE contract, but BBI believes it would be minor compared to dealing with the cost to deal with the conflict later.

BBI is requesting to please re-evaluate and provide direction.

Attached is a suggested detail as well as examples where it has been used before, for your consideration.

Provided the criteria shown in the Contact Documents is satisfied, the proposal is acceptable.

Additionally:

Provided this proposal is acceptable to the TJPA, the internal bracing design submittal shall include the details and calculations associated with this proposal.

The soldier piles shall be checked for the increased moment due to the eccentric strut reaction. This check shall be reported in the internal bracing submittal.

No increase in torsional loading on the soldier pile is permitted.

End of Comments

T-0053.1 **BSE - Waler Standoff** **Closed** **03/09/2011** **03/19/2011** **03/22/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran

To: Turner Construction Compan Daphne Faulkner

Answered By: Transbay PMPC Alfred Lau

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet GT-1110, RFI #T-0018, and attached photos and drawings

Previous RFI #T-0018 - BSE - Waler to CDSM Wall spacing addressed BBI's concern with only having 6" clear between the face of the CDSM Wall and the Waler. Conversations in the weekly TG03 BSE Design Team Coordination meetings have re-raised the issue and BBI believes it requires additional consideration. The response in RFI #T-0018 said that rebar couplers in the wall verticals (in the next contract) would be used to eliminate the conflict. BBI believes that this seems to be impractical and not cost effective for over 3000 lf feet of wall and 4 levels of walers. Providing a standoff equal to the wall

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

REVISED RESPONSE TO RFI #T-0053

TJPA revises response to as follows:

The W/O and BBI proposal to increase the spacing between the waler and CDSM wall is acceptable to TJPA since it meets the requirements in 31 55 00 1.5 DESIGN subsections I, J, K, L, and M. This design is for Contractor use. This proposal from the Contractor creates multiple benefits for W/O and BBI including The waler is out of the way of the rebar and this will help W/O with their coordination with the Train Box concrete work subcontractor.
W/O benefits since more rebar can be installed with

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

thickness would be an additional cost to the BSE contract, but BBI believes it would be minor compared to dealing with the cost to deal with the conflict later.

BBI is requesting to please re-evaluate and provide direction.

Attached is a suggested detail as well as examples where it has been used before, for your consideration.

this increased spacing which saves time to the schedule and costs associated with the waterproofing and rebar installations.
BB benefits because it appears that there is a decrease to the number of times that struts and walers must be moved.
BB benefits in that strut length remains essentially the same when restrutting after Train Box wall sections are completed.

TJPA and the Program Management Team suggest that W/O and BB proceed with a 3' - 6" spacing or whatever dimension is necessary to insure that the walers are not within the Train Box Wall profile. If the walers position requires rework, the Contractor and SubContractor take full responsibility to meet design requirements with no change to contract cost.
TJPA agrees to this suggestion from the Contractor to offset the waler from the CDSM wall to allow for the construction of the Train Box wall. TJPA requests that the Contractor proceed on this issue as a no-cost resolution to these RFIs. If W/O finds that this Internal Bracing for Shoring Wall design does have an additional cost to TJPA, the funds will come from the CM/GC Contingency Fund.

T-0053.2 **BSE - Waler Standoff** **Closed** **03/09/2011** **03/19/2011** **03/28/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran
To: Turner Construction Compan Daphne Faulkner
Answered By: Transbay PMPC Douglas Jacobson
Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet GT-1110, RFI #T-0018, and attached photos and drawings

Previous RFI #T-0018 - BSE - Waler to CDSM Wall spacing addressed BBI's concern with only having 6" clear between the face of the CDSM Wall and the Waler. Conversations in the weekly TG03 BSE Design Team Coordination meetings have re-raised the issue and BBI believes it requires additional consideration. The response in RFI #T-0018 said that rebar couplers in the wall verticals (in the next contract) would be used to eliminate

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

TJPA and Program Management Team expect that the Contractor and Sub-Contractor meet the design requirements for the Design/Build of the Internal Bracing as specified in 31 55 00 INTERNAL BRACING FOR SHORING WALL and per the Contract Drawings. As subsection 1.8 M. states,

"Walers are to be placed against the shoring wall on spacers to provide a minimum of 6 inches of clearance between the waler and the shoring wall. The 6 inch clearance is to provide a continuous path

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

the conflict. BBI believes that this seems to be impractical and not cost effective for over 3000 lf feet of wall and 4 levels of walers. Providing a standoff equal to the wall thickness would be an additional cost to the BSE contract, but BBI believes it would be minor compared to dealing with the cost to deal with the conflict later.

BBI is requesting to please re-evaluate and provide direction.

Attached is a suggested detail as well as examples where it has been used before, for your consideration.

to allow the outboard curtain of reinforcement of the permanent wall to be routed through this space without requiring use of couplers or added lap splices at walers..."

The Submittal for Internal Bracing needs to address the concerns expressed by the reviewers including Arup in their response to RFI T-0053 which states:

"Provided the criteria shown in the Contact Documents is satisfied, the proposal is acceptable.

Additionally:

Provided this proposal is acceptable to the TJPA, the internal bracing design submittal shall include the details and calculations associated with this proposal.

The soldier piles shall be checked for the increased moment due to the eccentric strut reaction. This check shall be reported in the internal bracing submittal.

No increase in torsional loading on the soldier pile is permitted."

T-0054 **BSE - AC Overlay at Temporary Bridges** **Closed** **03/09/2011** **03/19/2011** **03/25/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

To: Turner Construction Compan Daphne Faulkner

Answered By: URS Corporation David Fyfe

REQUEST:

Reference Specification Section 01 53 13, 1.3.A.6 and attached material information

For the temporary bridges, BBII will be using the attached structural bridge deck material from Big R Bridge. The troughs are filled completely with AC to the top of the decking, and an overlay will be applied over the top. BBII would like to use a 2" minimum overlay, resulting in an overall cross section with an average 4" thickness. Bridge geometry requirements specified in section 01 53 13 - 1.3.A.6 will be met without reducing the overlay thickness below the 2" minimum.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

2" minimum asphalt concrete (AC) overlay not acceptable. Provide minimum of 4" asphalt concrete (AC) overlay per contract documents (specification section 01 53 13, 1.3.B.3).

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Please confirm this is acceptable.

T-0055 **BSE - Request for Soil Parameters** **Closed** **03/09/2011** **03/19/2011** **03/14/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet GT-1110 and Specification Section 31 55 00

In the TG03 BSE Design Team Coordination meeting held on 03/09/2011, Arup said they would provide BBII with soil input parameters for use in BBI's model.

Please provide BBI with this information.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Summary tables of the soil properties used in Arup's PLAXIS analysis are attached.

T-0056 **BSE - CR T-006** **Closed** **03/09/2011** **03/19/2011** **03/10/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Daphne Faulkner

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference CR T-006

The Change Request documents do not indicate who will have the maintenance responsibility for the AC walkway.

BBII has the following questions:
1. Should BBII include pricing for maintenance? If this walkway is going to get placed on top of the 3" minus rubble, a fair amount of maintenance would be required.
2. When is this walkway scheduled to be constructed? And if maintenance is needed, when would it start?
3. Are the typical fence and K-rail shown in the section the same ones that are protecting the perimeter, or an additional row that creates a walkway that has both sides fenced, protecting the public from construction and vehicle traffic?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is not an RFI. W/O has control of the site and is to coordinate maintenance duration with their subcontractor for pricing.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

BBII needs to have this information in order to provide accurate pricing for this Change Request T-006. Please advise.

T-0056.1 **BSE - CR T-006** **Closed** **03/24/2011** **04/03/2011** **04/12/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI T-0056 and CR T-006

Please confirm that any necessary repairs of the AC overlay are excluded from CR T-006 scope as discussed at the TG03 BSE - Design Coordination Meeting on 3/23/2011. Also, please provided additional sketches we discussed at the meeting as well. Finally, please provide a complete copy of Demo Contractor¿s change order related to CR T-006 to fully understand the limits of their responsibility.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

CM/GC is responsible for maintenance of site - including these sidewalks- debris, cleaning, graffiti etc. as specified in contract documents.

The AC overlay was installed by Demolition Contractor per RFI 24.2. The basements were filled per contract using crushed concrete, compaction methods were used by EBi and verified by ISI Special Inspector. The AC overlay was installed per RFI 24.2 with asphalt applied no less than 3" thick.

However, the CM/GC's concern is related to the required repair if there is a failure of this asphalt. If there is a failure of the AC overlay (if caused by pedestrian traffic on this sidewalks- not construction equipment), then this should be brought to the attention of TJPA Rep at that time in accord with contract.

Demo RFI 24.2, EBi Proposal drawings and Change Order attached.

T-0057 **BSE - Verticality and Sonic Testing on Drilled Piers and Shafts** **Closed** **03/10/2011** **03/20/2011** **03/11/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet GT-5202 and Specification Section 31 63 29

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Specification Section 31 63 29, 3.8.I.3 states "The contractor shall perform a test to determine verticality of the steel tubes, or drilled holes, that are going to be used for the sonic tests."

BBII has been advised by a number of testing firms that verticality tests cannot be performed on steel tubes or PVC tubes tied to steel cages. Detail 12 on Drawing GT-5202 shows 4 equally spaced PVC or steel tubes tied to reinforcing steel cage. BBII has also been informed that, as of now, there is not a specification in existence that mentions vertical tolerances of CSL tubes.

BBII is proposing to do the following in lieu of formally testing the CSL tubes for verticality:
1. BBII will make sure that the tubes are parallel and symmetrically placed. The cages and tubes will be properly inspected for positioning, spacing, parallelism prior to placing the cages into the hole. This is the most important inspection to ensure accurate CSL results.
2. Since the tubes are tied directly to a vertical cage, and the cages and casings are tested for verticality anyway, BBII will do a visual inspection to ensure that the tubes are sufficiently "vertical" for CSL testing purposes prior to placement of tremie concrete.
3. BBII will make sure that the cages are carefully lifted in a manner that limits the deflections of the cage to ensure that the CSL tubes do not fail at the joints.

Please confirm if this is acceptable.

The verticality of the holes / tubes must be checked to properly interpret the CSL test results. If verticality tests cannot be performed on steel tubes, consider using PVC tubes. The integrity of the PVC tubes can be maintained by filling them with water and inserting alignment bars into them prior to concrete pouring.

T-0058 **BSE - Underground Utilities Removal on Beale Street** **Closed** **03/11/2011** **03/21/2011** **03/23/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet D-2230

Per Drawing D-2230 Note 2, "Unless specified otherwise all utilities to be removed have already been cut and capped outside limits of work by Transbay Transit Center

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Beale Street Utilities PGE and ATT. Substructure installation and work is incomplete. Work is scheduled to complete by 5/30/11. Cabling/cutovers & pressurizing gas pipe forecasted to be complete by 6/30/11. ATT will finish in this window also.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Program Relocation of Utilities Project including future utilities installed by the Transbay Transit Center Program Relocation of Utilities Project. Contractor to coordinate removal of utilities with TJPA representative."
Please confirm that the work described in Note 2 has been completed for all underground utilities on Beale St.
If work has not yet been completed, please provide a list of utilities not yet abandoned and dates when the said utilities are to be cut and capped.

***** These dates are subject to change due to weather, operational issues and any conflicts outside the control of PG&E******

Beale St. Webcor-Obayashi: Relocation of Utilities project will provide the completion dates for utilities on Beale St.

T-0059 **BSE - Underground Utilities Removal on Fremont Street** **Closed** **03/11/2011** **03/21/2011** **03/23/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet D-2230

Per Drawing D-2230 Note 2, "Unless specified otherwise all utilities to be removed have already been cut and capped outside limits of work by Transbay Transit Center Program Relocation of Utilities Project including future utilities installed by the Transbay Transit Center Program Relocation of Utilities Project. Contractor to coordinate removal of utilities with TJPA representative."
Please confirm that the work described in Note 2 has been completed for all underground utilities on Fremont St.
If work has not yet been completed, please provide a list of utilities not yet abandoned and dates when the said utilities are to be cut and capped.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Fremont Street PGE Final conduit installation scheduled to be complete 4/11/11. Cabling and cutovers forecasted to be complete by 6/4/11.

***** These dates are subject to change due to weather, operational issues and any conflicts outside the control of PG&E******

Fremont St. Webcor-Obayashi: Relocation of Utilities project will provide the completion dates for utilities on Fremont St.

T-0060 **BSE - Underground Utilities Removal on 1st Street** **Closed** **03/11/2011** **03/21/2011** **03/23/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet D-2230

Per Drawing D-2230 Note 2, "Unless specified otherwise all utilities to be removed have already been cut and

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

First Street - Substructure installation scheduled to complete by 4/30/11. Cabling and cutovers forecasted to be complete by 6/24/11

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

capped outside limits of work by Transbay Transit Center Program Relocation of Utilities Project including future utilities installed by the Transbay Transit Center Program Relocation of Utilities Project. Contractor to coordinate removal of utilities with TJPA representative."
Please confirm that the work described in Note 2 has been completed for all underground utilities on 1st St.
If work has not yet been completed, please provide a list of utilities not yet abandoned and dates when the said utilities are to be cut and capped.

***** These dates are subject to change due to weather, operational issues and any conflicts outside the control of PG&E******

First St. Webcor-Obayashi: Relocation of Utilities project will provide the completion dates for utilities on First St.

T-0061 **BSE - Concerns About Pile To Mat Slab Connection** **Closed** **03/15/2011** **03/25/2011** **03/23/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet S-3003 and attached detail

BBII has concerns that the trestle pile to mat slab slip connection as shown in detail 2 on S-3003 will not work as intended. Based on BBII's understanding that this joint is intended to allow the mat slab to deflect upward and our limited knowledge of the permanent structure design, BBII has listed some concerns with this connection below:
1. BBII does not think the sleeve will be able to slide with the bolts and slotted holes completely encased in concrete. (see attached)
2. If the slab does deflect upwards and the lower section of pile is no longer in contact with the bearing plate, then the mat slab is carrying the entire load on the pile.
3. Any upward movements of the slab will affect the trestle supper structure framing. Differential upward deflections could cause damage depending on severity.

BBII does wish to bear the risk of re-designing this joint due to the interaction with the permanent structure, however BBII has attached a suggestion that they feel would eliminate some of their concerns listed above.

Please provide a revised detail or rebut BBII concerns if you still believe the detailed connection is the best suited for this application.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Thornton Tomasetti response:

Comments in response to BBII concerns:

1. Bolts/slotted holes could be isolated from the concrete via styrofoam blocks.

2. Anticipated slab movement upward is due to rise of groundwater pressure after the dewatering pumps are turned off - which is after structure is completed and trestle work is completed.

Comments regarding proposed alternate detail:

1. Proposed detail does not address waterproofing at bottom of mat and allows water infiltration into the mat as currently presented.

AAI Response: Alternate detail will not satisfy waterproofing requirements.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0062	BSE - Concrete Submittals	Closed	03/16/2011	03/26/2011	03/23/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 03 30 00

BBII believes a number of the submittals listed under the Cast In Place concrete spec section are not applicable to the BSE package.
- 03 30 00-1.6.A.5 Joint Locations for Concrete Slabs to receive a terrazzo finish ¿ None of the concrete work in this package is to receive flooring.
- 03 30 00-1.6A.6 Preconstruction Survey - This is intended for locations where concrete interfaces with existing construction. The mud slab does not interface with existing concrete, and BBII is not anticipating using concrete at the temporary bridges.
- 03 30 00-1.6.A.7 Survey of Flat Plate or Flat Slab Concrete Floors - No flat plates included in the BSE package.
- 03 30 00-1.6.A.8 Survey of as-built floor conditions - This is applicable to finish floors only, which are not included in the BSE package.
- 03 30 00-1.6.A.8 Structural Repairs - BBII does not believe there is any structural concrete requiring repair procedures in the BSE package.
- 03 30 00-1.6.A.10 Patching defective concrete finishes - The concrete work in the BSE package is not finished or exposed concrete, so BBII does not believe patching procedures are necessary.

Please confirm that the above submittals are not necessary for the BSE contract.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Thornton Tomasetti response:

Confirmed that the submittals listed in the RFI are not applicable for the BSE contract.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0063	BSE - Request for Final EIS/EIR for Mitigation and Monitoring	Closed	03/16/2011	03/26/2011	03/21/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Transbay PMPC Alfred Lau

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 01 35 65

BBII has been unable to obtain the report titled "Final EIS/EIR" dated November 29, 2007, as described in specification section 01 35 65, 1.1.A. The report requires the contractor to be responsible for mitigation measures and monitoring requirements that are included in the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

A copy of Final EIS/EIR as referred in 01 35 65 is available in Constructware at the following location:

File Director - Programwide - 5 Program Coord - 10 Environmental - 11 EIS/EIR - EIS/EIS Transit Center - 2004 EIS - Original

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

specification section.

Please provide BBII with this report.

A Constructware screenshot is attached for your information.

T-0064 **BSE - Demolition Contract Backfill Material** **Closed** **03/16/2011** **03/26/2011** **03/21/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference photos (attached)

It appears that the demolition contractor is leaving large unprocessed rubble along the backside of some of the basement walls (See attached photos). Per the demolition drawings included in BBII's contract, all of the material in this area should be crushed/processed concrete at 3" minus. Handling material that does not meet these requirements will be considered a changed condition. Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The site Parcel E is in progress. The basement will be filled in accord with the contract drawings with crushed/processed concrete at 3" minus upon completion of work by the demolition contractor - contract completion date 4/7/11.

Please do not use RFI to ask a question of an area not yet completed by the Demolition contractor. Webcor-Obayashi the CM/GC or Turner Construction CMO can easily answer these questions over the telephone or via e-mail.

T-0065 **301 Mission Wall - Length of dowels in concrete wall** **Closed** **03/17/2011** **03/27/2011** **03/24/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** URS Corporation David Fyfe

Co-Author:

REQUEST:

Reference: Sheet S-5000, RFI T-0042

The response to RFI T-0042 specifies for the new concrete wall height to be exposed above the existing pavers a minimum 18". To achieve this requirement, the overall concrete wall height must be increased 8", therefore also increasing the length of the dowels that are to be installed.
The #8 embedment bars have already been purchased and fabricated. To achieve the higher wall height per response to RFI #T-0042, 90% of these fabricated #8 bars will have to be scrapped and new bars with the longer length must be made.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Use of fabricated #8 bars with lenton terminator acceptable. #8 embedment bars shall be dowelled 30" into existing concrete vault wall per RFI T-0027.

Resulting distance from top of #8 embedment bars with lenton terminator to top of new concrete wall will vary between approximately 3" - 9", verify in field. If resulting distance from top of #8 embedment bars with lenton terminator to top of new concrete wall is greater than 6", contractor shall install #4 U-bars at 12" on center. #4 U-bars shall be centered between the #4 ties on both sides of the #8 bar(s). #4 U-bar legs shall be 22" long.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

As an alternative, would it be acceptable to still use the fabricated #8 embedment bars dowelled 30" into the wall per RFI T-0027, with the lenton terminator which would be set 32" above the (E) steel plate?

See attached coordination sketch.

TJPA Representative to field verify all rebar placement prior to Contractor placing concrete.

T-0066 **BSE - Pile Survey for Buttress Area** **Closed** **03/21/2011** **03/31/2011** **04/04/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran
Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

To: Turner Construction Compan Daphne Faulkner

Answered By: Turner Construction Comp Jack Adams

REQUEST:

It is BBII's understanding that EBI has completed their survey of the existing timber piles in the buttress area, including the area that was previously missed.

Please provide BBII with the remaining timber pile survey information, as indicated at the TG03 BSE Design Coordination Meeting.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Here is the remaining timber pile survey information.

It is expected that BBII will provide the TJPA a Credit since this survey scope was in contract Spec. 02-41-19 Para 1.4E

T-0067 **BSE - Joint Preconstruction Survey** **Closed** **03/21/2011** **03/31/2011** **03/23/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran
Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

To: Turner Construction Compan Daphne Faulkner

Answered By: Transbay PMPC Alfred Lau

REQUEST:

Reference RFI T-0047

Based on recent discussions, BBII is requesting confirmation of their understanding of Specification Section 01 15 40:

1. The inside survey of the adjacent buildings will be performed by ARUP and ARUP is in the process of performing these surveys. BBII will attend these surveys to the extent possible. ARUP will also provide monitoring of these buildings, including but not limited to, active crack monitoring. ARUP will make the initial survey and subsequent monitoring information available to BBII. BBII reserves its right to review this information and request to perform its own indoor survey at any of the surveyed buildings. ARUP is solely responsible for the accuracy of

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Correct.

2. The 19 buildings listed by ASC for BBI are all included in the pre-construction survey list prepared by Arup (copy attached).

(note the 101 1st Street address listed by ASC should be corrected to 100 1st & 533 Mission)

3. Correct.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

the information provided and the continuation of the monitoring effort. ARUP is also responsible for ensuring that the property owners concur with the surveying methods and the results.
2. The list of 19 buildings previously provided by BBII is accurate and is in conformance with ARUP's list.
3. The TJPA will arrange for a survey of the outside of these buildings with the attendance of the property owners. BBII will attend with its professional photographer as required by the Specifications.

T-0067.1 **BSE - Joint Preconstruction Survey Follow-Up** **Closed** **02/06/2012** **02/16/2012** **02/15/2012** **Potentially** ☐

From: Webcor Construction LP David Fields **To:** Arup Kevin Clinch **Answered By:** Webcor Construction LP David Fields

Co-Author:

REQUEST:

Per 01 15 40 and confirmed within RFI #T-067: ARUP is to provide monitoring information from adjacent buildings including but not limited to, active crack monitoring. ARUP will make the initial survey and subsequent monitoring information available to BBII. Please provide this information.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Arup has provided the pre-construction surveys to the TJPA via the Architect. The Contractor's request will be addressed by the TJPA.

T-0067.2 **BSE - Monitoring Information for 545 Mission** **Closed** **02/13/2012** **02/13/2012** **02/16/2012** **Potentially** ☐

From: Webcor Construction LP Joanne Filipas **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Ref RFI T-0067 and T-0067.1

Please provide the monitoring information from 3/23/2011 through 11/01/2011 as agreed to in response to RFI T-0067.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger - ARUP Response: Arup has provided the TJPA, via the Architect, the reports and photographs documenting our visits which have been made at the request of the TJPA. The Contractor's request will be addressed by the TJPA.

Per Jack Adams of Turner Construction:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Contractor is directed to fulfill their contractual obligations and perform the work described in Specification Section 01 15 40 PROTECTION OF PROPERTY for all buildings adjacent to the Project.

Contractor will coordinate the Joint Survey to establish authenticity of claims by coordinating access and access dates with TJPA Representatives (Singer Associates).

T-0068 **BSE - Soil Encountered During Installation of Pile Removal Instrumentation** **Closed** **03/22/2011** **04/01/2011** **03/25/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

When ARUP was installing their pile removal instrumentation, they recorded the depths of the various soil layers they encountered.

Please provide BBII these depths for the pile extraction work.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Soil log attached.

T-0069 **BSE - Revised Shoring Wall Layout Clarification** **Closed** **03/23/2011** **04/02/2011** **03/28/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

BBII believes there is an issue with some of the information provided regarding the revised shoring wall layout.

The following information was provided on drawing SKGT-0001-R1:

- The (x, y) distances of the intersection of the LOL's of segments X1-1 and R2-1 (Point P on attached sketch) from the intersection of 1-line and J-line: (x, y) = (73'-2

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

The dimensions to the corner of the LOL where segment X1-1 and R2-1 meet have been revised.

See the attached SKGT-0001-R2.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

1/4", 166'-4").
- The (x, y) distances of the radial center of segment R2-1 (Point C on attached sketch) from the intersection of 1-line and J-line: (x, y) = (490'-7 1/4", 640'-10 1/4").
 The radius of the LOL of segment R2-1 as 633'-6".

The distance between the point P and point C can be calculated with the above information:
 ΔX = 490'-7¼" minus 73'-2¼" = 417'-5" = 417.417
 ΔY = 640'-10¼" minus 166'-4" = 474'-6¼" = 474.521
 D = (ΔX2 + ΔY2)1/2 = (417.4172 + 474.5212)1/2 = 632.053'

Using the distances provided on SKGT-0001-R1 gives a distance of 632.053' between point P and C. This distance must be 633'-6" because it lies along segment R2-1 and the radius of the arc is given. There must be an error in either the radius or one of the other given dimensions. BBII requests an expedited response as this information is critical to our work.

T-0070 **BSE - Excavation Permit for Pre-trenching in the Public Right of Way** **Closed** **03/24/2011** **04/04/2011** **03/25/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Transbay PMPC Alfred Lau

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 01 14 10 and attached sheet

BBII would like to confirm the following:
- BBII is responsible for applying for Excavation Permits from the San Francisco Department of Public Works for all of the pre-trench excavations in the public right-of-way.
- Per Specification Section 01 14 10 Appendix (attached), TJPA will compensate BBII for the excavation permit costs.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For pre-trenching work, Contractor is expected to acquire excavation permit from DPW. Permit fee is reimbursable by TJPA.

In addition to the excavation permit, please note the the pre-trenching activity may need to obtain street space permit from DPW for work in Minna, Natoma, Fremont, Beale, and 1st (fee also reimbursed by TJPA), and Special Traffic Permit (as required) from DPT (or Sustainable Streets Division, SFMTA).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0071	RFI T-0071 - 301 Mission Screen Wall - Waterproofing at South face	Closed	03/25/2011	04/04/2011	04/05/2011	Potentially	☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** URS Corporation David Fyfe

Co-Author:

REQUEST:

Reference: Attached letter

Please see the attached letter dated March 16, 2011 by Erik Liu of Transworld.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please clarify this RFI.

It is not clear what information/clarification (if any) is being requested, nor is it clear if a specific recommendation is being proposed/submitted for acceptance.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0072	BSE - Concrete Sidewalk and SD Removal in Zone 4	Closed	03/30/2011	04/09/2011	04/11/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference attached photos showing concrete sidewalk and sewer manhole in Zone 4, adjacent to 301 Mission building

The sidewalk and sewer manhole (as seen in the photos) is not in the BSE contract work and will need to be removed prior to pre-trenching. BBI is scheduled to start their pre-trenching activities on 04/11/2011.

Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Demolition Drawings D-1014, D1060, D-1063, D-1072, D1076, D-1202, D-1206 , D-1215 define extent of demolition contract.

Refer to Contract and BSE Drawings D-0001 and D1001 Notes for BSE Demolition scope.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0073	BSE - Request for Response Spectra	Closed	03/30/2011	04/09/2011	04/07/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 01 53 13

During a meeting with the San Francisco DBI & DPW, it was expressed that BBII must use response spectra generated by ARUP in the design of the temporary bridges. It was also noted that if the bridges are going to be in place for over 5 years, the design must be for a permanent structure and the specified ground motion may not be suitable. Therefore, BBII requests response spectra

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

This request needs to be discussed in more detail. We will provide this in time for Tuesday's meeting.

Adamson Comment:

The meeting referenced will be held on April 12, 2011.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

for a ground motion with a 10% probability of exceedence in 50 years as specified, as well as for a ground motion with a 7.5% probability of exceedence in 75 years.

The purpose of delivering the information in the meeting is to confirm that the Contractor and Arup have a common understanding of the requested information and the data being transmitted.

T-0073.1 **BSE - Request for Response Spectra** **Closed** **03/30/2011** **04/09/2011** **04/14/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Response to RFI#T-0073

During a meeting with the San Francisco DBI & DPW, it was expressed that BBII must use response spectra generated by ARUP in the design of the temporary bridges. It was also noted that if the bridges are going to be in place for over 5 years, the design must be for a permanent structure and the specified ground motion may not be suitable. Therefore, BBII requests response spectra for a ground motion with a 10% probability of exceedence in 50 years as specified, as well as for a ground motion with a 7.5% probability of exceedence in 75 years.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Attached are:

1. Arup Amec (2010) report Tables 3-3(bedrock), 3-7a (base of structure West end of box), 3-7b (base of structure East end of box), 3-9 (ratio vertical to horizontal spectral acceleration ratios) and Table 3-4 giving scale factors for near-fault effects. Note that these spectra exclude structural interaction effects and do not include the progressive softening effects that will occur progressively in the Old Bay Clay.

2. Output from LS Dyna dynamic analyses of the temporary (1 in 100 year return period) condition at 301 Mission, adjacent Fremont Street abutment, using the Kobe bedrock and far-field motions to generate the horizontal acceleration spectrum at the top of the shoring wall. This produces increased spectral accelerations at the fundamental period (understood to be 0.8s) of the Contractor's bridge structure.

Arup recommends that a meeting be held to review and discuss these after the Contractor's engineer has examined them.

T-0074 **301 Mission Wall - Nelson Stud and Stirrup Locations** **Closed** **04/01/2011** **04/11/2011** **04/01/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** URS Corporation David Fyfe

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference: RFI T-0027

Per field conversation, please confirm that it is acceptable to install/weld nelson studs at 9" on center at locations in front of the vault intrusions into the concrete stem wall, where the #8 size dowels are also spaced at 9" on center, per RFI T-0027. The Nelson Stud spacing will match dowel embeddment locations. This spacing also facilitates the installation of rebar stirrups and provides two tie points, one being the dowel, and the other the nelson stud.

This work is currently ongoing and immediate confirmation is requested. Please confirm this layout is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Industry standard practice is to use miscellaneous added tie rebar (e.g. #3 or #4 bar) to provide for requirements to tie reinforcement bars as required. This RFI is a request to change spacing of nelson stud bars from 12" o.c. to 9" o.c. (where #8 dowels are spaced at 9" o.c.) in lieu of use of added tie bars.

We note this request is for convenience of the Contractor and on this basis take no exception to reducing the spacing of the nelson stud bars from 12" o.c. to 9" o.c. (where #8 dowels are spaced at 9" o.c.). Accordingly, no change in contract and/or extension in schedule will be provided to accommodate this Contractor request. All impacts including cost and schedule associated with reducing spacing of nelson stud bars shall be borne solely by the Contractor.

David Fyfe, 04/01/2011

No CR will be issued for work associated with the change in nelson stud spacing from 12" o.c. to 9" o.c. (where #8 dowels are spaced at 9" o.c.).

Kevin Chiu, 04/01/2011

T-0075	**BSE - Specification Section 32 12 17 and 32 12 18**	**Closed**	**04/04/2011**	**04/14/2011**	**04/05/2011**	**Potentially**	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Transbay PMPC Alfred Lau

Co-Author:

REQUEST:

We noticed that the Specification 32 12 17 at the bid has been revised to 32 12 18 in the IFC Document.
1. Please confirm that the content of the specification "STREET EXCAVATION AND RESTORATION" was unchanged between pre-bid and post-bid.
2. Please confirm that the Trade Subcontractor shall continue to use the Specification Number 32 12 18 and TJPA shall revise the Table of Contents and other specification sections referring to "32 12 17."

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Confirmed. Street Excavation and Restoration specification was issued as 32 12 17 in the IFB set, and issued as 32 12 18 to avoid duplication with the Pavement Restoration specification for the Utilities trade packages.

2. Confirmed. As stated above, 32 12 17 is for Pavement Restoration section for the Utilities trade packages, and is not applicable for TG03 Work.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0076	BSE - Footing and Pile Removal at Bent 59 - 61	Closed	04/04/2011	04/14/2011	04/11/2011	Potentially	☐

From: Webcor Construction LP — Nhi Tran
To: Turner Construction Compan — Daphne Faulkner
Answered By: Turner Construction Comp — Jack Adams
Co-Author: Balfour Beatty Infrastructure, Inc. — Ural Yal

REQUEST:

Reference Sheet D-1072, D-1030, D-1046, and D-5103 and Spec Section 01 35 65

Please advise the following as discussed with BBII on 03-28-2011 have been completed per the Demolition Contract:
- Bent 59-61 - Removal of columns, footings and timber piles as required to complete 4'x4' x13' excavation below grade complete and backfilled. (Refer to drawings D-1072, D-1030, D-1046).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Demolition of both Bent 59 and 61 was completed per Demolition Contract Drawing D-1046 Rev.0 Dated 01/04/10 and Drawing CL-17456 Rev.1 dated 8/10/09.

Bent footings were demolished to the minimum 3 feet below grade per drawing D-1046 and applicable notes. Locations of these Utility Pole Foundations were determined by SFMTA (MUNI) and BLHP (Street Lighting).

The three (3) locations total for the new Utility Pole Foundations had the bent footings removed and were excavated to a depth of 13' (+/-). Wood piles were not "pulled." Pile removal consisted of removing the top of pile as required to install the pole foundations to depth.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0077	BSE - Monitoring Plans and Data for Zone 4 and Lot N	Closed	04/04/2011	04/14/2011	04/11/2011	Potentially	☐

From: Webcor Construction LP — Nhi Tran
To: Turner Construction Compan — Daphne Faulkner
Answered By: Turner Construction Comp — Jack Adams
Co-Author: Balfour Beatty Infrastructure, Inc. — Ural Yal

REQUEST:

Reference Specification Section 01 35 65

As discussed at the site walk through meeting on 03-28-2011 with BBII, BBII requests a copy of the demolition contract monitoring plan and any data in relation to demolition contract mitigation monitoring of Lot N and Zone 4.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Project "110 - Existing Terminal Building & Ramps Project" in Constructware contains the following submittals with the monitoring data requested-

1. 011540-02.0 Pre-Construction Survey - 181 Fremont St
2. 011540-04.0 Pre-Construction Survey - 199 Fremont St

Note: 301 Mission did not provide the demo contactor access therefore data is not available for this property.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0078	BSE - Timber Piles Not Yet Surveyed by EBI	Closed	04/04/2011	04/14/2011	04/12/2011	Potentially	☐

From: Webcor Construction LP — Nhi Tran
To: Turner Construction Compan — Daphne Faulkner
Answered By: Turner Construction Comp — Jack Adams
Co-Author: Balfour Beatty Infrastructure, Inc. — Ural Yal

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Reference attached photos and sketch

While BBII was excavating the trial pile extraction area and exposing the timber piles on 03/31/11, piles that were not surveyed by EBI were discovered on the eastern side of the TPE area close to pile 215053. Please advise on how to proceed.

Demolition Contractor exposed tops of wooden piles as part of demolition and was not required to survey wooden piles.

BBII should follow contract Spec 02-41-19 Pile Removal Para 1.4 and provide existing timber pile documentation.

Each pile over contract quantity will be reimbursed as force account (unless parties can agree on a unit rate) in accord with CCO no. T-001 Rev 2 dated 4/8/11.

T-0079 **BSE - Existing Street Light Footing Locations** **Closed** **04/04/2011** **04/14/2011** **04/11/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 02 41 01

As discussed at the site walk through meeting 03-28-2011 with BBII, the pre-existing street light poles were relocated per demo contract. BBII was told the foundations and timber piles for the pre-existing street lights have not been removed.
Please provide BBII with as-built drawings indicating the pre-existing street light locations. Pre-existing streetlight foundations will need to be removed before CDSM wall installation, if a conflict is identified.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Spec 02-41-00 is the Spec for Demolition Contractor and Demolition Drawing D-1084 scopes the Lighting Removal and Replacement Plan.

All Pre-existing street lights scoped in the Demolition Contract Drawings were demolished and removed. There are no pre-existing lights, street light foundations or OCS pole foundations remaining installed that were contracted for demolition by Demolition Contractor.

The (3) three Light Poles and Light Pole Foundations located at Fremont St. per Demolition Drawing D-1084 are on "Portable Foundations" (versus poured concrete foundations).

The (3) three Light Poles and Light Pole Foundations located on First St. per Demolition Drawing D-1084 are on poured underground foundations anchored to basement floor.

This is less scope for BSE Contractor who will not have to disconnect and demolish pole foundations that were located in the Frmont St. excavations. Locations of these Portable Light Poles at Fremont and

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

underground foundation Light/OCS Poles on First St. were determined by SFMTA (MUNI) and BLHP (Street Lighting).

T-0080 **BSE - Additional Timber Piles Not Surveyed by EBI** **Closed** **04/04/2011** **04/14/2011** **04/12/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI#T-0078 and attached photos and sketch

While BBII was excavating the trial pile extraction area and exposing the timber piles on 04/01/2011, piles that were not surveyed by EBI were discovered on the southern side of the TPE area close to piles 215044, 215043 and in the centre of the TPE area at 215054, as shown in the attached drawing. The pile next to 215054 was extracted due to its proximity to 215054. A total of 7 additional piles have now been discovered to date. Please advise BBII on how to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

BBII should follow contract Spec 02-41-19 Pile Removal Para 1.4 and provide existing timber pile documentation.

Each pile over contract quantity will be reimbursed as force account (unless parties can agree on a unit rate) in accord with CCO no. T-001 Rev 2 dated 4/8/11.

T-0081 **BSE - Revised Shoring Wall Alignment Dimension** **Closed** **04/05/2011** **04/15/2011** **04/11/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference attached sheet SKGT-0001-R1

The dimension from gridline J to the intersection of wall segments 1-1 and X1-1 was not updated for the revised shoring wall alignment - see attached drawing for reference. Please provide the correct dimension.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

The dimensions have been revised. See the attached SKGT-0001-R3.

T-0082 **BSE - Hazardous Material Removed From Site** **Closed** **04/05/2011** **04/15/2011** **04/11/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference Specification Section 00 03 35

Please confirm that all hazardous material has been removed from site per the extent of demolition contract drawings for Zone 4 and Lot N.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Above ground structures and foundations were demolished at Parcel N, including footings to minus 3 feet. Demolition contract Hazardous materials scope was completed including 133 Beale st. Bar and Grille.

Refer to Demolition Drawings D-1011, D-1012, D-1013, D-1029, D1030, D1044-1046 and D-1252 for extent of removal of structures and hazardous material.

T-0083 **BSE - Existing Utilities Decommissioning Lot N and Zone 4** **Closed** **04/05/2011** **04/15/2011** **04/13/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet D-2230 and Specification Section 02 41 01

Please provide as built drawings for all decommissioned utilities in Lot N and Zone 4 to BBII.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Parcel N: Exisiting Utilities were decommissioned (e.g. cut and cap) in accord with Contract Drawings which only is 133 Beale st. Bar and Grille per D-1252.

Parcel D Zone 4 : Exisiting Utilities were decommissioned (e.g. cut and cap) in accord with Contract Demolition Drawings D-1202, D-1203, D-1206, D-1207, D-1210, D-1215

However: Two (2) locations of Existing Combined Sewer Connections ("SEWER") shown on D-1202 and D-1206 were as left unplugged to assist BBII with Dewatering discharge pipes. Locations are identified as follows: "3/D-1210 SEWER" on sheets D-1202, D-1206 and "-/- SEWER" on sheets D-1202, D-1206 (NE Corner of Lot D; no detail number provided).

Demolition Contractor has not completed their scope of Contract and therefore has not submiited their final as-built drawings in Constructware. However, they are available in Demolition Contractor's trailer office for your viewing.

T-0083.1 **BSE - Existing Utilities Decommissioning Lot N and Zone 4** **Closed** **04/05/2011** **04/15/2011** **05/24/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Response to RFI#T-0083, Sheet D-2230 and Specification Section 02 41 01

The following response of RFI T-0083 is not acceptable and will become out of control of the RFI documentation process: "they are available in Demolition Contractor's trailer office for your viewing."

Please provide BBI with as built drawings for all utilities which has been decommissioned to date in Lot N and Zone 4 to BBII.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Demolition Contractor has no Utility Demolition scope at Parcel N.

Demolition Contractor has completed Utility Demolition scope at Parcel D (Zone 4) per contract drawings except where agreed by BBIi.

These as-built Utility Demolition Drawings are currently under review by the Engineer of Record and will be issued to Webcor/Obayashi for their use after this review is complete.

T-0084 **BSE - Existing Storm Drains Decommissioning in Lot N** **Closed** **04/05/2011** **04/15/2011** **04/11/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet D-2230 and Specification Section 02 41 01

There are 2 existing storm drain basins in Lot N not yet decommissioned. Please provide BBII the status of decommissioning or modification of these lines.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Parcel N: Existing Utilities were decommissioned (e.g. cut and cap) in accord with Contract Drawings which only is 133 Beale St. Bar and Grille per D-1252.

There are two Storm Drain outlets on parcel N and their status' are unknown because they are outside the scope of the demolition contractor. Unforeseen Catch Basin at Beale Street Bar & Grill is identified under Demolition Contractor RFI -00058. These have been observed draining the water from parcel N during the rainy season.

T-0084.1 **BSE - Existing Storm Drains Decommissioning in Lot N** **Closed** **04/21/2011** **05/01/2011** **05/02/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI#T-0084, Drawing Sheet D-2230, and Specification Section 02 41 01

RFI response T-0084 has not provided clear direction for

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

As stated in response to RFI T-0084 there are two Storm Drain outlets on Parcel N and their status' are unknown because they are outside the scope of the demolition contractor. Unforeseen Catch Basin at

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

decommissioning these SD lines. The drawings indicate that the SD drain flows towards Beale Street and will conflict with the CDSM wall. Please advise on status for decommissioning the above SD lines.

Beale Street Bar & Grill is identified under Demolition Contractor RFI -00058.

This is outside the scope of the Demolition and the BSE contract. Webcor-Obayashi RUP relocation of Utilities Project Manager will be contacted for reroute or decommissioning these Parcel N parking lot storm drain lines.

T-0085 **BSE - Existing Site Conditions Lot N** **Closed** **04/05/2011** **04/15/2011** **04/11/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 01 15 40

Prior to demolition work Lot N surface consisted of asphalt paving, however a majority of the Lot is not currently paved. BBII assumes that the lot will be restored to its original condition. Please confirm

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Demolition Contractor was not required to restore areas specified for demolition with asphalt paving (areas such as Parcel N). This was not specified for in the demolition Contract drawings or Spec. The demolition contractor is required to backfill after removal of below grade structures with recycled crushed/processed demolition concrete. For Parcel N - Refer to drawing D-1029 Note 9.

T-0086 **BSE - Clean Debris From Adjacent Buildings To Lot N and Zone 4** **Closed** **04/05/2011** **04/15/2011** **04/11/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 01 15 40

Please confirm that demolition contractor has satisfied the requirement to clean all dust and debris generated by demolition contract to the satisfaction of the adjacent building owners, and BBII will only be responsible for cleaning dust and debris generated by BBII during its own operations, after the turnover of these are completed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed. Demolition contractor has satisfied the requirement to clean all dust and debris generated by demolition contract to the satisfaction of the adjacent building owners to date. This was confirmed through conversation with both EBi and Singer Associates.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0087	BSE - Zone 4 Gate	Closed	04/05/2011	04/15/2011	04/11/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Demo Contract Drawings

Per note 5 on drawing D-1006 of the demolition contract, each discreet fenced area shall have a minimum of two 16ft gates at the conclusion of demolition work. Currently, zone 4 only has one gate in place. BBII requests an additional gate be provided on the Fremont St. side of zone 4. BBII is available to meet and coordinate an ideal location.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Demolition Contractor second 16 foot gate eliminated due to Fremont Shoring wall. Demolition contractor used alternate means and methods for truck traffic to-from parcel D Zone 4.

That said, Demolition contractor has offered gate credit which could be used to install a 16 wide gate either at SW corner near 181 Fremont St. or on the Beale St. fence line. However- Demolition contractor would not be responsible for curb cut, removal of parking meters or other ancillary scope if Beale St. gate is chosen - that would be the responsibility of BSE Contractor. BBII can use/modify and relocate barrier fence and gates as needed per your contract. A field coordination meeting after the Monday 4/11/11 Street Coordination meeting is recommended.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0088	BSE - Temporary Shoring Wall and Buttress Conflict	Closed	04/06/2011	04/16/2011	04/08/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet GT-2201 and Specification Section 31 63 29

The temporary shoring wall installed under the demolition contract was moved East away from Fremont St. to avoid an unknown existing concrete wall. The as-built alignment of the wall now falls along the edge of the third column (C) of buttress shafts. In an effort to avoid conflicts with column C shafts generated by the revised temporary shoring wall alignment, BBII suggests that the buttress formation be moved 12'' East.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

This issue was discussed at yesterday's (4/6/11) BSE meeting. The information which will be included in the Contractor's drilled shaft work plan is needed by Arup to evaluate the feasibility of the proposed shift and to consider other options.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0088.1	BSE - Temporary Shoring Wall and Buttress Conflict	Closed	04/06/2011	04/16/2011	04/20/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

The response for RFI #T-0088 was not an answer to the question
Please provide an appropriate direction to start preparing the submittal and the work as soon as possible.

Reference Sheet GT-2201 and Specification Section 31 63 29

The temporary shoring wall installed under the demolition contract was moved East away from Fremont St. to avoid an unknown existing concrete wall. The as-built alignment of the wall now falls along the edge of the third column (C) of buttress shafts. In an effort to avoid conflicts with column C shafts generated by the revised temporary shoring wall alignment, BBII suggests that the buttress formation be moved 12'' East.

The contractor may relocate the entire buttress structure up to 12 inches east of the design location in order to clear any conflict with the Fremont Street shoring wall. Contractor is requested to identify the new layout and any impacts prior to start of buttress construction.

T-0088.2 **BSE - Temporary shoring wall and buttress conflict** **Closed** **04/06/2011** **04/27/2011** **04/25/2011** **Potentially** ☐

From: Webcor/Obayashi Joint Venture Nhi Tran
Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

To: Turner Construction Compan Daphne Faulkner

Answered By: Adamson Associates, Inc George Metzger

REQUEST:

The response for RFI #T-0088.1 was not an acceptable answer to the question.

Please provide exact revised layout as required.

The Buttresses have exact Coordinate Locations to define the layout, as shown on GT-2201.

The existing coordinates must be changed to reflect the new layout the TJPA desires.

History

Information from RFI#T-0088.1

The response for RFI #T-0088 was not an answer to the question
Please provide an appropriate direction to start preparing

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

The Contractor's cover sheet describes this as RFI 0088.2, but the correct number is 0088.3.

See attached SKGT-0002.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

the submittal and the work as soon as possible.
Answered By: George Metzger
Answered On: 20-Apr-2011
Answer:
The contractor may relocate the entire buttress structure up to 12 inches east of the design location in order to clear any conflict with the Fremont Street shoring wall. Contractor is requested to identify the new layout and any impacts prior to start of buttress construction.

Information from RFI#T-0088

Reference Sheet GT-2201 and Specification Section 31 63 29

The temporary shoring wall installed under the demolition contract was moved East away from Fremont St. to avoid an unknown existing concrete wall. The as-built alignment of the wall now falls along the edge of the third column (C) of buttress shafts. In an effort to avoid conflicts with column C shafts generated by the revised temporary shoring wall alignment, BBII suggests that the buttress formation be moved 12" East.
Suggestion
Cost Impact Potentially Cost Amount
Schedule Impact Potentially Days
Answered By George Metzger
Date Answered 2011-04-20
Answer The contractor may relocate the entire buttress structure up to 12 inches east of the design location in order to clear any conflict with the Fremont Street shoring wall. Contractor is requested to identify the new layout and any impacts prior to start of buttress construction.

T-0088.3 **BSE - Temporary shoring wall and buttress conflict** **Closed** **04/06/2011** **04/27/2011** **04/25/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST: **SUGGESTION:** **ANSWER:** **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

The response for RFI #T-0088.1 was not an acceptable answer to the question.

Please provide exact revised layout as required.

The Buttresses have exact Coordinate Locations to define the layout, as shown on GT-2201.

The existing coordinates must be changed to reflect the new layout the TJPA desires.

History

Information from RFI#T-0088.1

The response for RFI #T-0088 was not an answer to the question
Please provide an appropriate direction to start preparing the submittal and the work as soon as possible.
Answered By: George Metzger
Answered On: 20-Apr-2011
Answer:
The contractor may relocate the entire buttress structure up to 12 inches east of the design location in order to clear any conflict with the Fremont Street shoring wall. Contractor is requested to identify the new layout and any impacts prior to start of buttress construction.

Information from RFI#T-0088

Reference Sheet GT-2201 and Specification Section 31 63 29

The temporary shoring wall installed under the demolition contract was moved East away from Fremont St. to avoid an unknown existing concrete wall. The as-built alignment of the wall now falls along the edge of the third column (C) of buttress shafts. In an effort to avoid conflicts with column C shafts generated by the revised temporary shoring wall alignment, BBII suggests that the buttress formation be moved 12'' East.
Suggestion
Cost Impact Potentially Cost Amount

ARUP Response:

The Contractor's cover sheet describes this as RFI 0088.2, but the correct number is 0088.3.

See attached SKGT-0002.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Schedule Impact Potentially Days
Answered By George Metzger
Date Answered 2011-04-20
Answer The contractor may relocate the entire buttress structure up to 12 inches east of the design location in order to clear any conflict with the Fremont Street shoring wall. Contractor is requested to identify the new layout and any impacts prior to start of buttress construction.

T-0089 **BSE - Existing Asphalt and Concrete Removed Zone 4** **Closed** **04/06/2011** **04/16/2011** **04/11/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet D-1001 and Demo Contract Dwgs D-1060, D-1072 and attached photos

Please see attached photos showing asphalt pavement at the entrance to zone 4 on the northeast corner. The referenced asphalt driveway is not in the BSE contract work and will need to be removed. Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The asphalt pavement at the entrance to zone 4 on the northeast corner is not in demolition contract scope. Contract scope included concrete columns, footings and mat slab to be removed as defined in contract drawings. Refer to demolition drawing D-1058 for best depiction of extent of demolition.

Refer also to D-1014, D-1030, D-1058, D-1060, D-1063 and D-1072

T-0090 **BSE - Timber Piles Not Surveyed By EBI 04/04/11** **Closed** **04/06/2011** **04/16/2011** **04/13/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference attached photos and sketch

While BBII were excavating the trial pile extraction area and exposing the timber piles on 04/04/2011, piles that were not surveyed by EBI were discovered on the eastern side of the TPE area close to pile 215053 and in the western side of the TPE area at 215055 as shown in the attached drawing. The pile next to 215055 was extracted due to its proximity to 215055. A total of 10 additional piles

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

BBII should follow contract Spec 02-41-19 Pile Removal Para 1.4 and provide existing timber pile documentation.

Each pile over contract quantity will be reimbursed as force account (unless parties can agree on a unit rate) in accord with CCO no. T-001 Rev 2 dated 4/8/11.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

have now been discovered to date. Please advise on how to proceed.

T-0091 **Reciept of Construction Documents** **Closed** **04/06/2011** **04/16/2011** **04/08/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Transbay PMPC Alfred Lau

Co-Author:

REQUEST:

Per the 110325_MSTR_CD_Work_Plan schedule, transmitted to Webcor/Obayashi on March 28, 2011 and discussed in the OAC Meeting on April 6, 2011; confirm the following dates should be implemented in the next monthly schedule update:

1. Webcor/Obayashi will receive the 90% CD documents on August 24, 2011

2. Webcor/Obayashi will receive the 100% CD documents on December 2, 2011

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirm. These are the current scheduled dates provided by the Design Team.

T-0092 **BSE - Timber Piles Not Surveyed By EBI 4/5/11** **Closed** **04/06/2011** **04/16/2011** **04/13/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference attached photos and sketch

While BBII was excavating the trial pile extraction area and exposing the timber piles on 4/5/11, two further piles that were not surveyed by EBI were discovered on the southern side of the TPE area close to piles 215043 and 215044. Following this, four additional piles to the north west of the area adjacent to 215067 and 215068 as shown in the attached drawing were discovered. A total of 16 additional piles have now been discovered to date. Please advise on how to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

BBII should follow contract Spec 02-41-19 Pile Removal Para 1.4 and provide existing timber pile documentation.

Each pile over contract quantity will be reimbursed as force account (unless parties can agree on a unit rate) in accord with CCO no. T-001 Rev 2 dated 4/8/11.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0093	BSE - CDSM Wall Segment 35-1 Spacing Confirmation	Closed	04/07/2011	04/17/2011	04/08/2011	Potentially	☐

From: Webcor Construction LP — Nhi Tran
To: Turner Construction Compan — Daphne Faulkner
Answered By: Adamson Associates, Inc — George Metzger
Co-Author: Balfour Beatty Infrastructure, Inc. — Ural Yal

REQUEST:

Reference Sheets GT-2103, GT-5101 and Specification Section 31 56 13

In drawing GT-5101, the spacing of all shoring wall beams is specified as 4'-0". This is reflected in the drawings for all sections of the CDSM shoring wall except the east wall (Wall Segment 35-1). The beam spacing of this Segment (measured in AutoCad) is 3.94728'. This creates a dimension bust of approximately 2.4' over the length of the wall and significant problems based on the auger spacing. Please verify the spacing of beams in Wall Segment 35-1.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

The spacing of the soldier piles shall be the stated dimension in the documents (4'-0", unless otherwise noted). The Contractor is reminded to not scale the drawings. Additionaly, the AutoCad dwg files are not part of the contract documents and the Contractor is not to obtain dimensions off the electronic files.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0094	BSE - Timber Piles Not Surveyed By EBI 04-06-11	Closed	04/08/2011	04/18/2011	04/13/2011	Potentially	☐

From: Webcor Construction LP — Nhi Tran
To: Turner Construction Compan — Daphne Faulkner
Answered By: Turner Construction Comp — Jack Adams
Co-Author: Balfour Beatty Infrastructure, Inc. — Ural Yal

REQUEST:

Reference attached photo and sketch

While BBII were excavating the trial pile extraction area and exposing the timber piles on 4/6/11, an additional pile was found close to 215068 as shown on the attached drawing and photos. A total of 17 additional piles have now been discovered to date. Please advise on how to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

BBII should follow contract Spec 02-41-19 Pile Removal Para 1.4 and provide existing timber pile documentation.

Each pile over contract quantity will be reimbursed as force account (unless parties can agree on a unit rate) in accord with CCO no. T-001 Rev 2 dated 4/8/11.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0095	BSE - Zone 1 CDSM Test Section Relocation	Closed	04/11/2011	04/21/2011	04/14/2011	Potentially	☐

From: Webcor Construction LP — Nhi Tran
To: Turner Construction Compan — Daphne Faulkner
Answered By: Adamson Associates, Inc — George Metzger
Co-Author: Balfour Beatty Infrastructure, Inc. — Ural Yal

REQUEST:

Reference Sheet GT-2101, Specification Section 31 56 13 and attached drawing

Per discussion with ARUP at the Wednesday April 06, 2011 Design Coordination Meeting, the Engineer was willing to consider relocating the Zone 1 CDSM test panel as shown on Dwg. GT-2101 from Zone 1 and into Zone 2. BBII and DND Construction are therefore proposing to

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:
This is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

relocate the Zone 1 CDSM test panel to the location shown on the attached drawing, near gridline 10. Please confirm.

T-0096 **BSE - Old Existing Footing Along 301 Mission in Zone 4** **Closed** **04/11/2011** **04/21/2011** **04/12/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 02 41 01

During Pre-Trench BBII found an existing footing along the Low Rise 301 Mission wall. The footing consists of bricks and concrete. It also has a perpendicular footing that come out from footing that is parallel to the 301 Mission building wall. BBII has exposed a 20 to 30ft section of this footing (approximately on Grid Line "A" between 30 and 32).

Please advise BBII as to how to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per Contract Spec. 31-56-13 Shoring wall by CDSM Method Para 3.2 Pretrenching and removal of Obstructions, Contractor is to " remove any obstructions that might be encountered along the alignment of the walls. The depth and width of trench shall be that required to remove the obsructions from the path of the shoring wall."

The Archaeologist was contacted and viewed the exposed section of wall and brick debris on 4/11/11. Further archeological investigation will folllow as pre-trenching continues and areas are exposed - Ref: Spec. 00-08-12 for Archaeological conditions in Zone 4.

Demolition of underground obstructions shall be per Spec 02-41-01 and Demolition Debris shall be handled in accord with Spec. 01-74-00.

T-0096.1 **BSE - Old Existing Footing Along 301 Mission in Zone 4** **Closed** **04/20/2011** **04/30/2011** **05/02/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference response to RFI T-0096 and Specification Section 02 41 01

BBII interprets the Response to RFI T-0096 (BBI 0067) as TJPA's approval for the removal of this unforeseen structure. Please confirm.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Construction means and methods are the contractor's responsibility exclusively. RFI response are not authorization of any change in contract sum or contract time.

We take no exception to above method for the

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

BBII proposes to follow the method outlined below for the removal of this unforeseen structure. Please confirm in writing that the removal of this unforeseen structure is approved and that provided that it is performed with the method outlined below, no damage to adjacent buildings will occur.

Pre Trench Obstruction Removal Method

Location:
Parallel along the 301 Mission St. Low Rise (Grid line A, approximately between lines 29 & 34).

Obstructions:
The footing consists of bricks and concrete. It also has a perpendicular footing that comes out from the footing that is parallel to the 301 Mission building wall.

Method:
BBII will first expose the obstructions and use an excavator mounted and hand held jackhammer to demolish the large masses into smaller more manageable sizes. An excavator with a bucket will then clear the debris, until the debris is removed from the area of the CDSM Wall location. BBII will chase the obstruction as deep as it goes in order to remove all debris necessary for a clean location to construct the CDSM Wall. Due to the unknown depth of the obstruction, at BBII discretion Sheet Piles or trench boxes may be used to support trench walls. All OSHA approved, safe practices will be used by BBII employees during the Demolition.

Additional Details:
As noted in the RFI response, the Archeologist has already examined the site. BBII (W/O) will notify the TJPA if additional structures or items are encountered.

removal of structure. This work will be tracked in accord with CR T-0010.

T-0097 **BSE - Protective Material Along 301 Mission St Wall** **Closed** **04/20/2011** **04/30/2011** **05/06/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Daphne Faulkner

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference attached photos

BBII has encountered a drainage material along the 301 Mission wall while pretrenching. During pretrenching, this drainage material has been removed because it was not affixed to the structure. The wall does not have any exterior waterproofing system.

Upon installation of the CDSM shoring system, the cementious material will be against this wall. The existing wall is a 5' deep cantilevered beam on the backside of the existing garage shaft for 301 Mission. Does TJPA plan to install any waterproofing along this wall that can tolerate the installation of a CDSM shoring system?

Please advise BBII of the TJPA's plan for waterproofing of this building.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Drainage material encountered is to be removed from the 301 Mission Wall as it was a temporary measure installed at the time of 301 Mission building construction. No waterproofing is required at this location. See attached email response from R. Rothenburger at PMPC.

04/19/2011 - George Metzger

TJPA to provide direction to GC.

T-0098 **301 Mission Wall - Tube Steel Alignment** **Closed** **04/12/2011** **04/22/2011** **04/21/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Transbay PMPC Alfred Lau

Co-Author:

REQUEST:

Reference: B/S-5000 and D/A-6000

Detail B on sheet S-5000 shows the 10" tube steel centered on the 14" concrete wall below, however this is in conflict with D/A-6000 which shows the steel tube off set from the center of the wall. Please confirm per the 301 Mission subcontractor meeting conversation yesterday, that the tube steel is to be centered on the center of the wall as dimensioned in B/S-5000.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

"Confirmed. The 10"x10"x5/8" HSS section shall be erected on the center line of the concrete wall as dimensioned in Section B on S-5000."

T-0099 **BSE - Depth of Fremont Street Shoring Wall in Zone 4** **Closed** **04/12/2011** **04/22/2011** **04/14/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** URS Corporation David Fyfe

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet D-2203 and attached as-built, photos,

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The temporary Fremont St. shoring wall was

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

and document
CPM Activity Impacted - SX-BB42640

While excavating adjacent to the existing Fremont street shoring wall as shown on contract drawing D-2203, BBII has found the existing shoring wall's height to be approximately 2' shorter than the 14 feet depth indicated in the as-builts (attached). This wall does not provide adequate shoring height for BBII to excavate and expose the timber piles prior to extraction. (See attached photo for illustration)

The contract documents D-2203 and pre-bid Q&A response #182 (also attached) indicate this wall would accommodate the buttress area pile removal, however actual existing field conditions do not provide adequate shored depth

Please provide direction.

constructed to support Fremont St. and facilitate removal of Terminal basement slab, walls, and pile caps/footings. The temporary Fremont St. shoring wall was not intended nor constructed to facilitate pile removal activities.
BSE sheet D-2203 only specifies removal of the temporary Fremont St. shoring wall. Sheet D-2203 does not specify nor imply that the temporary Fremont St. shoring wall shall be used or is sufficient to be used for pile removal activities.
Response to QBD 182 was provided to bidders to enable bidders to form a basis for pricing removal of the temporary Fremont St. shoring wall.
If the Contractor is undertaking excavation activities which jeopardize the stability of the Fremont St. roadway/foundation, then Contractor shall take any and all necessary actions to protect Fremont St. roadway/foundation.

T-0100 **BSE - Slurry Wall Along 301 Mission St Garage** **Closed** **04/13/2011** **04/23/2011** **04/18/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI#T-0096, Specification Section 02 41 00, and attached photos

Please reference from RFI#T-0096 (BBI RFI #67): "During Pre Trench BBII found an existing footing along the Low Rise 301 Mission wall. The footing consists of bricks and concrete. It also has a perpendicular footing that come out from footing that is parallel to the 301 Mission building wall. We have exposed a 20 to 30ft section of this footing (Approximately on Grid Line "A" between 30 and 32)."

After the Concrete and Brick Footing was discovered, a very large mass of slurry was discovered in the same area, and continues where the RFI#T-0096 (BBI RFI# 67) Concrete Footing" stopped. ***Please See Attached Photos***

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per Contract Spec. 31-56-13 Shoring wall by CDSM Method Para 3.2 Pretrenching and removal of Obstructions, Contractor is to " remove any obstructions that might be encountered along the alignment of the walls. The depth and width of trench shall be that required to remove the obsructions from the path of the shoring wall."

The Archaeologist was contacted and viewed the exposed section of wall and brick debris on 4/11/11. Further archeological investigation will folllow as pre-trenching continues and areas are exposed - Ref: Spec. 00-08-12 for Archaeological conditions in Zone 4.

Demolition of underground obstructions shall be per

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

This slurry wall seems to continue into the future location of the Pre-Trench, and was not in the contract drawings.

Please Advise BBII as to how to proceed.

Spec 02-41-01 and Demolition Debris shall be handled in accord with Spec. 01-74-00.

T-0100.1 **BSE - Slurry Wall Along 301 Mission St Garage** **Closed** **04/20/2011** **04/30/2011** **05/02/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran
Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

To: Turner Construction Compan Daphne Faulkner
Answered By: Turner Construction Comp Jack Adams

REQUEST:

Reference response to RFI T-0100 and Specification Section 02 41 01

BBII interprets the Response to RFI#T-0100 (BBI 0070) as TJPA's approval for the removal of this unforeseen structure. Please confirm.

BBII proposes to follow the method outlined below for the removal of this unforeseen structure. Please confirm in writing that the removal of this unforeseen structure is approved and that provided that it is performed with the method outlined below, no damage to adjacent buildings will occur.

Pre Trench Obstruction Removal Method

Location:
Parallel along the 301 Mission St. Low Rise (Grid line A, approximately between lines 30 & 34).

Obstructions:
A very large mass of slurry.

Method:
BBII will first expose the obstructions and use an excavator mounted and hand held jackhammer to demolish the large masses into smaller more manageable sizes. An excavator with a bucket will then clear the debris, until the debris is removed from the area of the CDSM Wall location. BBII will chase the obstruction as deep as it goes in order to remove all debris necessary for

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Construction means and methods are the contractor's responsibility exclusively. RFI response are not authorization of any change in contract sum or contract time.

We take no exception to above method for the removal of structure. This work will be tracked in accord with CR T-0010.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

a clean location to construct the CDSM Wall. Due to the unknown depth of the obstruction, at BBII discretion Sheet Piles or trench boxes may be used to support trench walls. All OSHA approved, safe practices will be used by BBII employees during the Demolition.

Additional Details:
As noted in the RFI response, the Archeologist has already examined the site. BBII (W/O) will notify the TJPA if additional structures or items are encountered.

T-0101 **BSE - Pile Extraction Procedure Modification** **Closed** **04/14/2011** **04/24/2011** **04/15/2011** **Potentially** ☐

From: Webcor Construction LP Masashi Kojima **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 02 41 19 and attached response for TG0300-310 Production Extraction Plan

BBII proposes to eliminate the "stroking" of the steel casing right before the CLSM is placed.
Upon removal of the steel casing, BBII proposes to "stroke" the steel casing after the CLSM is placed.
BBII believes the same effect of filling the void will be achieved, and this procedure will help to expedite the Project schedule.
Please kindly review our proposal. Your prompt response is appreciated.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:
This is not acceptable. The proposed procedure does not allow the volume of placed CLSM to be measured after the stroking of the casing.

T-0102 **BSE - Confirm Project Coordinates** **Closed** **04/15/2011** **04/25/2011** **04/19/2011** **Potentially** ☐

From: Webcor Construction LP Masashi Kojima **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Drawings U-0100 and GT-0100

BBII's surveyor, KCA Engineers, has noticed some slight variations in bearings between the Utility drawings and the BSE drawings. Please see the following of KCA's

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response: The Building Grid and bearing has been established to best-fit the numerous constraints on the project. It is coincidental that the street control lines (note, these are not necessarily in the center of the Right-of-Way and should not be construed as

observations and confirm coordinates provided on drawing GT-0100.

Drawings U-0100 has coordinates along the center lines of various streets. The result of those coordinates put a bearing on the center line of Mission Street and Minna Street at North 46° 18 ' 19.6" East and the center line of First Street at North 43° 41 ' 39.0" West. This results in those streets not being at right angles to each other.

Drawings GT-0100 has coordinates on Column Line E. The result of those coordinates puts a bearing of North 46° 18' 09.7" East on the terminal Tills is 00° 00' 10" off from being parallel with Mission and Minna Streets.
Is this correct or should Column Line E be parallel with Mission and Minna Streets?

The numerical column lines are shown at right angles to Column Line E, which gives them a bearing of North 43° 41 ' 50.3" West. It was observed that Column Line 18 appeared to be in almost the same location as the center line of First Street, but First Street has a bearing of North 43° 41 ' 39.0" West which is 00° 00' 11" different than Column Line 18. Is it just a coincidence that the center line and column line are almost exactly in the same location or should something be adjusted to make the two lines identical?

Please advise if the bearings of the terminal should remain or be changed.

Center Lines) are very close, but at slightly different bearings. The building elements are constructed based on the building grid, whereas the utilities and subsequent street level improvements will be constructed based on the street control lines. The Numerical Bearings of the North South Grid lines appear to be correct. A follow-up survey control meeting should take place to ensure the shoring wall layout is performed as intended.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0103	BSE - Existing Concrete Footing Gridline J between Gridline 26.5-30	Closed	04/15/2011	04/25/2011	04/25/2011	Potentially	☐

From: Webcor Construction LP — Masashi Kojima
Co-Author: Balfour Beatty Infrastructure, Inc. — Ural Yal
To: Turner Construction Compan — Daphne Faulkner
Answered By: Turner Construction Comp — Jack Adams

REQUEST:

Reference Drawings D-5103, D-2203 and GT-5104

Please see attached photos showing an unknown concrete structure discovered on the south side of zone 4. This structure is located between gridline 26.5-30 along gridline J. BBII is not aware of the purpose for this

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per Contract Spec. 31-56-13 Shoring wall by CDSM Method Para 3.2 Pretrenching and removal of Obstructions, Contractor is to " remove any obstructions that might be encountered along the alignment of the walls. The depth and width of trench shall be that required to remove the obstructions from

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

structure, or if it has any affect on the stability of the adjacent structures (177/181 Fremont street).

The unknown structure was not present in the BSE contract drawings and is in direct conflict with the CDSM wall alignment, Please advise BBII how to proceed.

the path of the shoring wall."

The Archaeologist was contacted and viewed the exposed section of wall and brick debris on 4/11/11. Further archeological investigation will follow as pretrenching continues and areas are exposed - Ref: Spec. 00-08-12 for Archaeological conditions in Zone 4.

Demolition of underground obstructions shall be per Spec 02-41-01 and Demolition Debris shall be handled in accord with Spec. 01-74-00.

T-0103.1 **BSE - Existing Concrete Footing Gridline J Between Gridline 26.5-30** **Closed** **04/27/2011** **05/07/2011** **05/02/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI#T-0103 and Specification Section 02 41 01

BBII interprets the Response to RFI T-0103 (BBI 0074) as TJPA's approval for the removal of this unforeseen structure. Please confirm.

BBII proposes to follow the method outlined below for the removal of this unforeseen structure. Please confirm in writing that the removal of this unforeseen structure is approved and that provided that it is performed with the method outlined below, no damage to adjacent buildings will occur.

Pre Trench Obstruction Removal Method

Location:
Parallel along the 177/181 Fremont Street (Grid line J, approximately between lines 26.5-30).

Obstructions:
A large concrete structure.

Method:
BBII will first expose the obstructions and use an

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Construction means and methods are the contractor's responsibility exclusively. RFI response are not authorization of any change in contract sum or contract time.

We take no exception to above method for the removal of structure. This work will be tracked in accord with CR T-0010.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

excavator mounted and hand held jackhammer to demolish the large masses into smaller more manageable sizes. An excavator with a bucket will then clear the debris, until the debris is removed from the area of the CDSM Wall location. BBII will chase the obstruction as deep as it goes in order to remove all debris necessary for a clean location to construct the CDSM Wall. Due to the unknown depth of the obstruction, at BBII discretion Sheet Piles or trench boxes may be used to support trench walls. All OSHA approved, safe practices will be used by BBII employees during the Demolition.

Additional Details:
As noted in the RFI response, the Archeologist has already examined the site. BBII (W/O) will notify the TJPA if additional structures or items are encountered.

T-0104 **BSE - Request for Report (PSI for Caltrans)** **Closed** **04/18/2011** **04/28/2011** **04/18/2011** **Potentially** ☐

From: Webcor Construction LP Masashi Kojima **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Transbay PMPC Alfred Lau

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification 01 13 50 and 00 03 35

The Site Mitigation Plan in Spec section 01 13 50 of Volume 1, References the report "PSI for Caltrans, 1999." After looking through the contract documents for the Analytical back-up, BBII, Treadwell & Rollo, and Republic Services, have not been able to find it. It is necessary to have this information to properly dispose of the Hazardous Materials.
To Complete the Profile of the work site, the Disposal facility, Republic Services, BBII need the Lab Data/Analytical Data from the report.
At this time, the lack of information is halting the process of Material Off-Haul.
Please Advise, or supply the Needed Report Information.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Caltrans' Site Investigation Report for SFOBB West Approach, prepared by PSI in 1999 can be assessed from Constructware or from ftp site as below:

ftp://ftp.tjpa.org/Document%20Control/1104168/

Log In Instructions

1. Enter case-sensitive Username (public) and Password (PublicFTP1)

2. Select View\Open FTP Site in Windows Explorer

3. Drag file(s) to your desktop

Please contact PMPC Document Control should there is problem of accessing the information.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0105	BSE - Train Box Beam Sizes	Closed	04/20/2011	05/02/2011	04/22/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference attached sketches and Sheet S1-3201

Drawing S1-3201 provides information on beam sizing in the permanent concrete structure. BBII was recently provided additional structure sections in response to T-0035.1, and a number of the beams appear to have changed in size. Beams at gridlines 18, 26, 34, & 35 should be 5' wide according to schedule A on drawing S1-3201. However, from the section provided at gridline A, these all appear to be sized at 7' wide. The sizes of these beams are critical in determining the final geometry and location of our temporary bridges. BBII acknowledges that the structural drawings are not to be scaled, so please advise if these beams are to be 60" wide as indicated in schedule A, or if they have increased in size to 84" wide.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Thornton Tomasetti Reply:

The concrete beams at gridlines 18, 26, 34, & 35 at Ground Level have increased to 84" wide. The design is "in-progress".

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0106	301 Mission Wall - Connection from Metal Stud to Tube Steel	Closed	04/20/2011	04/30/2011	04/27/2011	Potentially	☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** URS Corporation David Fyfe

Co-Author:

REQUEST:

Reference: E & C/S-5000

Please see E & C/S-5000. Transworld has attempted in their shop to set #10 SMS through the structural tube steel, as per plan. The attempt was unsuccessful, therefore Transworld tried the use of a Hilti X-U fastener into the structural steel. Attached are Hilti spec sheets for the X-U Universal Knurled Shank Fastener as well as a photo showing the X-U fastener through the structural steel. Welding is another option for connection to the tube steel. Please advise how Transworld is to fasten the metal stud to the structural tube steel.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The proposed Hilti X-U fasteners are for interior use only and are not acceptable for use on the 301 Mission exterior screen wall. Welding will damage the structural steel paint and light gauge steel galvanized coating and is not an acceptable means of connection.

To fasten metal stud to structural tube steel contractor may: 1) Use shot pins rated for exterior use (i.e. Hilti X-CR fastener - ESR 1663); or 2) Pre-drill holes and tap stainless steel machine screws.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0107	BSE - Visual Test in Lieu of Formally Testing for Verticality in CSL Tubes	Closed	04/20/2011	04/30/2011	04/22/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Reference RFI#T-0057, Sheet GT-5202, Specification Section 31 63 29, and attached documents
CPM Activity Impacted - Buttress Wall

Below are three cases (A, B, and C) in which formally testing for verticality on CSL tubes, BBII argues would prove to be highly unusual and counter-productive:

A. Specification Section 31.63.29.I.3 states "The contractor shall perform a test to determine verticality of the steel tubes, or drilled holes, that are going to be used for the sonic tests." Balfour Beatty has been advised by a number of testing firms that verticality tests cannot be performed on steel access tubes as well as piles reinforced with steel. Magnetic interference from steel reinforcement and steel tubes will cause the instrument to not function properly. BBII has also been advised by Terracon (please see attached email from Dextra), a reputable CSL testing firm that there are currently no known cases in the US where verticality of CSL tubes in steel reinforced piles have been formally tested.

B. Attached is a case study that details the investigation of debonding that occurs when using PVC as CSL access tubes. The results of this study clearly show the use of steel tubes (BBII is proposing to use Sonitec tubes) should be preferred over PVC.

C. After doing some research, the closest we came to find any mention of verticality in CSL tubes was this excerpt from EPA's website which states, "If the CSL access tubes are not installed in a near-vertical position and/or the distance between them varies significantly along the length of the shaft, errors in velocity calculations may occur." Judging by this approach to verticality in CSL tubes in most specs, BBII concludes that parallelism and symmetry between tubes are more important factors in ensuring accurate CSL test readings.

In summary, BBII in lieu of formally testing the CSL tubes for verticality will perform a visual test making sure that the tubes are symmetrical (equally spaced) in a circle and parallel. This is the most important inspection to ensure accurate pulse readings.

ARUP Response:

This is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please confirm that this is acceptable.

T-0108 **BSE - Building Adjacent Zone 3 Clean From Dust and Debris Generated By Demoli** **Closed** **04/20/2011** **04/30/2011** **04/29/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 01 15 40

Please confirm that the demolition contractor has satisfied the requirement to clean all dust and debris generated by demolition contract to the satisfaction of the adjacent building owners, and BBII will only be responsible for cleaning dust and debris generated by BBII during its own operations, after the turnover of these are completed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed. Demolition contractor has satisfied the requirement to clean all dust and debris generated by demolition contract to the satisfaction of the adjacent building owners to date. This was confirmed through conversation with both EBi and Singer Associates.

T-0108.1 **BSE - Building Adjacent Zone 3 Clean From Dust and Debris Generated By Demoli** **Closed** **05/04/2011** **05/14/2011** **05/18/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author:

REQUEST:

Reference response to RFI#T-0108 and Specification Section 01 15 40

W/O requests information on the measures used to clean the adjacent structures

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RFI#T-0108 - BSE - Building Adjacent Zone 3 Clean From Dust and Debris Generated By Demolition Work

Question -
Reference Specification Section 01 15 40
Please confirm that the demolition contractor has satisfied the requirement to clean all dust and debris generated by demolition contract to the satisfaction of the adjacent building owners, and BBII will only be responsible for cleaning

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Demolition Contractor ceased dust generating activities and turned over Zone 3 for BBIi use on 4-13-11.

BBIi did occupy the site and did commence work activities, and is responsible for dust control in accord with Mitigation and Monitoring Specifications from 4-13-11 until completion of BBii work activities.

BBII is only responsible for cleaning dust and debris generated from Zone 3 during BBII operations from 4-13-11 going forward.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

dust and debris generated by BBII during its own operations, after the turnover of these are completed.

Response -
Confirmed. Demolition contractor has satisfied the requirement to clean all dust and debris generated by demolition
contract to the satisfaction of the adjacent building owners to date. This was confirmed through conversation with both
EBi and Singer Associates.

T-0108.2 **BSE - Building Adjacent Zone 3 Clean From Dust and Debris Generated By Demoli** **Closed** **05/04/2011** **05/14/2011** **05/27/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author:

REQUEST:

Reference response to RFI#T-0108, RFI#T-0108.1 and Specification Section 01 15 40

The response to RFI#T-0108.1 did not provide the requested information.

W/O requests information on the measures used to clean the adjacent structures

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RFI#T-0108.1 - BSE - Building Adjacent Zone 3 Clean From Dust and Debris Generated By Demolition Work

W/O requests information on the measures used to clean the adjacent structures

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RFI#T-0108 - BSE - Building Adjacent Zone 3 Clean From Dust and Debris Generated By Demolition Work

Question -
Reference Specification Section 01 15 40
Please confirm that the demolition contractor has satisfied the requirement to clean all dust and debris generated by demolition contract to the satisfaction of the adjacent

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

There are no prescribed measures. The cleanliness of the adjacent buildings is subjective. Cleanliness is discussed with building owners requesting cleaning of their property upon completion of demolition work and initiated by the adjacent property owner/manager. Discussion with adjacent property owners is coordinated through TJPA Representative and Singer Associates.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

building owners, and BBII will only be responsible for cleaning
dust and debris generated by BBII during its own operations, after the turnover of these are completed.

Response -
Confirmed. Demolition contractor has satisfied the requirement to clean all dust and debris generated by demolition
contract to the satisfaction of the adjacent building owners to date. This was confirmed through conversation with both
EBi and Singer Associates.

T-0109 **BSE - Existing Drains & SD Basin Clear Of Debris Generated By Demo Contract W** **Closed** **04/21/2011** **05/01/2011** **05/03/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 01 15 40

Please confirm per the site walkthrough on 04-18-2011 that all active SD and sewer have been cleared of all debris generated by the demolition contract work.
BBII is requesting as-builts to confirm the above.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Demolition Contractor has continuously covered the Catch Basins and inlets to storm sewers and occasionally has cleared debris generated by others outside of the demolition contract work. Demolition contractor will provide per Demolition Spec. 02-41-13 at conclusion of their work which is scheduled for June 2011.

T-0110 **BSE - Existing Utility Decommissioning Zone 4** **Closed** **04/22/2011** **05/02/2011** **05/02/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI#T-0083, Drawing Sheet D-2230, and Specification Section 02 41 01

RFI response to RFI#T-0083 issued on 4-15-2011 has not provided direction for decommissioning or abandoning these utilities per BBII drawing # D-2230 Note 2

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Parcel D Zone 4 : Demolition of the Zone 4 sewer/storm drain piping after dewatering work has been completed is BBIi contract scope. The best examples are BSE Drawings D-2230, D-2231, D-5100 through D-5103. Beale St. Zone 4 sewer/storm drain piping decommissioning/abandoning scope is defined in the Webcor-Obayashi RUP Relocation of Utilities

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please advise on decommissioning the utilities after dewatering work has been completed.

Project . Coordinate Beale St. Zone 4 sewer/storm drain piping decommissioning/abandonment with the Webcor-Obayashi RUP Relocation of Utilities Project Manager.

Parcel N Zone 4 :Refer to RFI 84.1 for Parcel N: The decommissioning or abandoning these Parcel N utilities which is outside the scope of the Demolition, BSE contract and the RUP contract. Webcor-Obayashi RUP Relocation of Utilities Project Manager will be contacted for reroute decommissioning, or abandonment of these Parcel N parking lot storm drain lines.

T-0111 **301 Mission Wall - Torque Spec** **Closed** **04/22/2011** **05/02/2011** **04/28/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** URS Corporation David Fyfe

Co-Author:

REQUEST:

Reference: S-5000

In regards to the structural steel bolts at the 301 Mission Wall, please confirm that the torque spec is 150 ft-lbs, per attached email.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed, structural steel anchor bolts shall be installed snug tight to a torque of 150 ft-lbs.

T-0112 **BSE - Project Control** **Closed** **04/22/2011** **05/02/2011** **05/10/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Daphne Faulkner

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet GT-0100 and Specification Section 01 10 50

Drawing GT-0100 shows four control points. BBII's surveyor, KCA Engineers, have surveyed their locations and found the following:
1) Survey Control Point #101: This point has been damaged - the brass disk is missing, though the rivet remains in the concrete sidewalk. There are score lines in

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Response provided by PMPC.

RFI T-0112 is a Survey and Control issue. Webcor/Obayashi is responsible for coordination with their subcontractors and this RFI lies within their domain of responsibility. Please ask W/O to coordinate their Survey Subcontractor (Contract T05.1 Chaudhary & Associates) provide a response to their BSE Subcontractor (Contract TG03 - Balfour Beatty).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

the concrete BBII assumes would intersect on the brass disk.
2) Project Benchmark Point #54: KCA was able to locate this point. Please confirm that it is acceptable to use the coordinates of this point for horizontal control, even though it is listed as a benchmark.
3) Survey Control Point #106: KCA was unable to locate this point.
4) Survey Control Point #105: KCA was able to locate this point.

With the current condition of the provided control points, KCA is not able to do a hard check on their survey work.

Please confirm that all the control points above may be used for the TG03 BSE Trade Package. Please reset the damaged or missing points for KCA's use.

1) Regarding Control Point #101 by Martin M. Ron (Drawing GT-0100), TJPA is requesting a meeting with Martin M. Ron (DPW). In the meantime W/O surveyors should assume that the riven and cross marks constitute the mark on Drawing GT-0100 and to submit the results of their check survey against the other remaining points to see if the given coordinates match those given on Drawing GT-0100. W/O should consult with Chaudhary & Associates now under subcontract to W/O, as to how Chaudhary & Associates used this point and whether it was damaged then. TJPA will set up a meeting with Martin M. Ron, Chaudhary & Associates, W/O and TJPA representatives.

2) Regarding Project "Benchmark" Point #54, the coordinates of this point given on Drawing GT-0100 are given for use as line survey control as well as elevation.

3) Regarding Control Point #106 (Drawing GT-0100), W/O is to consult with DPW and Chaudhary & Associates as to their knowledge of the last time this point was located. This can be done by W/O alone or in the meeting the TJPA representative will set up. With the 3 remaining Control Points #101, #054, #105 (Drawing GT-0100), W/O should use the given position of Control Point#106. If this has already been done TJPA will re-establish this Control Point.

4) No action requires.

TJPA requests that the BBI and W/O surveyor submit their notes on what they have completed and verified to date.

T-0112.1 **BSE - Project Control** **Closed** **05/20/2011** **05/30/2011** **05/24/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Transbay PMPC Alfred Lau

Co-Author:

REQUEST:

Reference RFI#T-0112, Transmittal No. 140-01593, Sheet

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Adopting Chaudhary's survey grid control document is

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

GT-0100, Specification Section 01 10 50, and attached document

Chaudhary's Transbay "Survey Grid Control Document" was transmitted to Ed Sum (TJPA) and Agnes Katanics (URS) on 5/18/11 (transmittal #140-01593, attached) following a meeting which took place on 5/17/11 with URS, F3, DPA and TJPA. In an effort to confirm the four survey control points shown on GT-0100, Chaudhary discovered that Point #101 and Point #106 were missing.

Due to the missing points, W/O requests TJPA to either approve Chaudhary's Survey Grid Control Document included as part of transmittal #140-01593, or have the monuments missing from GT-0100 replaced.

acceptable.

T-0112.2 **BSE - Project Control** **Closed** **07/14/2011** **07/24/2011** **07/14/2011** **Potentially** ☐

From: Webcor Construction LP Tim Maxwell **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Webcor Construction LP Ted Williams

Co-Author:

REQUEST:

Reference RFI #T-0112.1 and attached drawing

Last month Webcor/Obayashi was requested to mark an alleged property line @ 199 Fremont between Beale and Fremont streets per the 12-10-2008 CAD file data provided by the Bruce Storrs of DPW. Chaudhary & Associates completed the task and the results were forwarded for TJPA review on June 20, 2011 via Transmittal # 140-01864. In that transmittal it was recommended that alleged Property Line (PL) data points as indicated within the attached (coordinates added) be presented to Bruce Storrs of DPW for verification of PL data accuracy. Has this been accomplished and, if so, what was the outcome?

Be advised that as previously confirmed in RFI #T- 112.1 Webcor/Obayashi is ONLY using Grid Control for construction reference, layout and staking.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0113	BSE - Unforeseen Object - Metal Casing In Production Pile Extraction Area	Closed	04/22/2011	05/02/2011	04/25/2011	Potentially	☐

From: Webcor Construction LP — Nhi Tran
To: Turner Construction Compan — Daphne Faulkner
Answered By: Turner Construction Comp — Jack Adams
Co-Author: Balfour Beatty Infrastructure, Inc. — Ural Yal

REQUEST:

Reference attached sketch and photo

While BBII was excavating the production pile extraction area and exposing the timber piles on 4/19/11, a metal casing was discovered close to pile 302050.
Please advise on how to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This metal casing is to be removed per Spec. 02-41-01 "Demolition - Existing Underground Structures". If the casing is over an existing wood pile - notify the TJPA Rep/Geotech Engineer prior to removal - refer to Spec. 02-41-19..

Demolition of underground obstructions shall be per Spec 02-41-01 and Demolition Debris shall be handled in accord with Spec. 01-74-00.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0114	BSE - Monitoring Plans and Data for Zone 3	Closed	04/27/2011	05/07/2011	05/12/2011	Potentially	☐

From: Webcor Construction LP — Nhi Tran
To: Turner Construction Compan — Daphne Faulkner
Answered By: Turner Construction Comp — Daphne Faulkner
Co-Author: Balfour Beatty Infrastructure, Inc. — Ural Yal

REQUEST:

Reference Specification Section 01 35 65

As discussed at the site walk through meeting 4-18-2011; BBII requests a copy of the demolition contract monitoring plan and any data in relation to demolition contract mitigation monitoring of Zone 3.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please clarify specifically what mitigation monitoring data you are requesting. Specification Section 01 35 65 is comprised of many different required submittals so we need a clarification on which one you are requesting

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Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0115	BSE - Hazardous Material Removed From Site in Zone 3	Closed	04/27/2011	05/07/2011	05/02/2011	Potentially	☐

From: Webcor Construction LP — Nhi Tran
To: Turner Construction Compan — Daphne Faulkner
Answered By: Turner Construction Comp — Jack Adams
Co-Author: Balfour Beatty Infrastructure, Inc. — Ural Yal

REQUEST:

Reference Specification Section 00 03 35

Please confirm that all hazardous material has been removed from site per the extent of demolition contract drawings for zones 3.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Hazardous material has been removed from site per the extent of demolition contract drawings for zones 3. Zone 3 above ground structures and foundations were demolished to extent shown on Demolition contract drawings and Demolition Spec. 02-41-00. Hazardous materials abatement scope was completed within the scope of demolition only. Refer to Demolition Drawings D-1050, D-1051 and D-1073 and D-1074 for representation of limits of structures demolished and hazardous material abatement. Utilities were cut/capped and were demolished to extent shown on Demolition contract drawings and Demolition Spec.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

02-41-00. Refer to drawings D-1202-1207 and 1210-1215 inclusive for representation of limits of extent of removal of utilities.

BSE Contractor to handle remaining Hazardous Materials in accord with their contract documents. Ref: BSE Drawings D-5101 and D-5102 for extent of BSE Demolition.

BSE Contractor to handle remaining demolition and abatement in accord with BSE Spec 00-08-14 Health and Safety Criteria Para 1.2 and 1.3 Lead hazards, BSE Spec. 02-41-01 "Demolition" and BSE Spec. 01-13-50 "Hazardous Materials Procedures".

T-0116 **BSE - Demolition Contract Drawings** **Closed** **04/27/2011** **05/07/2011** **05/02/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Please supply BBII with an electronic copy (PDF), of the 'issued for construction' drawings for the demolition contract (EBI).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

BBII should contract Webcor-Obayashi for an electronic copy (PDF), of the 'issued for construction' drawings for the demolition contract.

T-0116.1 **BSE - Demolition Contract Drawings** **Closed** **05/03/2011** **05/13/2011** **05/03/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Daphne Faulkner

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference response to RFI#T-0116

Webcor-Obayashi cannot verify "issued for construction drawings" in PDF format for the demolition contract in the past communications.
If the confirmed drawing set was sent to Webcor-Obayashi before, please let us know the transmittal number and the date.
If not, please send us the drawing set immediately.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Demolition Issued for Construction drawings were issued to W/O on 12/8/2010 via Transmittal #110-00076 in Project (110) in Constructware. Please find a copy of the transmittal attached for your use.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

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Please supply BBII with an electronic copy (PDF), of the 'issued for construction' drawings for the demolition contract (EBI).

T-0117 **BSE - As-built Drawings for Utility Decommissioning in Zone 3** **Closed** **04/27/2011** **05/07/2011** **05/02/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Demo Contract Drawing Sheets D-1202,D-1203, D-1204, D1205, D1206 and Specification Section 02 41 01

Please provide as-built drawings for all utilities that have been decommissioned, or cut and capped per the demolition contract for Zone 3.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Demolition as-built drawings for Zone 3 utilities that have been decommissioned, or cut and capped per the demolition contract are attached. Drawing D-1202-1207 and D1210 through D1215 inclusive.

NOTE: Demolition contractor is not contractually responsible for submitting their As-Built drawings until completion of their contract which is June 2011 ref. Spec. 01-17-00 for Demolition Contractor.

T-0118 **BSE - Crash Cushion Modules on Natoma & Minna Street** **Closed** **04/27/2011** **05/07/2011** **05/02/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Demo Contract Drawing Sheet D-1007 - Note 5

Currently the crash cushion or k-rail as specified in the Demo Drawing D-1007 note 5 has not been installed. Please confirm the above will be installed by the demo contractor.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed. Demolition Contractor will install Crash Cushion modules at K -Rails installed on Fremont St (east), Natoma St. and Minna St. in accord with Demolition Drawing D-1007.

T-0119 **301 Mission Wall - Metal Stud Layout Alignment** **Closed** **04/28/2011** **05/08/2011** **05/05/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** URS Corporation David Fyfe

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Reference: RFI T-0098, Sheet A-6000

Per response to RFI T-0098, the 10" x 10" tube steel columns are to be set in the center of the 14" concrete wall. The architectural drawings (sheet A-6000 dated 11/04/10) show 10" metal studs aligning with the 10" tube steel, however, per response to RFI T-0098, the tube steel is to shift in the architectural drawings 1/2" and align in the center of the concrete wall. Please confirm that the metal studs will remain per plan, and not shift as the steel tube has.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The light gauge steel studs will remain per plan as shown in Section B on S-5000. The light gauge steel studs shall be placed on both sides of the tube steel as shown on the contract documents.

Per direction provided at 5/2 weekly coordination meeting, 1 - 5/8" light gauge studs shown on Detail A, Sheet A-6000 shall be in line with 10" light gauge steel stud (i.e. both sides of tube steel).

T-0120 **301 Mission Wall - Stone Panel Layout** **Closed** **04/27/2011** **05/07/2011** **05/20/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** URS Corporation David Fyfe

Co-Author:

REQUEST:

Reference: RFI T-0042

Per RFI T-0042, the concrete wall height increased to achieve a min 18" above the finished paver surface. Please clarify if the exposed concrete areas shown on A-5000 are to to be min 18" above the pavers. If so, the 1st stone above the exposed concrete would have to be trimmed. Please clarify.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per contract documents, at exposed concrete wall sections, full height of concrete wall above finished top of paver (and finished concrete walks at east and west ends) shall be exposed.

Cutting of stone panel(s) to a height of approximately 6.84" and cutting of stone panels in an "L" shape as shown in attached sketches, "Attachment for RFI T-0120" and "Part of Sheet A-5000" transmitted/emailed to URS from Webcor-Obayashi on 5/19/2011 is acceptable.

Per contract documents, at east end of wall (east of east most section of exposed concrete wall) stone panels shall extend down to finished top of paver/concrete walk. See annotation by URS on attached sketch, "Part of Sheet A-5000_Annotated by URS."

(Answered by: David Fyfe on 05/20/11)
(Response forwarded to Webcor-Obayashi on 05/22/11)

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0121	301 Mission Wall - Aluminum Panel Layout	Closed	04/27/2011	05/07/2011	05/10/2011	Potentially	☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** URS Corporation David Fyfe

Co-Author:

REQUEST:

Reference: A-5000

Regarding the aluminum panels on the 301 Mission wall, bottom panel at each end of the wall will need to be trimmed. The standard panel is 2-11 1/2" tall, but the bottom panel measures out to be 2'-1"+/- on the west end and 2'-9"+/- on the east. Please confirm that this is acceptable. If not, please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per contract documents aluminum panels shall match original aluminum panels. Existing bottom aluminum panel(s), as shown in photos on sheet C-5010, have an approximate 1" gap between the bottom of panel and top of existing grade.

Contractor shall place bottom aluminum panel(s) to provide an approximate 1" gap between bottom of panel and top of finished/existing grade. It is acceptable to provide bottom panel(s) that are less than 2' - 11-1/2" tall to provide an approximate 1" gap between bottom of panel(s) and top of finished/existing grade.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0122	BSE - Hazardous Material Removed From Zone 3 (Potential Contaminated Material	Closed	04/29/2011	05/09/2011	05/02/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 00 03 35, 1.2

During Investigation of Zone 3, BBII discovered potential lead based material existing on site. The specific area of concern is the pedestals on Fremont Street.

Please confirm that all contaminated material (specifically the referenced pedestals) as specified in the specification section 00 03 35, Article 1.2 has been removed and abated by the Demolition Contractor.

BBII is scheduled to remove these pedestals next week and cannot proceed with this critical work until it is confirmed that the site is cleared of lead based materials as required by the Specifications.

The TJPA's attention is directed to the following Section of the Specifications:

SECTION 00 03 35 ¿ EXISTING CONDITIONS:
HAZARDOUS MATERIALS

"1.2 HAZARDOUS MATERIALS REPORTS

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Hazardous material has been removed from site per the extent of demolition contract drawings for zones 3 - this does not include the "pedestals" in Zone 3. The building and above ground structures were demolished to the extent shown on Demolition contract drawings. Hazardous materials abatement scope was completed within the scope of demolition only. Refer to Demolition Drawings D-1050, D-1051 and D-1073 for representation of limits of structures (specifically the referenced pedestals) demolished and hazardous material abatement.

BSE Contractor to handle remaining demolition and abatement in accord with BSE Spec 00-08-14 Health and Safety Criteria Para 1.2 and 1.3 Lead hazards, BSE Spec. 02-41-01 "Demolition" and BSE Spec. 01-13-50 "Hazardous Materials Procedures".

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

A. The TJPA's environmental consultants have surveyed the facility for the presence of various hazardous materials. Materials investigated may include asbestos, lead, PCB ballasts, mercury containing lamps, contaminated soils, underground storage tanks, and other hazardous materials. The demolition contractor for the Demolition project (Evans Brothers Inc.) is responsible for removing and abating products containing asbestos, lead, or PCB ballast, and mercury-containing lamps."

T-0123 **301 Mission Wall - SASM and Insulation Tape Materials** **Closed** **04/29/2011** **05/09/2011** **05/05/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** URS Corporation David Fyfe

Co-Author:

REQUEST:

Reference: S-0002, A-6000

Clarification is requested regarding the notes and details on Sheet S-0002, and A-6000 (see attached marked up sheets). Note 1 within the "WALL FINISH" section of the notes on page S-0002 says to use insulation separation tape between treated wood surfaces and steel framing. In note 2 on page S-0002, SASM is specfied as a different material, but on the details of page A-6000 SASM is shown to be used in the same areas as is described for the insulation tape. It is the interpretation of Transworld that the insulation tape is to be used at all locations referenced on sheet A-6000 as "SASM". Please clarify if these two different materials are to be applied in the same areas.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Insulation tape shall be used between all treated wood and metal surfaces. SASM shall be used as a waterproofing barrier around the entire wall as shown on the contract documents.

These two materials (SASM and insulation tape) may overlap in certain locations where insulation tape is provided between treated wood and metal surfaces and where waterproofing is also required.

T-0123.1 **301 Mission Wall - SASM and Insulation Tape Materials** **Closed** **05/06/2011** **05/16/2011** **05/09/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** URS Corporation David Fyfe

Co-Author:

REQUEST:

Reference: RFI T-0123, A-6000, S-0002

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is not a new contract requirement. SASM is referred to on A-6000 in two different instances. It is

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

The response provided to RFI T-0123 is in conflict with the contract documents. The response requires the contractor to create a waterproofing barrier for the entire length of the wall; however, the contract documents do not indicate a complete waterproofing barrier. References to SASM on page A-6000 instructs the application of SASM at all points where pressure-treated or moisture resistant wood comes in contact with metal. This application instruction, therefore, would not result in a waterproof barrier along the entire length of the wall. Please clarify if on the details "SASM" was intended to read "insulation tape", because the application locations of the SASM, as per A-6000, are called out and described to be at all locations of the insulation tape defined on S-0002.

In the alternative, is it the intention of the design team to apply additional waterproofing not shown on the contract documents?

referred to when there is treated wood blocking/ elements. At these locations, the insulation tape shall be used. There is also SASM shown on the front and back face of the wall as shown on Detail D, A-6000. Contractor shall provide SASM as shown.

T-0124 **301 Mission Wall - Dimension Between Screen Wall and Existing Garage Wall** **Closed** **05/02/2011** **05/12/2011** **05/31/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** URS Corporation David Fyfe

Co-Author:

REQUEST:

Reference: C-2000

The dimension between the new location of the 301 Wall and the existing garage wall is approx 8". Please advise as to how this gap is to be closed off.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Gap shall be closed for the full height of the new interim screen wall and width of gap. The closure of this gap must meet ADA handrail loading requirements as well as the wind and seismic loading requirements. See attached Figures 1, 2, and 3 for recommended details of gap closure.

Per discussions at weekly meeting on 5/23/2011, Contractor may provide suggested alternatives to address the 8-inch gap for URS to review.

T-0124.1 **301 Mission Wall Enclosure Panel Method of Connection** **Closed** **09/01/2011** **09/16/2011** **09/13/2011** **Potentially** ☐

From: Webcor Construction LP Michael Constable **To:** Turner Construction Compan Gary Krutsch **Answered By:** URS Corporation David Fyfe

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference: RFI T- 0124, URS response to RFI T- 0124

Per recent Change Order negotiations for the required 301 Mission Wall end panel per RFI # T-0124, the panel detail is now being revised to a two-piece, glued enclosure panel. Please confirm the method of two-piece panel attachment to the existing wall is the same as that indicated in RFI # T-0124.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Material substitution (two 1/8" thick aluminum panels glued together in lieu of a single 3/16" thick aluminum panel), "Proposed gap closure per RFI #T-0124-Option3" provided in attached Change Request No. 10C from Transworld Construction Inc. to Webcor/Obayashi dated 7/26/2011 is acceptable, provided aluminum panels are fastened to metal stud with rivets or sheet metal screws at 24" o.c.

T-0125 **BSE - CDSM Corner Overlap** **Closed** **05/02/2011** **05/12/2011** **05/06/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheets GT-2101-2103, GT-5101 and Specification Section 31 56 13

In the Owner's preferred method of soil mixing, the triple auger method, a continuous wall is formed by drilling adjacent sets of columns with a 100% overlap of the outer columns (see 2/GT-5101). A CDSM wall's strength, permeability, and homogeneity is largely contingent upon this remixing action. This overlap also helps ensure the verticality and alignment, as the augers in the secondary panels tend to follow the path of the outer columns of the primary panels. Based upon the beam and column layout shown in GT-2101-2013, the corners formed by Wall Segment A/33.5-35 & 35-1 and R2-1 & X1-1 do not receive the complete remixing obtained by the typical 100% outer column overlap. These corner details are atypical compared to industry standards, and will lead to permeability issues. Is it acceptable to move a small number of beams slightly closer together (~0.1') near those corners, such that the panel layout is shifted enough to have a 100% column overlap at the corners?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Arup received from DND the two sketches attached to this response at the BSE meeting on May 4, 2011 as further clarification of the Contractor's proposal. The Contractor's proposal is acceptable.

T-0126 **BSE - Confirmation of Utility Abandonment on Fremont St, East side of Phase 1 El** **Closed** **05/02/2011** **05/12/2011** **05/12/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Transbay PMPC Douglas Jacobson

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

In order to drive sheet piles for the hammer head wall location along Fremont St and the North West Corner of Zone 4, BBII requests confirmation of the abandonment of all utilities east of the PG&E electrical duct bank. BBII also will need the As-Build drawing of the PG&E duct bank location.

BBI needs this information to proceed on the extra unforeseen concrete wall in the hammer head area of the buttress wall.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Today, 5/11, BBI has sawcut AC and removed one lane-width and two laborers have exposed the utility lines in the street east of the PG&E duct bank. Verizon came and cut two of their 4" ducts. The remaining lines will be identified by the utility subcontractors in the next day or two. Please contact Jason Dunne (W/O) for the field conditions of abandoned utilities.

T-0127 **BSE - Openings Below Screen Wall at 301 Mission Building** **Closed** **05/04/2011** **05/14/2011** **05/16/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** URS Corporation David Fyfe

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheets GT-2201, GT-5102 Sec. 10, and attached photos

In the northwest corner of Zone 4, BBII has exposed 2 openings below the screen wall in the 301 Mission structure. The first opening is located approximately 6 feet east of gridline 27 and the second opening is located approximately 8 feet east of gridline 29. These openings are approximately 18" x 36" in size. (See attached pictures).

These openings are not shown on construction documents. Please advise how to proceed. BBII requests an expedited response prior to the end of this week, as this matter is pertinent to backfill operation.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Plugging of existing ventilation shafts/openings below screen wall is specified in the 301 Mission Interim Screen Wall contract documents. Webcor-Obayashi to coordinate all work amongst tradegroup packages/subcontractors.

T-0128 **BSE - Old Existing Concrete Floor Along 301 Mission in Zone 4** **Closed** **05/05/2011** **05/15/2011** **05/12/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Transbay PMPC Douglas Jacobson

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 02 41 01

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The obstruction was removed by BBI. Remove pre-trench obstructions per contract requirements and

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

During pre-trenching, BBII found an existing concrete floor along the 301 Mission St garage wall. It is located between the 301 Mission building wall and the buttress area between Grid Line 29 and 30. BBII has exposed a 20ft-30ft section of this floor (approximately on Grid Line A between Grid Lines 29 and 30), and have demolished the slab within the pre-trench area that has been exposed. It appears to BBI that this unforeseen obstruction continues further into the buttress area. If this unforeseen obstruction continues further into the buttress area, it would have to be removed so the buttress construction can continue.

Please advise on how to proceed.

Force Account agreement with TJPA.

T-0129 **BSE - Unforeseen Timber Pile in Pre-Trench Along 301 Mission in Zone 4** **Closed** **05/05/2011** **05/15/2011** **05/06/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 02 41 01 and attached photo

During pre-trenching, BBI discovered existing timber piles along the 301 Mission St garage wall between Grid Lines 29 and 30. These piles are less than 1foot away from the 301 Mission St garage wall and within the CDSM shoring wall limits. These unforeseen piles need to be removed as soon as possible. Please advise on how to proceed.

W/O requests that the Engineer Of Record (Arup) review this on site with BBII prior to responding.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Arup Response:

1. For the westernmost 3 timber piles along the line of piles 16 to 18'' from the face of the 301 Mission wall: in order to minimize ground loss at 20 to 30 ft depth beneath the PG+E vault and adjacent corridor, BBI needs to use best endeavors to carry out the pile removal using the method agreed following the initial trials. This means vibrating in the casing in advance of removing any of those piles.
2. For the remaining timber piles along this line, the piles are anticipated to be 30' long and will thus lie within the influence of the c. 70' deep shoring wall for the 301 Mission Low-rise parking garage. Each pile can be removed without casing, working from east to west. Concrete to be placed in the remnant pile hole as rapidly as possible after pile removal and before removal of the adjacent pile.

T-0130 **301 Mission Wall - FCR 043 Concrete Wall Crack** **Closed** **05/06/2011** **05/16/2011** **05/09/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** URS Corporation David Fyfe

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Reference: Field Condition Report No. 043

See attached FCR No. 043. The east end of the 301 Mission concrete wall has cracks and also spalled in one corner. This had been discussed on 05/02/11, in Transworld's subcontractor meeting with Turner, URS, TJPA, Webcor-Obayashi, and Transworld. Please advise as to how Transworld is to repair the spallled corner and cracks.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Defective concrete shall be removed and concrete shall be restored in accordance with ACI 301 Section 5.3.7.3. An epoxy bonding agent shall be used in lieu of bonding grout where new concrete and existing concrete interface. After removal of the defective concrete and prior to restoration, contractor shall contact engineer to inspect the removal areas in field.

If crack(s) go beyond/into the anchor bolts and reinforcement, the concrete shall be removed minimum of 1" around the reinforcement and anchor bolts. Contractor shall shore/support the existing structural steel as necessary in order to prevent damage to other areas of existing concrete.

T-0130.1 **301 Mission Wall - FCR 043 Concrete Wall Patch Material** **Closed** **06/09/2011** **06/19/2011** **06/13/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** URS Corporation David Fyfe

Co-Author:

REQUEST:

Reference: FCR #043, RFI T-0130, and attached product data

Response to RFI T-0130 directs Transworld to repair the damaged concrete at the 301 Mission Wall, as described in Field Condition Report 043. Attached are product data sheets which satisfy the requirements noted in response to RFI T-0130. Please review and confirm that the attached materials are acceptable to patch the damaged concrete.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The submitted materials are acceptable to patch the damaged concrete. All materials shall be prepared, mixed and placed in accordance with manufacturers' recommendations.

T-0131 **301 Mission Wall - Framing Modifications and Base Plate Conflict** **Closed** **05/06/2011** **05/16/2011** **05/20/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** URS Corporation David Fyfe

Co-Author:

REQUEST:

Reference: C/S-5000, B/A-6000, attached sketches, and referenced RFI's

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Item/Issue 1) Contractor shall cut base plate neat, flush with stucco slot/face of concrete. Extent of cut(s) shall not exceed dimension(s) shown in attached

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Field verified measurements and layout for the location of the structural steel does not coordinate with the stucco inset locations as shown on detail C/S-5000. In addition framing around the perimeter of the wall (aluminum panel locations) had to be modified due to assembly and installation methods. (See attached pictures and sketches. This RFI addresses three framing issues. All issues have been discussed in the weekly 301 Mission Wall subcontractor meeting with URS, Turner, Transworld, TJPA and Webcor-Obayashi.

1.) In two of the four stucco slot locations, field conditions show that a portion of the base plate conflicts with the stucco slot. This base plate encroaches into the stucco panel per dimensions shown on the attached sketch. Please advise.

2.) The structural steel had been relocated to CL of the wall (per RFI T-0098) and therefore studs around the steel per B/A-6000 could not be set per plan. Transworld has installed hat channel metal framing to the face of the structural steel tube using fasteners into the structural steel as per RFI T-0106 as well as modified the boxed framing per attached sketches around the perimeter of the wall. Sizes of metal framing were used to align with adjacent framing per plan. This work is currently installed, please confirm framing modifications per attached marked up details are acceptable.

3.) Blocking a the top of the wall at the north side (between the framing and 8"x 8" tube steel) was not installed, as there was no room between the framing and steel. Framing was attached directly to the tube steel. See attached.

Please confirm that the framing modifications in item 2 and 3 are acceptable and provide direction at the base plate conflict per item 1.

sketch, "RFI T-0131: (Item 1) Base Plate conflict with slot locations" provided by WO/Transworld. Contractor shall field apply complete paint system as stated in contract documents following cutting procedures. Any damage to non-shink grout and/or concrete below shall be repaired. All architectural wall finishes (SASM, cement board, stone panels, aluminum panels, 3-coat stucco, etc.) shall be installed as shown on contract documents.

Item/Issue 2) We note this request is for convenience of the Contractor and on this basis take no exception to the framing modifications as shown in attached sketches, "RFI T-0131: (Item 2) Metal Stud Framing Modification at Perimeter of Wall (Aluminum Panel locations)" and "RFI T-0131: (Item 2) Metal Stud Framing Modification Surrounding Structural Steel (Slot locations)" provided by WO/Transworld. Accordingly, no change in contract and/or extension in schedule will be provided to accommodate this Contractor request. All impacts associated with proposed framing modifications, including installation of all architectural wall finishes (SASM, cement board, stone panels, aluminum panels, 3-coat stucco, etc.) as shown on contracts documents, cost and schedule shall be borne solely by the Contractor.

Item/Issue 3) Intention of wood blocking is to provide spacing and allow fastening of aluminum panels. If there is not sufficient space to provide wood blocking, it is acceptable to fasten aluminum panels directly to tube steel members and omit wood blocking on north side of wall as shown in attached sketch, "RFI T-0131: (Item 3) Omission of Blocking Between 8" x 8" Tube Steel and Framing (North Side Only). Accordingly, prior to deletion of wood blocking Contractor shall ensure all architectural wall finishes (SASM, cement board, stone panels, aluminum panels, 3-coat stucco, etc.) can and will be installed as shown on contract documents.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0132	BSE - Lead Based Paint On Bent Pedestals	Closed	05/06/2011	05/16/2011	05/09/2011	Potentially	☐

From: Webcor/Obayashi Joint Venture — Masashi Kojima
To: Turner Construction Compan — Daphne Faulkner
Answered By: Balfour Beatty Infrastructu — Ural Yal
Co-Author: Balfour Beatty Infrastructure, Inc. — Ural Yal

REQUEST:

Please see information attached regarding the paint on the old bent Pedestals existing along Fremont Street. The information provided indicates the level of lead is above the permissible level. This area is now considered part of the lead abatement program; this work will be commencing on Saturday 5/7/2011. Cost of this Lead abatement will be charged to the owner.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Voided. See the attached email on 05/09/2011.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0133	BSE - CDSM Test Section & Start of Work	Closed	05/09/2011	05/19/2011	05/10/2011	Potentially	☐

From: Webcor Construction LP — Nhi Tran
To: Turner Construction Compan — Daphne Faulkner
Answered By: Adamson Associates, Inc — George Metzger
Co-Author: Balfour Beatty Infrastructure, Inc. — Ural Yal

REQUEST:

Reference Specification Section 31 56 13, 1.6. F. 1-2

Please confirm that the acceptance of Zone 4 Test Section strength and permeability results is the prerequisite to begin Zone 4 & 3 shoring work, and acceptance of the Zone 1/2 Test Section results is the prerequisite to begin work Zones 1 & 2.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

The acceptance of Zone 4 Test Section strength and permeability results is the prerequisite to begin Zone 4 & 3 shoring work, and acceptance of the Zone 1/2 Test Section results is the prerequisite to begin work Zones 1 & 2.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0134	BSE - 301 Mission Guide Wall	Closed	05/09/2011	05/19/2011	05/12/2011	Potentially	☐

From: Webcor Construction LP — Nhi Tran
To: Turner Construction Compan — Daphne Faulkner
Answered By: Transbay PMPC — Douglas Jacobson
Co-Author: Balfour Beatty Infrastructure, Inc. — Ural Yal

REQUEST:

Reference Sheet GT-2103, Specification Section 31 56 13, and attached sketch

Typically in CDSM shoring, a guide frame constructed from steel beams is used, which straddles the CDSM wall. The guide frame is used to align the augers, align and place beams, and expand/collapse the drill rods. The existing 301 Mission building wall is approximately 5-6" away from the outside of the CDSM shoring wall. As such it will not permit placement of a standard steel beam guide frame. Is it acceptable to construct a temporary concrete/rebar guide wall on the outside of the CDSM wall and adjacent to the existing 301 Mission footing wall? See

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This guide wall proposal is for Contractor convenience.

Please submit more information for this proposal, e.g., spacing, depth, and diameter of anchors/studs, discuss means and methods, and describe condition that contractor will leave the CMU wall when finished.

Once the above information is returned, TJPA will meet with 301 Mission to negotiate authorization for this proposal.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

attached sketch details of the proposed guide wall.

T-0135 **BSE - Unforeseen Timber Piles in Pre-Trench Along 301 Mission St. in Zone 4** **Closed** **05/10/2011** **05/20/2011** **05/12/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI#T-0129 and Specification Section 02 41 01

The response to BBII RFI 094 [RFI #T-0129] regarding the unforeseen timber piles along 301 Mission Street, "Concrete to be placed in the remnant pile hole as rapidly as possible after pile removal of the adjacent pile."

Per DND Construction, concrete backfill is incompatible with soil mixing methods. Please provide clarification on what material will be placed within the CDSM wall limits that will not conflict with the mixing of the CDSM wall.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

The material for filling the void left by the extracted timber pile needs to be filled by a material which can be drilled by the CDSM shoring equipment.

Kevin Clinch

12 May 2011

T-0136 **301 Mission Wall - Manhole Vents** **Closed** **05/10/2011** **05/20/2011** **05/20/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Kevin Chiu

Co-Author:

REQUEST:

Reference: A/C-5000,

Per Justin Burke of Turner Construction, the 3' tall sleeves on the north side of the 301 Mission Screen Wall are per PG&E preference. At Turner's request, please review the design for the sleeves as shown on C-5000 and consider a grated cover over the manholes at grade, as opposed to the 3' tall sleeves per the documents.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

5/23/11 UPDATED RESPONSE from Kevin Chiu:
Pending approval by TJPA, a CR may be issued.
==========
5/20/11 Response per Kevin Chiu:
Contractor is to eliminate the referenced "(N) 3'-0" HIGH CIP CONCRETE SLEEVE OVER MANHOLE WITH (N) KADEE S.S. CIRCULAR GRATE SATIN FINISH (TWO LOCATIONS)" per C-5000. Elimination of sleeves was agreed upon by TJPA (Brian Dykes), PG&E (Mike Balmy) and Mission Street Development (Steve Hood).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

5/13/11 Response per URS' David Fyfe:
3' tall concrete sleeves are required per the Easement Agreement between the TJPA and Mission Street Development, LLC (MSD). Eliminating use of 3' tall concrete sleeve(s) and providing grated PG&E manhole lid(s) at existing grade elevation must be approved by TJPA, MSD, and PG&E.

T-0137 **BSE - Unforeseen Obstruction - Concrete Lip Off 301 Mission St Garage Footing** **Closed** **05/10/2011** **05/20/2011** **05/11/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Transbay PMPC Roger Rothenburger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 02 41 01 and attached photo

During Pre-Trench, BBII found an existing concrete lip/shelf footing along the low-rise 301 Mission St. garage wall. The footing consists of reinforced concrete, and is a part of the 301 Mission St. garage structure. It is not a separate structure, and it protrudes into the CDSM wall location in multiple places and does not allow enough room for the drill rig to construct the CDSM wall. The lip/shelf protrudes out at the western corner of the 301 Mission St. garage and goes to the east 81-feet. The footing is then flush with the 301 Mission St garage wall for 67-feet.

This is a potential delay in pre-trenching and the installation of the CDSM wall. It is a part of the 301 Mission St garage, and will need to be removed flush with the 301 Mission St. wall.

Please see photo attached.

Please advise BBII as to how to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Previously a much larger section of concete footing within the TJPA limits was removed with a breaker.

The BSE Contractor BBII should determine the property line and the extent that this protrusion from 301 Mission is within the TJPA limits.

If the 3" protrusion is within the TJPA construction limits beyond the property line of 301 Mission the "3-inch lip" should be removed with smaller breaking tools and concrete chipping tools back to the property line limits.

T-0138 **BSE - Unforeseen Timber Pile in Pre Trench Along 301 Mission St. in Zone 4 - Con** **Closed** **05/10/2011** **05/20/2011** **05/12/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Response to RFI #T-0129 [BBI RFI 094] and Specification Section 02 41 01

Using the current, approved means & methods set forth in RFI Response #T-0129, there is an extremely high probability that the vibratory hammer or casing will come into contact with the existing 301 Mission wall. Despite multiple tag lines and attempts to swing away from the wall, BBII cannot guarantee the equipment will not contact the wall.

BBII requests a revised methodology to extract the unforeseen timber piles or to protect the existing wall which will reduce the of damaging the wall at 301 Mission. BBII is willing to meet with the Engineer to discuss and develop this method.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

As discussed in the May 11, 2011 BSE meeting, Arup, in our response to RFI T-0129, is seeking the Contractor's "best endeavors" at using the casing on the three (3) timber piles furthest west. The remaining seven (7) or so piles to the east of these piles may be pulled directly without casing as long as there is replacement filling of the timber pile void as soon as it is pulled.

The Contractor, TJPA and Arup will observe the Contractor's "best endeavors" to install casing and pull each of the 3 western-most timber piles at a date and time (Friday May 13, 2011 mentioned as the earliest) chosen by the Contractor. Mechanical methods to control and hold the vibratory pile puller away from the wall, as well as any method of pre-protection of the aluminum panel clad corner, are suggested.

5/11/2011 Roger Rothenburger

As discussed in the Wednesday May 11, 2011 BSE meeting, the Engineer (Arup) is seeking (response to RFI T-0129) "best endeavors" to use the casing on the three (3) timber piles furthest west. The remaining seven (7) or so piles to the east of these piles may be pulled directly withou using casing as long as there is replacement filling of the timber pile void as soon as it is pulled.

TJPA is aware of the risk of exterior damage to the 301 Mission Parking Struture at the corner and sides, but weighs the potential for more serious structural damage in the basement around the PG&E vault to be greater risk than the exterior damage.

The work is in accordance with the force account directive CRT-010 for removal of obstructions so the risk becomes part of the cost which TJPA is willing to bear for avoiding potential greater risk of basement structural damage.

(1) At a date and time (Frday May 13, 2011 mentioned

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

as the earliest) chose by the BSE Subcontractor, BBII, TJPA representatives including the Engineer (Arup), Architect (AAI) will observe the BBII "best efforts" to install casing and pull each of the 3 wesrtn most timber piles. Mechanical methods with the excavators or other equipment to control and hold the vibratory pile hammer away from the wall are suggested as well as any method the experienced work crews suggest. An attempt to protect the aluminum panel clad corner by any means is also advisable.

(2) The material for filling the void left by the extracted timber pile needs to be filled by a material which can be drilled by the CDSM shoring equipment. A sand-water solution with some light bonding material (bentonite, 1/8 +/- bag of cement or other suggested material) that is drillable should be submitted by BBII. The CDSM shoring contractor suggestion would be helpful. A strength of 50psi was mentioned in the meeting but the choice belongs to BBII fo their CDSM equipment.

Please determine a date and time for the trial casing installation and to determine the desired CDSM "drillable mix"

T-0138.1 **BSE - Unforeseen Timber Piles in Pre Trench Along 301 Mission St. in Zone 4 - Co Closed** **05/20/2011** **05/30/2011** **05/23/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference response to RFI#T-0129, RFI#T-0138, Specification Section 02 41 01 and attached documents

The response to BBII RFI 094 [RFI#T-0129] regarding the unforeseen timber piles along 301 Mission Street, "Concrete to be placed in the remnant pile hole as rapidly as possible after pile removal of the adjacent pile." Concrete is not compatible with CDSM mixing.

After clarification on the issue in RFI Response #T-0138,

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Mix FOA100CX is acceptable. Contractor shall verify that this mix is acceptable to the CDSM shoring wall installer.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

BBII proposed and furnished Central Concrete Sand Slurry Mix FOA100CX under the direction of the Engineer. The Engineer of Record's field engineer reviewed, approved and observed the installation of this mix in the pile voids along 301 Mission Street. The mix was recommended by ARUP Field Engineer prior to placement in the field, please confirm that this mix design meets the field engineer¿s requirements.

Attachments: Mix as requested is being submitted for record.

T-0139 **BSE - Unforeseen Timber Pile in Pre Trench Along 301 Mission St. in Zone 4 - CR 1** **Closed** **05/10/2011** **05/20/2011** **05/11/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Transbay PMPC Roger Rothenburger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Response to RFI #T-0129 [BBI RFI 094] and Specification Section 02 41 01

Please clarify if the removal of the unforeseen timber piles along 301 Mission Street will be reimbursed by CR T-010.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

As discussed in the BSE meeting of Wednesday, May 11, 2011 the removal of the unforseen piles in the CDSM shoring wall pre-trenching along 301 Mission is paid under CRT-010.

T-0140 **BSE - Bridges Submittals** **Closed** **05/12/2011** **05/22/2011** **05/27/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** URS Corporation David Fyfe

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 01 53 13

BBII proposes breaking up the bridge submittals to allow submittal fundamental structural drawings and calculations for the bridge, independent of accessories and specialized components necessary for a complete bridge package.

Specifically, the first set of submittals would include Structural drawings and calculations for the bridge structure from the pavement and decking down - piers, cap beams, girders, abutments, and associated

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The approval to split the temporary bridge submittal into two submissions is provided subject to the following conditions:

1. Items which are provided in the initial submission shall be designed for all loading to support all features which are deferred. This includes loading attributable to but not limited to the following: operable gates; vehicle barriers; required thickness of pavement for all purposes, added thickness of paving for pedestrian areas, curbs and provisions for slope inducement for

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

connections. Additionally, it will include standard edge railing/barriers.

Follow on coordination submittals will include traffic coordination components, gates, hardware, locking mechanisms, fences, Muni OCS components, utility support details, surface grading and drainage.

BBII believes that it will take some time to finalize a complete bridge package that satisfies all interested parties. Isolating the core bridge structure into it's own submittals will ensure that detailing and fabrication of the main components of the bridge will not be held up while working out the details.

Please confirm this is acceptable

handling of surface water; support for utilities; lighting poles/standards; OCS poles/wires; and any other items specifically required to meet city of SF requirements brought to the attention of the contractor team by review meetings with city staff.

2. Items deferred to the second submission shall be in full conformance with specifications requirements.

3. Any items for which a deviation from the specifications is sought shall be fully identified in the first submission.

T-0141 **BSE - Inclinometers IW-5 to IW-8 Install Locations** **Closed** **05/12/2011** **05/22/2011** **05/16/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheets GT-1301, GT-1302, GT-2201 & 13/GT-5101 and Specification Section 31 56 13

Please clarify if locations IW-5 to IW-8 exist. They are not shown on GT-1301 and GT-1302.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Inclinometers IW-5 to IW-8 do not exist.

T-0142 **BSE - Instruments I-104 to I-107** **Closed** **05/13/2011** **05/23/2011** **05/16/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheets GT-1301, GT-1302, GT-2201, & 13/GT-5101 and Specification Section 31 56 13

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Instruments I-104 to I-107 require detail 13/GT-5101.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

On Sheet GT-2201, please confirm that Instrument I-104 to I-107 is detail 13/GT-5101.

T-0143 **BSE - Confirmation of Utility Decommissioning and As-Builts for Fremont Street** **Closed** **05/16/2011** **05/26/2011** **05/20/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Kevin Chiu

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet D-2230 and attached sketch

During BBII potholing work on the Fremont street hammer head, BBII exposed the existing live PG&E concrete duct bank. The duct bank is located under BBII Buttress drill pad (see attached sketch), the drill pad is scheduled to be poured 5-26-2011/5-27-2011. BBII has concerns that the duct bank will not be able to support the load for the drilling equipment. The concrete duct bank will need to be removed prior to drill pad installation. Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Removal of existing duct bank is in RUP scope, see U-1123. Coordinate BSE work activities with RUP scope. Target date given by PG&E to have duct bank decommissioned is 6/24/11. If RUP's removal of duck bank is not complete prior to drill pad installation, BBI is to protect the existing utilities.

T-0144 **BSE - Unknown Concrete Structure along 199 Fremont St in Zone 4** **Closed** **05/18/2011** **05/28/2011** **05/24/2011** **Potentially** ☐

From: Webcor Construction LP Masashi Kojima **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Kevin Chiu

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 31 56 13

BBII discovered the unforeseen concrete structure in the attached photo. TIlls concrete mass is unknown and is in direct conflict with the BSE CDSM wall.
The concrete mass is approx 2ft wide and extends 8ft depth the entire between GL J 30-33.5 adjacent 199 Fremont Street building. During the excavation at 8ft there was water egress into the excavation from underneath the concrete structure see photos attached.
BBII requests immediate direction from the TJPA on this issue.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Demolition of underground obstructions shall be per Spec 02-41-01 and Demolition Debris shall be handled in accord with Spec 01-74-00.

5/20/2011 - George Metzger

ARUP Response:

If the CDSM shoring wall is to be installed in the location shown, then the material which is in the way, including any rubble which will interfere with the soil mixing for the CDSM wall, will need to be removed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Arup requests TJPA to provide direction to the Contractor regarding removal of the obstacles encountered.

T-0145 **BSE - Existing Concrete Footing Gridline J between Gridline 26.5-30 along 181 Fre** **Closed** **05/18/2011** **05/28/2011** **05/20/2011** **Potentially** ☐

From: Webcor Construction LP Masashi Kojima **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 02 41 00

BBII followed the method approved to remove a section of the unforeseen structure in RFI #74 & 74.1, and found a separate concrete footing bellow that. It is believed to be a footing that extends below the 177/181 Fremont St. building. The top of this footing is approximately 8 feet below the original grade, and it is approximately 3 feet wide, and 3 feet deep.
BBII is concerned with the removal of this footing and the extensive rubble that was exposed below it. When a bucket of dirt was removed along the footing, a large amount of water gushed out, from below the 177/181 Fremont St. building, and through the large amount of stone rubble that was exposed. At this point the bottom of the footing was found, and the soil was quickly replaced. This footing is within the CDSM wall extents, and will have to be removed. Due to the fragile nature, and the age of the 177/181 Fremont St. building; please clearly describe and advise.
Please See Attached Pictures.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

The RFI refers to RFIs 74 and 74.1. We understand these are BBI numbers; the corresponding RFI numbers in Constructware are 103 and 103.1.

If the CDSM shoring wall is to be installed in the location shown, then the material which is in the way, including any rubble which will interfere with the soil mixing for the CDSM wall, will need to be removed. Based on field observations made earlier today, and recent email correspondence, we understand the concrete (unreinforced) basement wall immediately adjacent to 181 Fremont has been removed. Arup requests TJPA to provide direction to the Contractor regarding any additional demolition and/or excavation should it be necessary.

Adamson Associates, Inc. Comment:

CM (Turner) is to confirm that TJPA approves in writing the approach and work the Contractor proposes at this location as the Field Actives and Contractor actions may impact the adjacent property.

T-0146 **BSE - Additional Timber Piles Adjacent 177/181 Fremont Building South Zone 4** **Closed** **05/19/2011** **05/29/2011** **05/20/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference RFI#T-0103 and attached photo

During BBII demolition of the unknown concrete structure along South side of Zone 4 adjacent 177/181 Fremont building (Refer to [RFI#T-0103] BBII RFI# 74), BBII discovered timber piles beneath the unknown concrete structure - see photos attached.

The location timber piles are in conflict with the alignment of the CDSM wall. Please advise on the method of removal of the obstruction.

Note: BBII has concerns regarding the stability of the adjacent 177/181 Fremont Building (old brick structure).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

1. We suggest that the timber piles be exposed no more than 3 at a time, and that they are removed and the remnant void is infilled immediately with a material that can be drilled by the shoring wall equipment of DND. A suitable material was proposed for the similar situation adjacent to the parking garage/low rise portion of 301 Mission.

2. If more timber piles are revealed along this part of the pre-trenching, then the process in 2 above should continue along the northern flank of 181 Fremont and for a distance of 20 ft east of the northeast corner of the building.

3. 181 Fremont building is equipped with crack width gauges, and Arup staff will take readings of the gauges before and after removal of the timber piles along this length of pre-trenching provided the building owner grants us access.

4. Inclinometers to monitor the effects of the installation of the shoring wall and the subsequent train box excavation will be installed in due course.

5. The Contractor shall take appropriate measures to retain the material under 181 Fremont and keep it from sloughing into the excavation.

Adamson Associates, Inc. Comment:

CM (Turner) is to confirm that TJPA approves in writing the approach and work the Contractor proposes at this location as the Field Activates and Contractor actions may impact the adjacent property.

T-0146.1 **BSE - Additional Timber Piles Adjacent 177/181 Fremont Building South Zone 4** **Closed** **05/20/2011** **05/30/2011** **05/20/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Transbay PMPC Roger Rothenburger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference RFI#T-0146

Please provide the TJPA's specific written direction and procedure on how to remove the unforeseen piles along North face of 181 Fremont Street according to the response for RFI T-0146.

The contractor cannot proceed on this extra and critical work without the specific direction and procedure provided in writing by the TJPA.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Sheet pile method using sheet piles either interlocked or not interlocked for 20 feet or so, removing the piles (3ft of exposed pile required to remove) described to TJPA and its representatives this morning (May 20, 2011) on site is compliant with the Contract Specifications Section 02 41 19 (Pile Removal and Section 31 56 13 (CDSM Shoring Wall) Part 3.2 (Execution - Pre-trenching)

T-0146.2 **BSE - Additional Timber Piles Adjacent 177/181 Fremont Building South Zone 4** **Closed** **05/23/2011** **06/02/2011** **05/24/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

To: Turner Construction Compan Daphne Faulkner

Answered By: Turner Construction Comp Kevin Chiu

REQUEST:

Reference RFI#T-0146.1

Based on the joint meeting between W/O, BBII and the TJPA on 5/23/2011, BBII would like to confirm the following:

181 Fremont Street Pile Extraction:
1. BBII will install additional survey control to establish the back of the shoring wall limit.
2. BBII will contact DND Construction to confirm the allowable distance between an existing pile and the back of the shoring wall.
3. BBII will expose, in the presence of the engineer, 3 piles at one time.
4. BBII and the Engineer will jointly determine the piles that can be left in place with reasonable assurance that they will not impact the shoring wall.
5. BBII will install flat sheet piles between the building and the wood piles to prevent caving of soils under the building.
6. BBII will extract the wood piles with vibratory hammer, with the same stroking procedure without steel casing. BBII will perform dewatering enough to be able to connect the hammer to the pile.
7. BBII will backfill the void with low strength material

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per Brian Dykes, this work is authorized to proceed. Allowable work hours will be established after 199 Fremont pile extraction begins.

5/24/2011 - George Metzger

ARUP Response:

The procedure described is consistent with that discussed and agreed to at yesterday's meeting with the following exceptions:

Item 4 shall read: BBI and TJPA will jointly determine the piles that can be left in place with reasonable assurance that they will not impact the shoring wall. Arup will be on site to assist the TJPA.

The Contractor may wish to consider placing the steel sheet prior to excavating to retain the material under 181 Fremont and keep it from sloughing into the excavation.

Items 10 and 11 will be reviewed by others.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Central Concrete Mix FOA100CX (RFI #T-0138.1).
8. BBII will backfill the piles.
9. BBII will remove the sheet piles and start over with Step 3.
10. All of this work will be tracked and compensated on force account under CR T-010.
11. Similar to the extraction in front of the 301 Mission garage wall, BBII will take every precaution to avoid damaging the adjacent wall; however, due to the proximity of the hammer to the wall, BBII will not guarantee not damaging the wall. If damage to the adjacent wall occurs in any phase of the pile extraction operation described above, BBII will be compensated for repairs under CR T-010 as well.

Please confirm the above as soon as possible. In addition, BBII requests immediate confirmation of allowable work hours for the work described above.

T-0146.3 **BSE - Additional Timber Piles Adjacent 177/181 Fremont Building South Zone 4** **Closed** **05/23/2011** **06/02/2011** **05/25/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Transbay PMPC Roger Rothenburger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI#T-0146.2

The response RFI T-0146.2 did not answer for Item 10 and 11. Please respond for Item 10 and Item 11.

RFI#T-0146.2 Question:

Reference RFI#T-0146.1

Based on the joint meeting between W/O, BBII and the TJPA on 5/23/2011, BBII would like to confirm the following:

181 Fremont Street Pile Extraction:
1. BBII will install additional survey control to establish the back of the shoring wall limit.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The row of timber piles closest to 199 Fremont are only 6"-9" clear of the 36-inch theortical CDSM wall thickness. TJPA in order to avoid the potential risk of these timber piles some of whom are canted and not straight pulled if anyy part of the pile is within 12" of the theoretical CDSM wall line. Since this work has previously been classified as an "unknown obstruction" paid on force account; if there is damage to the 199 Masonry wall that the cost of repair is considered part of the force account work. BBII is to exert efforts to avoid damage and use the method of pulling the piles that gives least amount of risk for damage to the masonry wall. This response is only for 199 Fremont. Discussions must be held when starting pile removal along 181 Fremont.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

2. BBII will contact DND Construction to confirm the allowable distance between an existing pile and the back of the shoring wall.
3. BBII will expose, in the presence of the engineer, 3 piles at one time.
4. BBII and the Engineer will jointly determine the piles that can be left in place with reasonable assurance that they will not impact the shoring wall.
5. BBII will install flat sheet piles between the building and the wood piles to prevent caving of soils under the building.
6. BBII will extract the wood piles with vibratory hammer, with the same stroking procedure without steel casing. BBII will perform dewatering enough to be able to connect the hammer to the pile.
7. BBII will backfill the void with low strength material Central Concrete Mix FOA100CX (RFI #T-0138.1).
8. BBII will backfill the piles.
9. BBII will remove the sheet piles and start over with Step 3.
10. All of this work will be tracked and compensated on force account under CR T-010.
11. Similar to the extraction in front of the 301 Mission garage wall, BBII will take every precaution to avoid damaging the adjacent wall; however, due to the proximity of the hammer to the wall, BBII will not guarantee not damaging the wall. If damage to the adjacent wall occurs in any phase of the pile extraction operation described above, BBII will be compensated for repairs under CR T-010 as well.

Please confirm the above as soon as possible. In addition, BBII requests immediate confirmation of allowable work hours for the work described above.

T-0146.4 **BSE - Additional Timber Piles Adjacent 177/181 Fremont Building South Zone 4** **Closed** **05/27/2011** **06/06/2011** **05/31/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Kevin Chiu

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Per Turner's request on 5/27/2011 this RFI is being asked, to modify the 177/181 Fremont pile extraction procedure

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Item 8 - BBI shall make every attempt to ensure voids are completely filled but is not required to test/verify

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

as desired by ARUP:

Based on the revised proposal for unforeseen pile extraction work along 181 Fremont St. from ARUP, BBII (W/O) can agree with revisions as the follows:
- Item 6 should read, "BBII will extract the piles with vibratory hammer only as necessary. BBII will use as little vibration as possible to remove the piles from the ground. BBII will perform dewatering enough to be able to connect the hammer to the pile."
- Item 8 should read, "BBII will back fill the pile voids using a tremie pipe of minimum length 20ft attached to the concrete bucket. The tremie shall be inserted as far into the pile hole as possible prior to pouring the concrete, and the concrete shall be placed using normal tremie techniques. BBII will make efforts to pour the material into the void as possible, but BBII is not responsible to eliminate void completely."
Other items shall remain the same.

Please also clarify that the response from RFI#T-0146.3 stating "Since this work has previously been classified as an "'unknown obstruction" paid on force account; if there is damage to the 199 Masonry wall that the cost of repair is considered part of the force account work. BBII is to exert efforts to avoid damage and use the method of pulling the piles that gives least amount of risk for damage to the masonry wall." is this instead, meant to address the property and work related to 177/181 Fremont? If not, please address the question regarding 177/181 address.

that the voids are completely filled.

Last paragraph of the RFI - Correct. RFI response from T-0146.3 should read 177/181 Fremont in lieu of 199 Fremont.

5/28/2011 - George Metzger

ARUP Response:

Based on additional observations made 03/27/2011of the pile pulling process adjacent to 199 Fremont, Arup has the following comments and recommends revisions to the procedure as noted below:

Item 6 is acceptable.

Item 8 should be modified to read, "BBII will backfill the voids using gravity fall method immediately after pile is pulled. BBII will accomplish this by having the concrete hopper filled and setup to pour prior to the final pull of the each individual pile, with the hopper's chute aimed at the pile. As soon as the pile is lifted from the void, the concrete is released from the hopper."

The last sentence in Item 8 in the RFI "BBII will make efforts to pour the materials into the void as possible but BBII is not responsible to eliminate void completely," shall be reviewed by the TJPA.

The last paragraph of the RFI shall be reviewed by others.

The Contractor shall not commence pile pulling adjacent to 177/181 Fremont without first receiving direction to do so from TJPA.

T-0147	**301 Mission Wall - Stone Application Detail**	**Closed**	**05/19/2011**	**05/29/2011**	**05/27/2011**	**Potentially**	☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** URS Corporation David Fyfe

Co-Author:

REQUEST:

Reference: Attached Sketch

Please review the attached sketch showing the thinset manufacturer's recommendations for the tile installation at this wall. In reference to the approved submittal detail (attached) an additional layer of cement board will be installed to fur out the substrate so that the materials can be applied to their recommended thickness. In addition, the manufacturer recommends to use Laticrete 254 Platinum thinset material. The stone tiles finished surface will align with the aluminum panel above. Please expedite the review of this RFI.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

2nd layer of cement board is not as specified in contract documents.

An adhesive shall be used between the layers of cement board in order to ensure the 2 layers act as a single composite layer. 2nd layer of cement board shall be attached to studs at 6" o.c. with stainless steel flat head screws to metal stud framing. All screws shall extend through both layers of cement board for full engagement to framing. There shall be no gaps or voids between the two layers of cement board.

Use of Laticrete 254 Platinum thinset material is acceptable.

T-0148 **BSE - Additional Timber Piles Adjacent 199 Fremont Building Zone 4** **Closed** **05/23/2011** **06/02/2011** **05/24/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Kevin Chiu

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI#T-0146.2

Based on the joint meeting between W/O, BBII and the TJPA on 5/23/2011, BBII would like to confirm the following:

199 Fremont Street Pile Extraction:
1. BBII will install additional survey control to establish the back of the shoring wall limit.
2. BBII will contact DND Construction to confirm the allowable distance between an existing pile and the back of the shoring wall.
3. BBII will excavate, in the presence of the engineer, 8 piles at one time.
4. BBII and the Engineer will jointly determine the piles that can be left in place with reasonable assurance that they will not impact the shoring wall.
5. BBII will extract the piles with vibratory hammer, with the same stroking procedure without steel casing. BBII will perform dewatering enough to be able to connect the hammer to the pile.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per Brian Dykes, this work is authorized to proceed. 199 Fremont has been notified and work may commence.

5/24/2011 - George Metzger
ARUP Response:

The procedure described is consistent with that discussed and agreed to at yesterday's meeting with the following exceptions:

Item 4 shall read: "BBI and TJPA will jointly determine the piles that can be left in place with reasonable assurance that they will not impact the shoring wall." Arup will be on site to assist the TJPA.

Items 8 and 9 will be reviewed by others.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

6. BBII will backfill the void with low strength material Central Concrete Mix FOA100CX (RFI #T-0138.1).
7. BBII will backfill the piles and start over with Step 3.
8. All of this work will be tracked and compensated on force account under CR T-010.
9. Similar to the extraction in front of the 301 Mission garage wall, BBII will take every precaution to avoid damaging the adjacent wall; however, due to the proximity of the hammer to the wall, BBII will not guarantee not damaging the wall. If damage to the adjacent wall occurs in any phase of the pile extraction operation described above, BBII will be compensated for repairs under CR T-010 as well.

Please confirm the above as soon as possible. In addition, BBII requests immediate confirmation of allowable work hours for the work described above.

T-0148.1 **BSE - Additional Timber Piles Adjacent 199 Fremont Building Zone 4** **Closed** **05/23/2011** **06/02/2011** **06/07/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI#T-0148

The response RFI T-0148 did not answer for Item 8 and 9. Please respond for Item 8 and Item 9.

RFI#T-0148 Questioin:
Reference RFI#T-0146.2

Based on the joint meeting between W/O, BBII and the TJPA on 5/23/2011, BBII would like to confirm the following:

199 Fremont Street Pile Extraction:
1. BBII will install additional survey control to establish the back of the shoring wall limit.
2. BBII will contact DND Construction to confirm the allowable distance between an existing pile and the back of the shoring wall.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed-In regards to item #8 and 9 in the response to RFI T-0148; All of this work will be tracked on force account under CR T-010. If BBII takes every precaution to avoid damaging the adjacent wall, BBII will be compensated for repairs under CR T-010 as well.

There is no Noise moratorium for 199 Fremont. This includes demolition, pile pulling, excavation, backfill, equipment set-up etc. is allowed at all times adjacent to 199.

Good neighbor notification policy is in effect - WO/BBIi will notify Singer Assoc. whenever work will encroach on 199 Fremont property or when work activity will disrupt the tenants of 199 Fremont - both inside lot and on sidewalk/street.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

3. BBII will excavate, in the presence of the engineer, 8 piles at one time.
4. BBII and the Engineer will jointly determine the piles that can be left in place with reasonable assurance that they will not impact the shoring wall.
5. BBII will extract the piles with vibratory hammer, with the same stroking procedure without steel casing. BBII will perform dewatering enough to be able to connect the hammer to the pile.
6. BBII will backfill the void with low strength material Central Concrete Mix FOA100CX (RFI #T-0138.1).
7. BBII will backfill the piles and start over with Step 3.
8. All of this work will be tracked and compensated on force account under CR T-010.
9. Similar to the extraction in front of the 301 Mission garage wall, BBII will take every precaution to avoid damaging the adjacent wall; however, due to the proximity of the hammer to the wall, BBII will not guarantee not damaging the wall. If damage to the adjacent wall occurs in any phase of the pile extraction operation described above, BBII will be compensated for repairs under CR T-010 as well.

Please confirm the above as soon as possible. In addition, BBII requests immediate confirmation of allowable work hours for the work described above.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0149	BSE - Revised Contract Drawing GT-2201	Closed	05/24/2011	06/03/2011	05/26/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet GT-2201, RFI#T-0088.2, and attached sketch SKGT-0002

BBII agreed with the TJPA's proposal in the response of RFI T-0088.2. Therefore, please issue the revised contract drawing of GT-2201.
Also, please note that attached Sketch SKGT-0002 includes an error in the CDSM wall alignment at gridline J/34-35.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Based on the 5/26/2011 meeting between TJPA, PMPC, Turner and AAI, and as directed by TJPA a revised contract drawing of GT-2201 will not be issued at this time. However, the attached sketch has been revised to correctly show the CDSM shoring wall outline. See attached SKGT-0002-R1.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0150	BSE - CDSM Top of Pile Elevations At Zone 4	Closed	05/25/2011	06/04/2011	05/31/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet GT-5101 and attached sketch

Please reference table 16/GT-5101. To facilitate construction on the streets and the Buttress area, at no additional cost to the owner BBII plans to install the CDSM piles on Fremont St., Beale St., and Zone 4 per the table below:

- (a) Location / Description; (b) Per 16/GT-5101 Top of Pile Elevation; (c) Proposed Top of Pile Elevation

1 - (a) Piles at Fremont St. and Beale St.; (b) EL 13.0 and EL 15.0; (c) Flush to street elevation
2 - (a) Piles in the Buttress Work Pad area along 301 Mission; (b) EL 14.0; (c) Approx. EL 14.0 w/c flush to Top of Pad
3 - (a) Along 301 Mission, piles between the Buttress Work Pad and Beale St.; (b) EL 13.0; (c) Approx. EL 15.0 w/c is 1' above grade
4 - (a) Piles along the 181 Fremont side of Zone 4; (b) EL 14.0; (c) Approx. EL 15.0 w/c is 1' above grade

Please confirm.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

The proposed top of pile elevations are acceptable provided the elevation at the bottom of the pile is not less than that shown in 16/GT-5101.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0151	BSE - Buttress Footprint Increase Due to Oversized Casing	Closed	05/26/2011	06/05/2011	05/31/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference attached sketch

Becho will be utilizing a 2200mm OD temporary casing for the Buttress Pile Installation. Becho requests that the spacing between tangent piles remain at 4'' minimum and the secant piles overlap remain 1'-6''. This will approximately increase the Buttress footprint by approximately 4'-4'' to the east and 1'-9'' to the south.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

This is acceptable provided no portion of the overall buttress shifts north-south. In particular, the Contractor shall verify that row R, once shifted east as proposed, can be installed in the same northsouth location, given the corner projection of the 301 Mission low-rise. Contractor to verify that the existing timber piles within the larger footprint have been removed and that the equipment pad is enlarged as necessary.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0152	BSE - Additional Timber Piles Adjacent 199 Fremont Building	Closed	05/26/2011	06/05/2011	06/07/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet GT-2103 and RFI#T-0148

In regards to item #4 in the response to RFI T-0148; field investigations of the curvature in first few piles removed along 199 Freemont, BBII feels that at a minimum it is necessary to remove all piles that's top is within 12'' of the ''neat line'' 36'' wide CDSM wall.

Please confirm that removal of these piles to the limits described above, in addition to any associated damage to adjacent structures caused by the extraction will be reimbursed under CR T-010.

Item 4:
4. BBII and TJPA will jointly determine the piles that can be left in place with reasonable assurance that they will not impact the shoring wall.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed-In regards to item #4 in the response to RFI T-0148; All of this work will be tracked on force account under CR T-010. If BBII takes every precaution to avoid damaging the adjacent wall, BBII will be compensated for repairs under CR T-010 as well.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0153	BSE - Additional Timber Piles Adjacent 177/181 Fremont Building	Closed	05/26/2011	06/05/2011	06/07/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Reference Sheet GT-2103 and RFI#T-0146.2

In regards to item #4 in the response to RFI T-0146.2; field investigations of the curvature in first few piles removed along 199 Fremont, BBII feels that at a minimum it is necessary to remove all piles that's top is within 12'' of the ''neat line'' 36'' wide CDSM wall.

Please confirm that removal of these piles to the limits described above, in addition to any associated damage to adjacent structures caused by the extraction will be reimbursed under CR T-010.

Also, please confirm allowable work hours, since 199 extractions have already begun.

Item 4:
4. BBII and TJPA will jointly determine the piles that can be left in place with reasonable assurance that they will not impact the shoring wall.

Confirmed-In regards to item #4 in the response to RFI T-0146.2; All of this work will be tracked on force account under CR T-010. If BBII takes every precaution to avoid damaging the adjacent wall, BBII will be compensated for repairs under CR T-010 as well.

Noise moratorium for 177/181 Fremont is Monday-Friday from 11 am to 2 PM. This includes demolition and pile pulling adjacent to 177/181 only - Excavation, backfill and equipment set-up is allowed at all times adjacent to 177/181.

T-0154 **BSE - Becho Tremie Placement Process** **Closed** **05/26/2011** **05/26/2011** **05/31/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran
To: Turner Construction Compan Daphne Faulkner
Answered By: Adamson Associates, Inc George Metzger
Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 31 63 29, 3.5.G.4.K

SS31.63.29.3.5.G.4.k states ''The tremie discharge end shall be immersed at least 25' in concrete at all times after starting the flow of concrete.''

Becho requests concrete tremie embedment to be reduced to 10ft minimum for all piles and 5ft minimum tremie embedment at the secondary pile transition zones between structural and CLSM mix pushing the minimum contaminated structural/CLSM concrete zone at sub grade to +5 foot above sub grade elevation.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

This is acceptable. Note that the procedure described pertains to both the primary and the secondary piles, not just the secondary piles as described in the RFI.

Webcor/Obayashi Joint Venture

PROJECT MANAGEMENT - REQUEST AND ANSWERS LOG

30100 - Transbay Transit Center Project

Number	*Subject*	*Status*	*Date Created*	*Date Required*	*Date Answered*	*Cost Impact*	*Proceed*
T-0155	**BSE - Primary Concrete Mix Tolerance**	**Closed**	**05/31/2011**	**06/10/2011**	**06/03/2011**	**Potentially**	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 03 30 01, 1.5.F

BBII, Becho, Central Concrete, W/O, ARUP and Adamson Associates met on Tuesday 5/24/2011 to discuss the results of Buttress Primary Concrete Mix Trial Batches. During this meeting, Central Concrete expressed concern about variability in the Buttress Primary Concrete mix due to slight variations in material and batching. The Buttress Primary Concrete Mix is a very high performance mix and even small variations in the mix constituents can result in significant changes in strength. Please advise how much of a working tolerance is acceptable for the primary buttress concrete mix.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

The strength of concrete which has been placed in the primary shafts will be considered satisfactory if both of the following requirements are met:

1. Every arithmetic average of any three consecutive strength tests (each test consisting of at least two 6 by 12 in. cylinders or at least three 4 by 8 in. cylinders made from the same sample of concrete) equals or exceeds 2,000 psi.

2. No individual strength test (average of two 6 by 12 in. cylinders or at least three 4 by 8 in. cylinders) falls below 1,800 psi.

Number	*Subject*	*Status*	*Date Created*	*Date Required*	*Date Answered*	*Cost Impact*	*Proceed*
T-0156	**BSE - Primary Concrete Mix 90-Day Compressive Strength**	**Closed**	**05/31/2011**	**06/10/2011**	**06/03/2011**	**Potentially**	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 03 30 01, 1.5.F

Per Specification Section 03 30 01 - 1.5F Trial Batches: "The mixes shall be proportioned to develop a compressive strength of 2,000 psi at 28 days." Per the response to Question TG0300-0262, "The rate of strength gain can be reduced so that the design strength is reached after 28 days but less than 91 days".

Please confirm that the Buttress Primary Shaft Concrete may take up to 90 days to achieve 2,000 psi.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

The rate of strength gain can be reduced so that the design strength is reached after 28 days but ess than 91 days, provided the Contractor submits test data demonstrating that the mix will reach 2,000 psi at or before 90 days. At a minimum, compressive strength tests of the mix shall be taken at 7, 14, 28, 56 and 90 days. Each test shall consist of a minimum three cast cylinders and a minimum three cores taken from trial batch cubes placed in accordance with submittal TG0300-385.

At shafts C/2, C/4 and C/6 (refer to GT-2201), the mixes shall be proportioned to develop a compressive strength of 2,000 psi at 28 days.

Contractor to submit proposed mixes and corresponding test results for approval prior to their use.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0156.1	BSE - 120 Day Acceptability of Buttress Primary Shaft Concrete	Closed	04/16/2012	04/26/2012	04/19/2012	Potentially	☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 4/12/12 Central Letter

BBII requests that in the event that the Buttress Primary Mix test specimens do not meet the 2,000 psi specified strength of 2,000 psi at 90 days (reference Response to previous RFIs #T-0157.2, and #T-0156), additional cylinders are to be taken and tested at 120 days. During this cooler climate, initial temperature may be impeding overall strength at the required time. Although only a few specimens are suspect of low strengths, Central Concrete is confident that at 120 days, the specimens in question will reach ·the required strength. If this criteria can be accepted for all test specimens at 120 days, this can mitigate any future concerns of suspect low strength.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

This is acceptable for shaft N-2. For future shafts, we will evaluate on a case by case basis. However, this will require the TJPA to take an additional cylinder at the sampling frequency required in the specfications so that, if the first cylinder tested at 90 days is less than 2,000 psi, there can be three samples tested at 120 days.

Christina Young : Per Turner, the additional cylinder sampling is to be performed by the Contractor's own testing agency.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0157	BSE - Primary Concrete Mix 500 PSI At 7-Days	Closed	05/31/2011	06/10/2011	06/03/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 03 30 01, 2.2.E

BBII, Becho, Central Concrete, W/O, ARUP and Adamson Associates met on Tuesday 5/24/2011 to discuss the results of Buttress Primary Concrete Mix Trial Batches. One of the concerns for the Buttress Primary Concrete is to provide a mix that is able to consistently achieve both 500 psi at 7 days and 2,000 psi at 28 days. The Buttress Primary Concrete Mix is a very high performance mix and even small variations in the mix constituents can result in significant changes in strength. Please advise if it acceptable to allow a working tolerance for the 500 psi requirement at 7 days.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

The 7 day compressive strength of primary shaft concrete (Type "A" concrete in spec section 03 30 01) shall be 500 psi +/- 200 psi.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0157.1	BSE - PSI Schedule for Buttress Shaft Primary Mix	Closed	01/13/2012	01/23/2012	01/18/2012	Potentially	☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor/Obayashi Joint Venture Kirk Nielsen **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP David Fields

Co-Author:

REQUEST:

To date there are multiple RFI responses that address the scheduled PSI requirements for the primary shaft mix which is resulting in confusion and unnecessary Vela issues. For clarification sake please confirm the following schedule is correct:
1. 300 psi at 7 days pursuant to RFI response T-0157.
2. 2000 psi based on an arithmetic average of tests on or before 90 days pursuant to RFI response T-0155 and T-0156.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

RFI is void and answered in RFI T-0157.2

T-0157.2 **BSE - PSI Schedule for Buttress Shaft Primary Mix** **Closed** **01/18/2012** **01/28/2012** **01/18/2012** **Potentially** ☐

From: Webcor/Obayashi Joint Venture Kirk Nielsen **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

To date there are multiple RFI responses that address the scheduled PSI requirements for the primary shaft mix which is resulting in confusion and unnecessary Vela issues. For clarification sake please confirm the following schedule is correct:
1. 300 psi at 7 days pursuant to RFI response T-0157.
2. 2000 psi based on an arithmetic average of tests on or before 90 days pursuant to RFI response T-0155 and T-0156.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The cylinder test results will be tracked in Vela as follows:

7 day report: below 300psi: Failure. Add an issue in Vela

28 day report:

below 300 psi: Failure. Keep the issue in Vela open
below 2,000 psi: below specification but within RFI T-0156 guidelines; monitor; if the 7 day break for the same report was less than 300 psi, then the Vela issue stays open; if the 7 day break for the same report was greater than 300 psi, no Vela issue

90 day report:

below 2,000 psi: Failure. Add an issue in Vela

above 3,000 psi: Failure. Add an issue in Vela

Regarding the question of averaging, see response to RFI 155.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0157.3	BSE - PSI Schedule for Buttress Shaft Primary Mix	Closed	01/19/2012	01/29/2012	01/23/2012	Potentially	☐

From: Webcor/Obayashi Joint Venture Kirk Nielsen **To:** Turner Construction Compan Gary Krutsch **Answered By:** Arup Kevin Clinch

Co-Author:

REQUEST:

To date there are multiple RFI responses that address the scheduled PSI requirements for the primary shaft mix which
is resulting in confusion and unnecessary Vela issues. For clarification sake please confirm the following schedule is correct:

1. 300 psi at 7 days pursuant to RFI response T-0157.

2. 2000 psi based on an arithmetic average of tests on or before 90 days pursuant to RFI response T-0155 and T-0156.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The cylinder test results will be tracked in Vela as follows:
Below 300 psi at 7 days: fail
Above 300 psi at 7 days: pass
Below 2,000 psi at 90 days: fail
Above 2,000 psi at 90 days: pass
Above 3000 @ 28 days does not conform with the specifications, but this will not be tracked in Vela.
Regarding the question of averaging, see response to RFI 155

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0158	301 Mission Wall - Architect of Record	Closed	06/01/2011	06/11/2011	06/06/2011	Potentially	☐

From: Webcor Construction LP David Hungerford **To:** URS Corporation David Fyfe **Answered By:** Transbay PMPC Alfred Lau

Co-Author:

REQUEST:

Please clarify who is the registered Architect of Record, for the 301 Mission Interim Screen Wall Project.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

URS is the Architect/Engineer of Record per signature and seal affixed to the drawings.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0159	BSE - Unforeseen Obstruction - Timber Piles Within Pre-Trench Limits Zone 3	Closed	06/02/2011	06/12/2011	06/06/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Webcor Construction LP Nhi Tran

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet D-2212, Specification Section 02 41 01, attached sketch and photo

During Pre-trench, BBII found additional unforeseen timber piles within the pre-trench limits along gridline A, between gridlines 24 & 25.
Per Contract Drawing D-2212 (attached), there should only be a single row of timber piles in conflict with the CDSM wall, although when the area was exposed there are three rows within the CDSM wall limits (see attached photo). These will have to be removed and will be considered extra work.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

06/06/2011 - Daphne Faulkner

Response provided by S. Rule of Turner.

Please refer to note on Drawing D-2212 in the upper half between grids 23~26 which states,

"In areas where (N)CDSM wall conflicts with the existing pile caps and piles, remove (E) pile caps and/or piles prior to construction of (N) Transit Center Building CDSM perimeter shoring wall (see Note 3 and 6)."

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please advise.

This includes all piles within the CDSM wall footprint.

"Unforeseen Conditions" are covered in Section 00 07 00 (General Conditions) Article 3.05.A.2 and 3.05.A.3 (Unforeseen or Changed Conditions).

Article 3.05.C states,

C. Differing Site Conditions shall not include:

1. All that is indicated in or reasonably interpreted from the Contract Documents or Reference Documents;

2. All that could be seen on Site

3. Conditions that are materially similar or characteristically the same as those indicated or described in the Contract Documents or Reference Documents.

Since Section 31 56 13 discusses both pre-trenching and the removal of timber piles and Bid Item #6 is for the removal of timber piles before the CDSM shoring wall is installed TJPA believes that this work was indicated and will provid payment for it under Bid Item #2, #4, #6, and #7.

There will be no additional payment for the removal of timber piles for the CDSM wall.

T-0159.1 **BSE - Unforeseen Obstruction - Timber Piles Within Pre-Trench Limits Zone 3** **Closed** **06/08/2011** **06/18/2011** **06/27/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Kevin Chiu

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI#T-0159, Sheet D-2212, Specification Section 02 41 19, and attached photos

The Response to RFI#T-0159, appears to have misunderstood the question. Therefore BBII is providing additional information.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The response to RFI T-0159 applies. The contractor shall remove all piles encountered during pre-trench activities.

Per note 7 on D-2212, it was made clear at the time of bid that the actual existing conditions may differ from

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

BBII contends that the lower and smaller diameter piles as indicated in the attached sketch were not shown in either the contract drawings or the reference documents, therefore BBII was un-able to account for the removal of these piles in their bid item prices. These piles meet the general conditions article 3.05A.2 definition of an unforeseen condition, because that quantity of piles encountered exceeds that shown in the bid docs.

Please confirm the removal of the "unforeseen" timber piles in excess of those shown in the drawings, will be tracked and paid under a Force account contract change order similarly as done for Zone 4 pre-trench obstructions.

the information shown on the drawings.

Note 7 on D-2212 states, "Location and depth/thickness of (E) basement slabs, walls and pile caps and location and depth/grouping of (E) piles shown on drawings based on best available information and may vary. [...] These quantities may not represent the actual extents of the entire building and/or ramp structure foundation elements (piles/footings)."

T-0160 **BSE - Timber Piles Not Extracted In Zone 4** **Closed** **06/03/2011** **06/13/2011** **06/16/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran
To: Turner Construction Compan Daphne Faulkner
Answered By: Turner Construction Comp Jack Adams
Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference CR T-010 and attached summary and sketch

BBII continues to remove unforeseen timber piles along 199 Fremont Street in Zone 4 and soon will commence extraction along 181 Fremont Street.

As of May 31, 2011, BBII has left 7 piles in place as they were estimated to be more than 12" away from the limits of the CDSM shoring wall. In addition, 5 piles were broken during extraction a portion of which were left in place due to their proximity to the adjacent building walls. While these piles also appear to be more than 12" outside the limits of the CDSM shoring wall, due to possible undulations and alignment changes underground, the possibility of these piles encroaching into the CDSM shoring wall area exist.

These piles are not shown on the contract plans and are extracted with extreme caution under the TJPA's direction and prescribed methods, taking the integrity of the adjacent buildings in consideration. Please confirm that it is the TJPA's intention to leave these piles in place.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractor is to remove the wood piles adjacent to 199 and 181 Fremont using alternate means and methods. Wood pile can remain along this line if it will not interfere with installation of CDSM wall.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0161	BSE - CDSM Wall Soldier Pile Installation	Closed	06/03/2011	06/13/2011	06/06/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Webcor Construction LP Nhi Tran

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 31 56 13, 3.13 and attached detail sketch

Is it acceptable to cut a 1.5" diameter hole, 16" from the bottom tip, in the web of the soldier beam pile beams? The purpose of the hole is to aid in securing the tail of the beam to the "dolly" that DND will use to raise the beams into a vertical position.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

06/03/2011 - George Metzger

ARUP Response:

This is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0162	BSE - Buttress Concrete Test Cylinders	Closed	06/03/2011	06/13/2011	06/08/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 03 30 01 and attached summary of test results

BBII, Becho, Central Concrete, W/O, ARUP and Adamson Associates met on Tuesday 5/24/2011 to discuss the results of Buttress Primary Concrete Mix Trial Batches (please refer to the attachment for a summary of the test results). The 28-day test results for the 4x8 test cylinders were on average 57% of the core 4" diameter core test results. The 28-day test results for the 6x12 test cylinders were on average 88% of the 4" diameter core test results. The test samples were extracted from the same concrete batches, at the same time and cured in the same manner. BBII believes the difference in compressive strength between the test results may be attributed to the sample size & the resultant heat of hydration which drives the concrete cure rate. BBII also believes that the concrete cores may be more indicative of the actual in-situ concrete strength than the concrete test cylinders.

The Specification Section 03 30 01 - 1.5 F Trial Batches references "concrete cylinders", however it does not specify 4x8 or 6x12 test cylinders.

During the course of the meeting, it was generally agreed upon that 6x12 test cylinders appeared to be a more representative and consistent measure of the Primary Buttress Concrete strength relative to the core samples.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Arup believes that there is insufficient information available at this time for the Contractor to draw the conclusions stated in the RFI.

Regarding the question posed in the RFI: Arup's understanding is that there should be little difference between 4x8 and 6x12 cylinders cast, cured and tested under identical conditions and, therefore, it is not essential to limit the TJPA's Testing Agency to one particular cylinder size.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

BBII has confirmed through CTS that there should be no additional cost in sampling and testing a 4x8 cylinder relative to a 6x12 cylinder.

Therefore, BBII proposes that the 6x12 test cylinders should be used as the basis of acceptance testing both for the Trial Batches and also for future Field Quality Control and Testing for the Primary Buttress Concrete; 4x8 test cylinders should only be used for informational purposes only. Please confirm.

T-0163 **BSE - Hazardous Material Removed From Site Zone 2** **Closed** **06/03/2011** **06/13/2011** **06/06/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran
To: Turner Construction Compan Daphne Faulkner
Answered By: Webcor Construction LP Nhi Tran
Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 00 03 35, 1.2

During Investigation of Zone 2, BBII discovered potential lead based material existing on site. The specific area of concern is the pedestals on First Street.

Please confirm that all contaminated material (specifically the referenced pedestals) as specified in the specification section 00 03 35 Article 1.2 has been removed and abated by the Demolition Contractor.

BBII is scheduled to remove these pedestals next week and cannot proceed with this critical work until it is confirmed that the site is cleared of lead based materials as required by the Specifications.

The TJPA's attention is directed to the following Section of the Specifications:

SECTION 00 03 35 - EXISTING CONDITIONS:
HAZARDOUS MATERIALS

"1.2 HAZARDOUS MATERIALS REPORTS
A. The TJPA's environmental consultants have surveyed the facility for the presence of various hazardous

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

06/06/2011 - Kevin Chiu
Hazardous material has been removed from site per the extent of demolition contract drawings for zone 2 - this does not include the "pedestals" in Zone 2. The building and above ground structures were demolished to the extent shown on Demolition contract drawings. Hazardous materials abatement scope was completed within the scope of demolition only. Refer to Demolition Drawings D-1050, D-1051 and D-1073 for representation of limits of structures (specifically the referenced pedestals) demolished and hazardous material abatement.

BSE Contractor to handle remaining demolition and abatement in accord with BSE Spec 00-08-14 Health and Safety Criteria Para 1.2 and 1.3 Lead hazards, BSE Spec. 02-41-01 "Demolition" and BSE Spec. 01-13-50 "Hazardous Materials Procedures."

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

materials. Materials investigated may include asbestos, lead, PCB ballasts, mercury containing lamps, contaminated soils, underground storage tanks, and other hazardous materials. The demolition contractor for the Demolition project (Evans Brothers Inc.) is responsible for removing and abating products containing asbestos, lead, or PCB ballast, and mercury-containing lamps."

T-0164 **BSE - Timber Piles Adjacent 177/181 Fremont Building South Zone 4** **Closed** **06/06/2011** **06/16/2011** **06/06/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Webcor Construction LP Nhi Tran

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI@T-0146.1 [BBI 0104] and attached photo

Per [RFI #T-0146.1] RFI 104 Response, BBII inserted a metal sheet behind the timber piles required to be removed, in the location between 199 and 181 Fremont. The sheet is to hold back the soil in the alley. Due to the close proximity of the timber piles, the sheet location is too close to the timber piles required to be removed from the CDSM Wall Location. The sheet is too close for the pile extractor to attach to the tops of the pile. See Attached Photo.

Please Advise in detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

06/06/2011 - Roger Rothenburger

The practice of removing the sheet pile was approved by TJPA in the "181 Fremont test" done on Friday June 3rd. The Contractor can remove the metal sheet and expose the piles as necessary with as steeply a sloped excavation that allows the vibrator pile puller to be attached. The work should be done in as reasonably a short duration as possible. All equipment, manpower, materials should be at hand when the metal sheet is pulled and the piles are exposed for extraction.

T-0165 **BSE - High pH Water Found In Zone 3 Pre-Trenching** **Closed** **06/07/2011** **06/17/2011** **06/10/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Daphne Faulkner

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 00 08 13, 1.9.C

BBI found high pH water while digging an exploratory hole in the Fremont St. side of Zone 3. This was confirmed by Peter Cusack from Treadwell & Rollo. Specification Section 00.08.13.1.9.C states that "Should the existing wastewater be contaminated, or should it be

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Pending approval by the TJPA, a CR will be issued for the chemicals to treat the water per specification section 00 08 13 (1.9.B).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

uncontaminated but subsequently become contaminated as a result of conditions other than the Contractor's operations, a Change Order will be issued..".

Please consider this as a Notice of Existing Contaminated Wastewater as defined by SS00.08.13.1.9.C. Please advise on how to proceed.

T-0166 **BSE - Unknown Concrete Structure at 199 Fremont Zone 4 (Gridline 33-30)** **Closed** **06/07/2011** **06/17/2011** **06/22/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Transbay PMPC Roger Rothenburger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI#T-0144 (BBI RFI 0103), Specification Section 31 56 13, and attached Turner Field Condition Report 056 and photos

BBII demolished the Unforeseen Concrete Structure along 199 Fremont St., and associated curb per RFI #103 [RFI#T-0144] response. During the process, due to the previous contractor's construction means, the curb inadvertently damaged the metal flashing, and possibly the waterproofing beside it.

Along with the curb, the fence panel was built on top of the Unforeseen Concrete Structure, so when the structure was removed, the fence came down too.

See attached pictures and Turner Field Condition Report (5/24/11)

BBII requests immediate direction from the TJPA on this issue.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Instructions for this were orally transmitted in the field and complied with by the BSE Contractor. The fence between the buildings 199 Fremont and 181 Fremont has been reinstalled. Repair of the curb and flashing can wait until work in the area is complete or at a point that no further damage is possible. The Contract requires that the BSE Contractor repair damage to any building damaged during construction activity for the site and this Contract.

T-0166.1 **BSE - Unknown Concrete Structure at 199 Fremont Zone 4 (Gridline 33-30)** **Closed** **07/20/2011** **07/30/2011** **07/26/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Transbay PMPC Roger Rothenburger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Reference RFI #T-0144, RFI #T-0166 and Specification 31 56 13

Per the response to RFI#T-0166 (BBI RFI 103.1), please provide an acceptable repair procedure for the 199 Fremont building. Also, please confirm that the repair work will be included in CR T-010.

No action is required by the contractor at this time.

The specific damage to 199 Fremont Street has not been listed in the RFI. TJPA is aware of minor damage to the metal flashing along the curb at the bottom of 199 Fremont St and the removal of the unreinforced "curb" that ran along the base of the cinder block wall. As stated previously repairs to 199 Fremont will be made at a much later date. The damage that occurred to the flashing and unreinforced concrete curb resulted from using breaker on the unreinforced foundation wall and pulling the sections out and repairs will not be done until the project is further along in progress where no more likely damage will occur.

T-0167 **Survey Grid Control Documents** **Closed** **06/08/2011** **06/10/2011** **06/20/2011** **Potentially** ☐

From: Webcor Construction LP Tim Maxwell **To:** Transbay Joint Powers Author Edmond Sum **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference RFI T-0112.1 and drawing GT-0100

As requested by Ed Sum in today's (6/8/11) OAC meeting we submit the following question:

Please confirm that gridlines as established from the GT-0100 and as confirmed on Chaudhary & Associates Survey Grid Control Documents (Ref: RFI T-0112.1) can be used for all future construction elements (i.e., CDSM wall, etc). Please confirm by 6/10/11.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

For the purpose of laying out the work shown in the BSE package, the layout drawing provided by Chaudry (included in RFI T-0112.1) is acceptable.

T-0167.1 **Survey Grid Control Documents** **Closed** **07/01/2011** **07/11/2011** **07/05/2011** **Potentially** ☐

From: Webcor Construction LP Daniel Foudy **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please provide City Survey of property lines with a

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

translation to grid for our use.

The City's property line survey has been provided to the Contractor and GT-0100 ties the building grid to the survey.

T-0168 **BSE - Soil Classification Data** **Closed** **06/08/2011** **06/18/2011** **06/22/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Transbay PMPC Roger Rothenburger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 01 13 50

The Class 1 and Class 2 Disposal site does not want to use the old "PSI for Caltrans" Reports in the Soil Profile, due to the lack of necessary tests, missing pages in the report, and age.

The Disposal site recommends the use of the Treadwell & Rollo reports from 2008 and 2009, and to dismiss the "PSI for Caltrans" reports.

Please Advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contract Specification Section 01 13 50 Part 1.1.C (General Summary - Soils Management) requires that the Contractor use "Site Mitigation Plan, Transbay Transit Center" by Treadwell and Rollo March 24, 2010 for "...the management of existing soils in a manner consistent with the reuirements of the Contract." This report is attached as Appendix A in Specification Section 01 13 50.

Section 01 13 50 Par 1.1.C for soils management also references a 2nd Treadwell and Rollo Report, "Environmental Site Characterization, Transbay Terminal, San Francisco California April 2009" that is referenced in Specification Section 00 03 35 (Existing Conditions Hazardous Materials Reports). This report is not a part of the Contract as stated in Section 00 03 35 is not part of the Contract except for the technical data incorporated by reference into the Contract.

A partial review of this document shows that there is nothing to require that the Contractor use "PSI for Caltrans" reports. The April 2009 Treadwell and Rollo report is basically a detailed data report which predates the March 2010 report "Site Mitigaiton plan, Transbay Transit Center".

The March 2010 Treadwell and Rollo document modified by any additional data in the 600page April 2009 Treadwell and Roll report should be used to

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manage the soils being excavated and coordination with the Class 1 and Class 2 Disposal Sites.

T-0169 **BSE - Disposal of Drilling Spoils** **Closed** **06/09/2011** **06/19/2011** **07/07/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran
To: Turner Construction Compan Daphne Faulkner
Answered By: Transbay PMPC Roger Rothenburger
Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 01 13 50

BBII is concerned of the close proximity of the differently classified layers within the Buttress Area of Zone 4. The concern is during Drilling & Shaft Excavation, cross contamination of the material could potentially lead to Class 1 Material inadvertently going to a Class 2 Disposal site, or even a clean waist site. The class 1, the class 2, and the clean material layers are described below:

Surface to GL-11 ft --- Land fill (clean material except for Equipment Pad Concrete)
GL-11 ft to GL-13 ft --- Class II (based on Spec 01 13 50/APA)
GL-13 ft to GL-16 ft --- Class I (based on Spec 01 13 50/APA)
GL-16 ft to bottom ---Clean Material

BBII is concerned that due to the process of excavating the soil out of the Buttress Shaft with large amount of water and the use of a clam shell digging attachment, that the soil layers have a high opportunity of mixing within the casing. Presumably the mixed the soil layers will make it difficult to distinguish between the class 1, the class 2, and the clean materials.

BBII requests the engineer to provide a revised stratum classification that is better for the actual shaft excavation methods being used, that will prevent cross contamination.

Please Advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Conract Specification 01 13 50 Part 1.1.C (General Summary - Sil Management) requies the Contractor to use the Treadwell and Rollo March 24, 2010 "Site Mitigation Plan, Transbay Tranit Center" and April 2009 "Environmental Site Characterization, Transbay Terminal" reports for managing existing soil disposal.

Only the March 24, 2010 Treadwell and Rollo report is a Contract Document in Appendix A of Section 01 13 50 and only data from April 2009 Treadwell and Rollo Report is included as Contract information even though both reports contain much of the same language. The April 2009 report is 600 pages and the March 2010 report is considerably shorter and condensed.

Section 01 13 50 requires the Contractor to submit a material handling plan for each type of excavation operation on the site and includes the buttress piles as well as CDSM overflow materials, pre-trench excavation material, bulk excavation material, etc.

Both the April 2009 and March 2010 Treadwell and Rollo report give the expected ground condition classifications as:

5~16 feet (below grade) fill material composed of loose to medium dense silty sand with varying amounts of brick, wood, tar, and glass fragments.
15~18 feet (below grade) fill material composed of medium dense to very dense sand with variable amutns of silt
18~55 feet (below grade) Bay Mud
Under Section 01 13 50 Part 1.5.G the Contractor is

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resonsible for devleoping a plan that reduces the amount of hazardous waste generated. This plan also includes (Part 1.4.C Submittals - Excavation Handling) methods, means, equipment, sequences that segreegates the material to reduce cost of hazardous material disposal.

Since the buttress pile area was excavated to remove piles and backfilled with a combination of existing clean material (fine sand with silt) and crused concrete debris and poured concrete (top 2 feet buttress pile working pad) the Contractor needs to devise and submit the methods to handle the segregation of those materials for disposal in the appropriate Class land fills.

The Contractor will need to test materials for suitability and work out a plan with the Disposal Landfill Operators. TJPA will assist with the TJPA environmental consultant, Treadwell and Rollo but it is the Contractor's responsibility to mke the plan and handle the material. Classification of excavated materials by TJPA will not always govern how the disposal operators deal with the material. The actual conditon of the material must be determined prior to disposal.

The materials listed by elvation in the RFI are presumably the levles of CLSM, crushed concrete debris and the material below. The buttress area was excavated to a minimum of 12 feet below grade at the Fremont St. shoring wall and then another 3~5 feet was excavated to grab on to the timber piles for removal. The excavated material was replace with different materials when the engineered work pad was constructed with compacted material.

This means that the material is not necessarily class I as stated in the RFI or as designated in the Treadwell and Rollo March 2010 report. Whether the land fill operators will agree with that is the open question.

However, as stated in Section 01 13 50 it is up to the BSE Contractor to test and determine the disposal of material in accordance with the Contract.

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TJPA will assist with some testing by their outside environmental consultant Treadwell & Rollo but such testing does not erelieve the Contractor of the responsibility for the means and methods of proper disposal despite TJPA being the "generator" of the material.

T-0170 **BSE - Existing 3" minus Concrete Rubble** **Closed** **06/20/2011** **06/30/2011** **06/29/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Drawing Sheets GT-1303, D-5100, D-5101, D-5102, D-5103, response to Pre-Bid RFI #TG0300-014, and attached drawing

Contract drawings GT-1303, D-5100, D-5101, D-5102, and D-5103 along with the response to Pre-Bid RFI #TG0300-014 describe the finish grades and subsequent quantities of crushed 3" minus concrete to be left on site for the BSE package. In summary, Zone 4 was to be left with a depression as shown on GT-1303 and Zone 1-3 were to be left no higher than existing ground elevations.

Previous discussions between BBII, W/O, EBI and TJPA were made to accommodate BBII's early access into Zones 1-3 for pre-trenching. At the time of these discussions EBI indicated they were short approximately 7000 cy of balancing the site and that they would not be able to get that remaining 7000 cy until the existing ramps were demolished. As a result of the short term shortage and in exchange for access to zone 1-3 BBII agreed to:

- Allow EBI to leave Zone 3 low of the Existing elevations
- Allow EBI to set up Crusher in Zone 2 for ramp demolition
- Allow EBI to leave the 7000 cy shortage in a stockpile in Zone 2, for our later use.

BBII appreciated the partnering agreement however the current size of the stockpile is far greater than BBII ever expected. BBII surveyed the stockpile and the Zone 3

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Intent of the demolition project is to retain processed construction demolition concrete onsite for use as buttress fill material and provide a working platform for construction of new terminal perimeter wall.

Contract drawings state" Subsequent to placement of CDSM wall perimeter shoring remove all onsite crushed/processes demolition concrete backfill." REF: D-2200-2203 inclusive, and D-1001 Note 2.

The amount of crushed concrete (and asphalt) is from the demolition contract is in accord with Demolition Contractor drawings and specs. REF: Demo Spec. 02-42-00.

depression on 6/7/11 after they completed their export to zone 4 and BBII estimates the size of the concrete stockpile to be in excess of 11,000 cy (this does not include the asphalt stockpile that was created after the survey).

Based on BBII's calculations (see attached topo) Zone 3 was left approximately 2000 cy short of existing grade and 5000 cy were taken from the stockpile to Zone 4. As a result BBII requests the current stockpile be removed in its entirety from the site, as it is in excess of the contractual amount to be removed by the BSE contract.

However, If acceptable to TJPA, BBII would be interested in taking 2000 cy of the crushed concrete if it could be delivered and stockpiled in an mutually agreeable staging area. BBII suggests Lot S. This material would then be used as need for excavation stabilization throughout the BSE contract.

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T-0171	BSE - Concrete Section Protruding Into CDSM Shoring Wall Area Zone 4	Closed	06/13/2011	06/23/2011	06/17/2011	Potentially	☐

From: Webcor Construction LP — Nhi Tran
Co-Author: Balfour Beatty Infrastructure, Inc. — Ural Yal
To: Turner Construction Compan — Daphne Faulkner
Answered By: Transbay PMPC — Roger Rothenburger

REQUEST:

Reference attached photo

While excavating a pile next to 181 Fremont Street, a section of concrete that was protruding into the CDSM shoring wall area fell from the foundation wall of 181 Fremont. Please advise on how to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The void should be filled with 2000 psi concrete after surfaces of the opening are cleaned. In addition grouted anchorage of #3 rebar hooks at 12'' c.c around the opening in the existing concrete basement wall and mesh is required before placing repair concrete through a ''bird's mouth'' form for a complete filling. A sketch is attached showing the desired configuration of the repair patch.

Cost to be tracked under CRT#10.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0172	LEED Submittal Requirements	Closed	06/13/2011	06/23/2011	06/21/2011	Potentially	☐

From: Webcor Construction LP — Joanne Filipas
Co-Author:
To: Turner Construction Compan — Daphne Faulkner
Answered By: Adamson Associates, Inc — George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Ref Spec Section 01 81 13 Section 1.5:

According to spec section 018113.1.5, LEED submittals shall be submitted in addition to other submittal requirements specified elsewhere. If a submitted item is identical to an item submitted to comply with other requirements, a duplicate copy is to be submitted. In effort to minimize duplicate submittals, please confirm it is acceptable to issue one submittal package to cover both the technical spec. and LEED spec section requirements.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

We agree with your proposal to combine the data.

T-0173 **BSE - Enhanced Trial Batch Testing** **Closed** **06/13/2011** **06/23/2011** **06/15/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

To: Turner Construction Compan Daphne Faulkner

Answered By: Adamson Associates, Inc George Metzger

REQUEST:

Reference Specification Section 03 30 01, 2.2.E and attached mix designs

BBII, Becho, Central Concrete, W/O, ARUP and Adamson Associates met on Tuesday 5/24/2011 to discuss the results of Buttress Primary Concrete Mix Trial Batches. Based upon the preliminary results of the 2nd Trial Batch, BBII proposes to submit the following three mixes for approval for use on the Buttress Primary Shaft Concrete:
1. Mix 1: 85AEC3B6
2. Mix 5: 86AEC3A6
3. Mix 7: 87AEC3A6

BBII believes that having additional mixes available for use as the Buttress Primary Concrete would be of great benefit to the Project. BBII proposes "enhanced testing" of these three mixes as well as three additional hybrids of each mix for a total of nine mixes (please see attached for mix designs). The intent of the enhanced testing is to further refine the information we currently have on all three of the above three mixes, as well develop additional mixes for future use as Primary Shaft Concrete.

One of the concerns of 1st and 2nd Trial Batches was potentially accelerated curing due to the Styrofoam

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

This is acceptable.

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insulated boxes in which the trail batch "cubes" were cast. BBII proposes a 3rd trial batch using all of the same methodology of the approved trial batch method placing, the only exception being that the concrete will be cast into +/- 5'x5'x4' deep excavations in lieu of the Styrofoam insulated forms. Each mix would be placed in an individual excavation, lined with plastic to retain moisture. All other aspects of the proposed trial batch methodology would be as previously submitted & approved.

The results of the "enhanced testing" would be evaluated and possibly submitted for approval as additional Buttress Primary Shaft Concrete Mixes.

Please confirm that this is acceptable.

T-0174 **301 Mission Wall - New Curb Detail** **Closed** **06/14/2011** **06/24/2011** **06/20/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** URS Corporation David Fyfe

Co-Author:

REQUEST:

Reference: Attached sheet C-5000

The required curb details are not clearly defined. Is new curb set atop finish pavers, onto topping slab, or set all the way down to structural slab. Additionally, provide all applicable rebar details to match condition.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

New concrete curb shall be placed on top of topping slab and shall extend 9 inches above top of pavers. See attached detail for reinforcement. Concrete mix used for new concrete curbs shall be according to RFI T-0176.

T-0175 **301 Mission Wall - Concrete Mix for Curb Around Existing Manhole Covers** **Closed** **06/15/2011** **06/25/2011** **06/20/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** URS Corporation David Fyfe

Co-Author:

REQUEST:

Reference drawing C-2000

The existing curb around the manholes at the east and west ends of the 301 Mission Wall is unknown. Design documents do not provide information as to the specs of

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

New concrete finish shall match existing concrete finish. Contractor shall provide concrete mix designs for curb(s) and walkway(s) based on specification as follows;

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this concrete mixture. The existing concrete appears to have a color added to the mix design. Please provide a mix design and color specification (if necessary) to use at these locations.

Concrete Mix, Design and Testing: Design the mix to produce standard weight concrete consisting of Portland cement, aggregate, air-entraining admixture and water to produce the following properties:

Compressive Strength: except as noted below, four thousand five hundred (4500) psi, minimum at twenty-eight (28) days, with a water cement ratio not to exceed 0.45 by weight.
Slump Range: Two (2) inches to Four (4) inches.
Air Content: Five (5) to seven (7) percent.
Mixed shall be design to provide concrete with the following properties:

Location	Maximum Size of Aggregate	Min. 28 Day Strength (psi)	Min Sacks of Cement/cu. Yd.
Concrete Curb	¾"	3000	6
Concrete Walkways	¾"	2500	5-1/2

Integral Color: Sidewalk shall be constructed of a dark grey, Hi-Con at 5 lbs. per cubic yard carbon black based concrete finish, with 25 to 30 lbs per 100 square feet of silicon carbide sparkle grains.

Contractor shall submit mix design (including integral color) for review and acceptance by the TJPA Representative prior to placing concrete.

Contractor shall provide sample of new concrete to ensure that it matches with existing concrete prior to placing new concrete.

T-0176 **301 Mission Wall - Fill Pour Back and New Curbs** **Closed** **06/15/2011** **06/25/2011** **06/20/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** URS Corporation David Fyfe

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Should the concrete mix design for the fill pour back and 9"x12" curbs along the north side of the 301 Mission wall be the same mix that is used for the new curb around the manhole? The mix design for curbs around the existing manhole was requested in RFI T-0175. Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Concrete mix design for new concrete curbs shall be as specified in RFI T-0175.

Finished concrete curbs shall match existing concrete curb finish.

Contractor to submit concrete mix design to TJPA Representative for review and acceptance prior to placing concrete.

T-0177 **BSE - Alternate Method Of Pile Removal Along 181 Fremont** **Closed** **06/15/2011** **06/25/2011** **06/16/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference attached procedure, photos, and sketch

During the extraction of unforeseen piles along 181 Fremont, two piles located inside the proposed CDSM wall broke and are now too deep to extract under using the current extraction method. During the attempted extraction of pile 151, the pile continued to break. The top of this pile is approximately 9' below the base of the foundation wall. Considering the length of the adjacent removed piles, there is approximately 6' left to be removed. Pile 105 is approximately 6' below the base of the foundation wall leaving approximately 12'-14' to be removed. Further excavation to expose these piles is not reasonable. BBII proposes to drill the remainder of each pile out. See below the proposed procedure as per committee meeting and consultation with Viking Drillers Inc. on 6-15-11. It was agreed that this work will be charged to CR T-010. Also attached are photos and a drawing indicating the location of both broken piles (105 and 151).

Please provide direction.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed - Method of pile removal is acceptable. CR T-010 is used to document work.

T-0178 **BSE - Connector Wall Layout** **Closed** **06/16/2011** **06/26/2011** **06/21/2011** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI#T-0151 and Sheets GT-2103 and GT-2201

Per the Engineer's response to RFI#T-0151, it is acceptable to expand the overall Buttress 4'-4" to the east. Please advise if the CDSM connector columns can still be installed per contract drawings GT-2103 and GT-2201.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

This is not acceptable. If the Contractor wishes to increase the spacing of the drilled shafts, then the connector columns will need to shift and / or be supplemented with additional columns to provide CDSM material for the full width of the buttress.

T-0179 **301 Mission Wall - Detail at Steel Baseplates on South Side** **Closed** **06/21/2011** **07/01/2011** **07/11/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** URS Corporation David Fyfe

Co-Author:

REQUEST:

"Reference drawing D/A-6000 and attached sketch

Detail D/A-6000 does not provide a plywood panel termination detail at the steel baseplate locations along the south side of the 301 Mission wall. At the locations of the steel baseplates, use of sealant and backer rod would leave the steel baseplate exposed (see attached sketch). Please advise."

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is noted that the contractor has already installed flashing to protect steel base plate prior to this RFI response. Although installation of flashing is not specified in contract documents this means of protecting the steel base plate is acceptable.

T-0180 **BSE - CDSM Wall Tolerance** **Closed** **06/22/2011** **07/02/2011** **06/22/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Transbay PMPC Roger Rothenburger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 31 56 13

As requested by the TJPA, DND submits this request to modify the horizontal tolerance for the CDSM shoring wall. The new goal is to set the wall 2" outside of the original planned centerline of shoring wall. This solution has been proposed by the TJPA in order to not encroach into the structure at the bottom of the train box.

DND respectfully requests the maximum soldier pile & CDSM wall tolerances be revised to 0 inches into the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

TJPA did not request this RFI. TJPA stated that if the Contractor was concerned about meeting the tolerances for top horizontal position of the CDSM shoring wall that the Contractor should submit an RFI and TJPA would support such a request in order to avoid any encroachment of the CDSM shoring wall with the Transit Box concrete structure which would be difficult to remediate.

TJPA has no objection in the horizontal setting of the CDSM shoring wall if the horizontal tolerance is 0"

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trainbox & up to 5 inches outside the trainbox.

There will be no additional excavation and/or bracing costs associated with this increase in tolerance from BBI. However; there may be future additional cost impacts to the Structural Concrete & Waterproofing that are to be handled in future trade packages.

Please confirm, if this is acceptable.

towards the TTC box structure and 4" away from the box structure. The verticality tolerances of 1/150 (CDSM wall) and 1/200 (steel beam) remain in place.

The 4" top horizontal tolerance away from the wall will allow at 1/150 in 55 feet a near 0" clearance at the invert level with the CDSM wall and will allow at 1/200 the steel beam to be clear of the structural outline by 0.70".

It is understood that there is no cost or time associated with this change for the BSE Contractor work and that TJPA accepts the additional overbreak concrete generated by this small adjustment in the top horizontal placement in exchange for a better chance of avoiding structural encroachment issues at the final invert level.

It is also understood that the use of the increased top horizontal tolerance is contingent on actual field physical property line clearances for the CDSM shoring wall.

T-0180.1 **BSE - CDSM Wall Tolerance** **Closed** **06/24/2011** **07/04/2011** **07/07/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Transbay PMPC Roger Rothenburger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Response to RFI#T-0180

Please delete the first sentence "TJPA did not request this RFI" of the response for RFI T-0180, because it is the wrong statement.
Emilio Cruz, PMPC, requested to submit this RFI at the Schedule Review Meeting on 6/14/2011 at W-O JV Office Conference Room, 183 Fremont St.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It depends on how "request" is defined. TJPA did "request" the RFI for expanded tolerances but only if the CDSM shoring wall subcontractor felt that they needed more tolerances and wished to have TJPA confirm that it would accept a larger set back (4") than allowed in the Specifications (2"). This is the same undertanding held my Emillio Cruz.

TJPA has allowed a 4" set back while maintaining the verticality specifications for the steel soldier piles (1/200) and the CDSM (1/150). The CDSM shoring wall subcontractor has initially selected a 2" setback for placing the steel soldier beams. At 1/200 for a depth of 55ft there could be as much as 1.3" of

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

encroachment (1/200x55x12 - 2" = 1.33").

At the very least it would seem that a 3" setback would minimize further the posibility for encroachment since the 1/200 is still a difficult specification to achieve as TJPA understands it from the CDSM subcontractor.

Since encroachment can be very problematic with the concrete structural wall TJPA supports the larger setback to avoid difficult encroachment problems while maintaining the specifications on verticality. The issue of who requested what and when is immaterial. TJPA has accepted the potential for additional concrete from allowing a larger setback and the BSE Contractor has accepted any impact to the bracing system from a larger impact.

T-0181 **BSE - CDSM Pile Tolerance Measurement Location** **Closed** **06/22/2011** **07/02/2011** **07/01/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 31 56 13

BBII's subcontractor DND would like to confirm the exact location of the soldier pile, where the pile tolerance is to be measured. Please find below DND's question:

"It is our understanding that the tolerance of the soldier pile beams is to be measured at the plan top of pile elevation. Is this correct?"

Please confirm that DND's interpretation of the pile tolerance measurement is correct.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

We confirm that the tolerance refers specifically to the location of the CDSM wall and soldier pile centerlines.

Section 31 56 13 3.3 A. states: "The location of the CDSM wall centerline relative to that shown on the Drawings is 0" toward the excavation and 2" away from the excavation." This refers to the location at the ground surface ("original grade") at the start of drilling.

Section 31 56 13 3.13 B. 8. states: "Acceptable construction tolerance for the location of the soldier pile centerline relative to that shown on the Drawings is 0" toward the excavation and 3" maximum away from the excavation." This refers to the location at ground surface ("original grade") at the start of pile installation.

Please also refer to 31 56 13 3.4 A and 31 56 13 3.13

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

B 2 which stipulates respectively the vertical alignment of the CDSM wall and soldier piles.

T-0181.1 **BSE - CDSM Tolerances** **Closed** **07/21/2011** **07/31/2011** **07/26/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran

To: Turner Construction Compan Gary Krutsch

Answered By: Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFIs #T-180, #T-0180.1, #T-0181 and Specification Section 31 56 13

Previous RFIs T-180, T-180.1, and T-181 have all addressed CDSM shoring wall tolerances. Below is BBII's interpretation of the responses:

1. Horizontal Tolerance:
a) CDSM Columns: 0" in towards the train box, 2" maximum away from the train box - measured relative to the "plan" CDSM shoring wall centerline located at the ground surface (original grade) at the start of drilling (W/O comment - Reference Specification Section 31 56 13, 3.3.A)

b) Steel Soldier Pile: 0" in towards the train box, 4" maximum away from the trainbox - measured relative to the "plan" CDSM shoring wall centerline located at the ground surface (original grade) at the start of drilling (W/O comment - Reference Specification Section 31 56 13, 3.13.B.8)

2. Vertical Tolerance:
a) CDSM Columns: Inclination deviation no more than 1:150 (horizontal to vertical)
(W/O comment - Same as stated in Specification Section 31 56 13, 3.4.A)

b) Steel Soldier Pile: Inclination no more than 1:200 (horizontal to vertical)
(W/O comment - Same as stated in Specification Section 31 56 13, 3.13.B.9)

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Using the numbering in the RFI:

1 a. 0" in towards the train box, 4" maximum away from the train box is acceptable everywhere along the alignment except at wall segments A/26-30 and A/30-33.5. 0" in towards the train box, 2" maximum away from the train box is acceptable at wall segments A/26-30 and A/30-33.5.

1 b. 0" in towards the train box, 4" maximum away from the trainbox is acceptable everywhere along the alignment.

2 a. Confirmed

2 b. Confirmed

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please confirm this is acceptable

T-0182 **BSE - Inclinometer Locations Within The CDSM Wall** **Closed** **06/23/2011** **07/03/2011** **06/24/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheets GT-1301, GT-1302, Specification Section 31 56 13, and Transmittal No. 140-01802 (attached)

Please refer to the Instrumentation Plan within the contract drawings GT-1301 & GT-1302, which depicts the rough locations of the 15 inclinometers (IW-1 through IW-15) that are to be installed through the CDSM shoring wall. Please notify BBII of the exact locations of those inclinometers by utilizing the soldier pile numbers 1 through 681, sent in Transmittal No. 140-01802 (attached).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Provide pipes at the piles (beams) in accordance with detail 13/GT-5101 in the following fourteen beam numbers: 46, 97, 138, 226, 306, 325, 340, 443, 458, 478, 497, 556, 641, 730. Refer to the plan submitted with the RFI for the beam numbers.

As noted in 13/GT-5101, wood block shall be used at the bottom of the pipe. The top of the pipe shall be covered with duct tape to prevent filling with soil cement.

T-0182.1 **BSE - Connector Wall Inclinometer Locations** **Closed** **06/30/2011** **07/10/2011** **07/05/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI#T-0182, Transmittal No. 140-01802, and Specification Section 31 56 13

BBII is in receipt of the Engineer's response to RFI T-0182, which lists the fourteen pile numbers where the inclinometers will be installed. Please note that pile # 443 was already installed on 06/18/2011, as part of the CDSM test panel.

Can the inclinometer casing be installed at pile # 446, instead of pile # 443?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

The inclinometer casing shall be installed in pile number 440 rather than number 443.

☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0183	BSE - Connector Wall Shift	Closed	06/23/2011	07/03/2011	06/27/2011	Potentially	

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI#T-0178, Sheets GT-2201, GT-5101, and attached sketch

Per the Engineer's response to RFI T-0178, it is acceptable to shift the CDSM Connector Columns to the east and to add additional columns to provide CDSM material for the full width of the Buttress. Please confirm that it is acceptable to shift the lower three rows of the CDSM Connector Columns approximately 3'-6" to the east and add two more columns to the top row. Additionally, please confirm that the CDSM Shoring Wall between Gridlines 26 and 30 can still be installed per GT-2201 and Table 16/GT-5101.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Provided there is no additional cost to the TJPA, it is acceptable to shift the connector columns and add columns as proposed and shown on the sketch.

The CDSM Shoring Wall between Gridlines 26 and 30 shall be installed per GT-2201 and Table 16/GT-5101.

T-0183.1	BSE - Connector Wall Shift	Closed	06/30/2011	07/10/2011	07/11/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI#T-0151, RFI#T-0178, RFI#T-0183, Specification Sections 31 63 29 and 31 56 13, and attached drawing

Please refer to the Engineer's response to RFI # T-0151, which accepted the expansion of the Buttress 4'-4" to the east. Please also refer to the Engineer's response to RFI No. T-#0178, where the designer required the connector columns be shifted and/or supplemented with additional columns to provide CDSM material for the full width of the buttress. BBII suggests to revise the connector column layout per the attached drawing and install two additional connector columns at Grid "A" and "30" intersection.

Please confirm, if the proposed revision of the CDSM connector columns according to the attached drawing fulfills the design requirement.

Also, please issue revised construction drawings that would reflect the changes made to the Buttress and the CDSM connector walls.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

The locations of the CDSM connector columns shown on the sketch accompanying the RFI are acceptable. The locations of the buttress shafts shown on the sketch accompanying the RFI have been revised. Please see the marked-up sketch attached to this response.

A revised GT-2201 will not be issued.

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T-0184	BSE - CIDH Pile Rebar Cage Hoop Size	Closed	06/27/2011	07/07/2011	06/28/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet GT-5202, Specification Section 03 20 01, attached sketch, and approved Shop Drawings from Package TA2010-032001A05

Drawing 12/GT-5202 shows 5'' clearance between the hoop OD and the inside diameter of a 7' +/- 2'' shaft. Per discussions with Becho, at least 3'' of clearance is needed between the rebar spacers and the ID of the casing to facilitate proper installation of the rebar cages inside the casing.

BBII would like to propose 7 1/4'' minimum clearance in lieu of the 5'' clearance (shown on 12/GT-5202) between the hoops and the inside diameter of the hole. Changing the clearance from 5'' to 7 1/4'' would give Becho the 3'' of clearance that they need between the spacers and casing ID.

Note that the approved rebar shop drawings show 5'' clearance to the hoops as per 12/GT-5202. BBII will submit for your records only revised shop drawings showing the proposed 7 1/4'' minimum clearance.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Changing the clearance from face of reinforing steel to the soil face from 5'' to 7 1/4'' is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0185	Division 01 specifications issued for the TG08.1 package	Closed	06/29/2011	07/09/2011	07/13/2011	Potentially	☐

From: Webcor Construction LP Tim Maxwell **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Transbay PMPC Alfred Lau

Co-Author:

REQUEST:

Confirm if any of all of the Specification Sections 00 01 10, 00 01 15, 00 01 16, 00 03 50, 01 10 20 / APH, 01 10 30, 01 10 30 / APA, and 01 80 50 issued for the TG08.1 bid documents are to be incorporated into the overall project specifications. If so, the specifications should be issued to W/O by Field Order or Change Order.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Yes, the revised Divsions 00 & 01 sections will be officially issued to W/O by maens of Add Amendment or Field Order, as appropriate.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0186	BSE - Hazardous Materials Removed From 564 & 568 Howard Street	Closed	06/30/2011	07/10/2011	07/07/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference Final Pre-Demolition Hazardous Materials Assessment: Asbestos & Lead Survey (564 & 568 Howard St) - June 2011, prepared for ERM-West by Millennium Consulting Associates

Please confirm that all the hazardous materials identified in the Final Pre-Demolition Hazardous Materials Assessment: Asbestos & Lead Survey (564 & 568 Howard St) - June 2011, will be removed by the demolition contractor.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Haz Mat abatement will include the materials identified in this report, however removal will be to the extent of demolition drawings issued for Demolition.

T-0187 **BSE - Connector Wall Inclinometer Locations - SEE RFI 182.1** **Closed** **06/30/2011** **07/10/2011** **08/23/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Webcor Construction LP Joanne Filipas

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI#T-0182, Transmittal No. 140-01802, and Specification Section 31 56 13

BBII is in receipt of the Engineer's response to RFI T-0182, which lists the fourteen pile numbers where the inclinometers will be installed. Please note that pile # 443 was already installed on 06/18/2011, as part of the CDSM test panel.

Can the inclinometer casing be installed at pile # 446, instead of pile # 443?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SEE RFI T-0182.1.

T-0188 **BSE - Timber Piles Minna Street** **Closed** **07/01/2011** **07/11/2011** **07/05/2011** **Potentially** ☐

From: Webcor Construction LP Masashi Kojima **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference D-2211 and D-5101.
During the pre-trenching operation on Minna Street between Gridlines 9-17, BBII discovered unknown timber piles. The timber piles are not shown on the BSE drawings. See attached BSE drawing D-2211, D-5101. The attached pictures indicate timber piles to be approx 2ft

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please refer to note on Drawing D-2212 which states,

"In areas where (N)CDSM wall conflicts with the existing pile caps and piles, remove (E) pile caps and/or piles prior to construction of (N) Transit Center Building CDSM perimeter shoring wall (see Note 3 and

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

from the centerline of the CDSM wall. These piles meet the general conditions set out in article 3.05A.2. The piles encountered were not outlined in the bid documents. Please confirm the removal of the "unforeseen" timber piles, tracking and paid under a Force account contract change order similarly as done for Zone 4 pre-trench obstructions.

6)."

Please refer to note on Drawing GT-5103 which states,

"Width and Depth as required to remove obstacles"

This includes all piles within the CDSM wall footprint.

"Unforeseen Conditions" are covered in Section 00 07 00 (General Conditions) Article 3.05.A.2 and 3.05.A.3 (Unforeseen or Changed Conditions).

Article 3.05.C states,

C. Differing Site Conditions shall not include:

1. All that is indicated in or reasonably interpreted from the Contract Documents or Reference Documents;

2. All that could be seen on Site

3. Conditions that are materially similar or characteristically the same as those indicated or described in the Contract Documents or Reference Documents.

Since Section 31 56 13 discusses both pre-trenching and the removal of timber piles and Bid Item #6 is for the removal of timber piles before the CDSM shoring wall is installed TJPA believes that this work was indicated and will provide payment for it under Bid Item #2, #4, #6, and #7.

There will be no additional payment for the removal of timber piles for the CDSM wall.

T-0188.1 **BSE - Timber Piles Minna Street** **Closed** **07/07/2011** **07/17/2011** **07/12/2011** **Potentially** ☐

From: Webcor Construction LP Masashi Kojima **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference RFI T-0188, Drawing D-2211 and D-5101.

Further to the TJP A response RFI # 188, this response did not address the mentioned timber pile removal method.
Please see the attached cross section showing timber pile location in relationship to the existing utilities and structures. Due to the pile location, in relation to the shoring box BBII proposes direct extraction as done on A line in Zone 3.
Please confirm this removal method is acceptable for the entire length of Minna Street.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Arup recommends that the procedure for removing these piles follow the procedure described in Arup's response to RFI T-0146.4.

T-0188.2 **BSE - Timber Piles Minna Street** **Closed** **07/13/2011** **07/23/2011** **07/14/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran
Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal
To: Turner Construction Compan Daphne Faulkner
Answered By: Transbay PMPC Roger Rothenburger

REQUEST:

Reference response to RFI#T-0188.1 and RFI#T-0146.4

As discussed at the TG03 BSE Design Team meeting on 7/13/2011, sand shall be used for back fillings instead of the low strength material described in RFI#T-0146.4.
Also, TJPA representative shall observe the extraction and instruct the extraction method in the field, if necessary.

Please confirm.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

TJPA Representatives and Arup will observe the method in practice Thursday July 14, 2011 at 10am to observe the method using sand described above for final verification that this method will be acceptable and suggest any changes to the method at that time.

T-0188.3 **BSE - Timber Piles Minna Street** **Closed** **07/18/2011** **07/28/2011** **07/26/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran
Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal
To: Turner Construction Compan Daphne Faulkner
Answered By: Transbay PMPC Roger Rothenburger

REQUEST:

Reference RFI#T-0188.2 and attached photos

BBII has concerns for the integrity of the adjacent street and utilities, as a result of the pile extraction being performed on Minna Street in accordance with the response to RFI#T-0188.2. BBII has observed

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractor's concern for the integrity of the adjacent street and utilities is as a result of the shoring method used - not the result of the pile extraction being performed on Minna Street in accordance with the response to RFI#T-0188.2.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

undermining and adjacent settlement during the extraction process (see attached photos).

Please advise an acceptable method of pile extraction that will allow this work to continue

The observed undermining and adjacent settlement during the extraction process is to be restored to prevent damage to Utilities installed in Minna Street. The methods allowed in RFI T-0188.2 are to be followed by the Contractor.

Section 31-56-13 Part 3.2.C (CDSM Wall - Pre-trenching) also references Section 32-12-17 (Street Excavation & Restoration) for pre-trenching "...within and or adjacent to the public right of way." In addition Section 31-56-13 Part 3.2.D requires the Contractor to "Comply with all regulatory requirements regarding trench shoring." Both Section the Street Excavation and Restoration Specification 32-12-17 and the regulatory requirements for trench shoring require a shoring system designed by a Professional Engineer and submitted to TJPA as well as the SFDPW. OSHA requires for all trenches deeper than 5 feet and not sloped according to OSHA standards be designed by a Professional Engineer.

Given the above it is the Contractor's responsibility to select the means and methods and to design pre-trench shoring meeting the above requirements.

TJPA observations of the Minna Street pre-trenching operations showed that the "trench shield" method of support where excavation below the trench shield required for both sinking the shield and exposing "obstructions" allowed the loose fill sand at the bottom of the excavation to slough into the excavation. This loss of ground led to settlement of the street and potential settlement of the adjacent water line and sewer.

TJPA notes that the Contractor has commenced using near-flat sheet piles in combination with the trench shield bracing to achieve the depths required. However, no submittal of a design done by a professional engineer has been submitted to TJPA in accordance with the requirements from the Specifications stated above.

An acceptable method of pile extraction includes a suitable trench shoring method and plan that meets

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the Specification requirements. TJPA has no objection to the use of braced sheet piles as long as the above Specification requirements are met. The actual method of pile extraction with vibration and sand filling has been addressed in a previous RFI and TJPA has witnessed a satisfactory site demonstration of this method of pulling timber piles.

7/20/2011 - George Metzger:

ARUP Response:

Regarding the removal of the piles, Arup recommended a procedure in response to RFI 188.1. Contractor to confirm that this procedure is being implemented as described in the RFI response.

Regarding the installation of temporary shoring to access the piles, this is the Contractor's means and methods.

T-0189 **BSE - CDSM Spoils - Initial Off Haul** **Closed** **07/01/2011** **07/11/2011** **07/05/2011** **Potentially** ☐

From: Webcor Construction LP Masashi Kojima
Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal
To: Turner Construction Compan Daphne Faulkner
Answered By: Transbay PMPC Roger Rothenburger

REQUEST:

Per our meeting on 6-23-11 with the TJPA, PMPC, T&R, TCCO and W/O, this RFI is to confirm the initial off haul of the CDSM spoils to be classified as Class 2 non-hazardous waste and will be paid under bid item #38 due to lack of soil testing data required by the landfill and risk of cross contamination.
BBII is currently in talks with various local landfills and their Consultant with the advice of Treadwell Rollo for the acceptance of the spoil to be classified under "clean soil" (not Class 2).
Please confirm.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

"Initial CDSM overflow "spoils" is considered only the overflow spoils from the CDSM test panels in Zone 4. For the single purpose of removing the CDSM test panel overlfow now on the surface in Zone 4 and without prejudice for the classification of future CDSM overflow materials the "iniital" CDSM overflow materials (30 loads+/-) from Zone 4 may be hauled to a Class 2 land fill site. Payment will be in accordance with the Contract for disposal of Class 2 hazardous waste material for this one time until a future classification for CDSM overflow materials can be agreed with the land fill operator.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0190	BSE - Connector Wall Daily As Built Requirement	Closed	07/01/2011	07/11/2011	07/13/2011	Potentially	☐

From: Webcor Construction LP Masashi Kojima **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 31 56 13 1.4F.

To satisfy the Section 31 56 13 1.4F requirement, BBII will continue to submit the "DND Daily Construction Report" on a daily basis along with the attached as-built drawing within 24 hours of column installation.

Please confirm that this will satisfy the Section 1.4F requirement: "submit as-built drawings within 24 hours of column installation."

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The attached daily report lacks required information (i.e. surveyed as-builts, column diameter, etc.) and therefore does not satisfy the documentation requirements of spec 31 56 13 (1.4, 3.5, 3.11, 3.13, etc.).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0191	BSE - Connector Wall Final As Built Requirement	Closed	07/01/2011	07/11/2011	07/12/2011	Potentially	☐

From: Webcor Construction LP Masashi Kojima **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 31 56 13 3.3B.

To satisfy the Section 31 56 13 3.3B requirement, BBII proposes to submit as built drawings prepared by a California licensed surveyor at the approximate completion of each Zone.

Please confirm that this will satisfy the Section 3.3B requirement: "Following CDSM wall construction, the Contractor shall submit as-built drawings prepared by a California licensed surveyor indicating the location of the CDSM walls relative to the excavation alignment."

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Contractor to submit as-built drawings within 24 hours of column installation. The drawings shall be prepared by a licensed surveyor and shall indicate the CDSM wall relative to excavation alignment.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0191.1	BSE - CDSM Connector Wall Final As Built Requirement	Closed	07/27/2011	08/06/2011	08/03/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI#T-0191 and Specification Section 31 56 13

BBII disagrees with TJPA's interpretation of the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Submitting as-built drawings prepared by BBII/DND's

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

requirements of the Specifications in its Response to RFI T-0191.

Article 1.4F, Section 31 56 13 of the Specifications state:
Record Documents
1. Submit as-built drawings within 24 hours of column installation.
2. Note and submit immediately to the TJPA's Representative unusual conditions encountered, including amounts of cement grout overpours during construction.

Article 3.11D2, Section 31 56 13 of the Specifications state:
The Daily Quality Control Report shall include as a minimum the results of the following QC parameter monitoring for each column:
a. Rig number
b. Type of mixing tool
c. Date and time (start and finish) of column construction
d. Column diameter
e. Column top and bottom elevations
f. Grout mix design designation
g. Slurry specific gravity measurements (obtained from the Testing Agency)
h. Description of obstructions, interruptions, or other difficulties during installation and how they were resolved
i. Surveyed as-built of previous day's work in relation to grid

Article 3.3B, Section 31 56 13 of the Specifications state: (emphasis added)
Following CDSM wall construction, the Contractor shall submit as-built drawings prepared by a California licensed surveyor indicating the location of the CDSM walls relative to the excavation alignment.

Article 3.3B of the above provides the only requirement for a survey performed by California licensed surveyor. BBII's proposal in RFI T-0191 exceeded the requirements of Article 3.3B by proposing to submit as-built drawings prepared by a California licensed surveyor at the completion of the CDSM wall at each Zone, rather than at the completion of the entire CDSM scope as the Specifications require.

project staff within 24 hours of installation is acceptable.

As-built drawings prepared by a licensed surveyor shall be submitted as each of the following sections of wall are completed:

1. A-line inside Zone 4

2. J-line inside Zone 4

3. Beale and N-lot

4. Fremont Street

5. First Street

6. A-line inside Zone 3

7. J-line inside Zone 3

8. A-line inside Zones 2 and 1

9. J-line inside Zone 2 to Grid 10

10. J-line inside Zone 1 from Grid 10 to Grid 1 and gridline 1

The drawings for a given section shall be submitted within 14 calendar days of completing that section.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please confirm that submitting as-built drawings prepared by BBII/DND's project staff within 24 hours of installation and as-builts of each zone at the completion of the zone by a licensed surveyor is acceptable. BBII will perform additional survey by a licensed surveyor if necessary at areas of concern, to ensure conformance with the project requirements.

T-0192 **BSE - Unforeseen Tank on Gridline 35** **Closed** **07/06/2011** **07/16/2011** **07/08/2011** **Potentially** ☐

From: Webcor Construction LP Masashi Kojima **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Transbay PMPC Roger Rothenburger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

BBII discovered an unforeseen tank structure during the pre-trenching operation along Gridline 35 between Gridline A-J that is not shown on the contract plans. The tank contains liquid substance; the odor from the excavation around the tank, it is assumed this is a fuel liquid. This tank needs to be removed to allow the continuation of the pre-trenching operation. Please advise as soon as possible.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

TJPA environmental consultant has contacted Golden Gate Tank Removal Co and removal is being scheduled. The TJPA has not yet received the paperwork from the Golden Gate Tank Removal Co. to schedule the date. TJPA will discuss further with W/O - BBI regarding handling.

T-0192.1 **BSE - Unforeseen Tank on Gridline 35** **Closed** **07/11/2011** **07/21/2011** **08/01/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Turner Construction Comp Kevin Chiu

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI#T-0192 and attached photo

The unforeseen tank discovered during the pre-trench operation on Beale Street contains liquid. The liquid has spilled and is present in the surrounding soil, visible from the surface. The response to RFI#T-0192 does not address the soil surrounding the tank. BBII suspects this soil is contaminated with hydrocarbons in excess of the current approved Class 1 profile.

Please advise on the classification, limits and disposal

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached test reports

Report Completed By - Title - Date - Work Order - Number of Pages

McCampbell Analytical, Inc. - Analytical Report - July 20, 2011 - 1107352 - 8
McCampbell Analytical, Inc. - Analytical Report - July 25, 2011 - 1107352 A - 8

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

methods for the contaminated soil surrounding the tank.

07/15/2011 Roger Rothenburger

TJPA has had their environmental consultant,Treadwell & Rollo (Peter Cusack) arrange for the underground storage tank (UST) and its contents to be removed, test samples of the material, determine the extent of the contamination, and the proper disposal of the soil around the tank. The following response has been reviewed by Mr. Cusack.

1. Soils in the area of the UST were orginally classified as Class I from 0~6ft below grade and Class II from 6~22 feet below grade (Soils Management Plan figure 4 & 7.
2. Remove and stockpile contaminated soils in the immediate area of UST including 2 feet along the sides of the UST and 2 feet below the UST.
3. If soils beyond this area still have a strong gasoline or petroleum odor then remove those soils as well.
4. The samples taken by TJPA environmental consultant Peter Cusack on Thursday July 14, 2011 will be chemically tested for different contaminents.
5. The results of these tests will not be available for approximately 2 weeks (July 28, 2011).
6. Maintain the contaminated stockpiles covered until classifiecation is complete and further directions are given by TJPA at that time.
7. Backfill the open trench/hole from which the contaminated material described above has been removed with clean suitable material as defined in the Specifications.

T-0192.2 **BSE - Unforeseen Tank on Gridline 35** **Closed** **08/02/2011** **08/12/2011** **08/15/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Kevin Chiu

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI#T-0192.1

The Analytical Report for the sample taken from the soil around the Underground Storage Tank (UST) has been

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Treadwell and Rollo Response -

Based on the attached analytical results, the soil excavated from the tank removal activities is

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

sent to BBII. The soil classification that has been determined was not listed in the response, nor the Analytical Report. Please advise on the classification of the soil.

considered Class II material and should be disposed of as Class II material using the established soil handling procedures.

T-0193 **BSE - CDSM Buttress Connector Wall** **Closed** **07/07/2011** **07/17/2011** **07/08/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 31 56 13

DND is refining the CDSM Shoring Wall mix design based upon the initial results of the Zone 4 Test Section in order to meet the specified compressive strength and permeability. DND is currently planning on trying 2 new mixes / methods in the CDSM Buttress Connector Wall:

1) Single Phase (down and up with grout only) - 275 kg/m3 cement treatment, 220% water/cement, specific gravity ~1.4
a. Based on Japanese experience
2) Two Phase (down with water, up with grout) - 265 kg/m3 cement treatment, 70% water/cement, specific gravity ~1.7
a. Based on US experience

DND is currently proceeding with the installation of the CDSM Buttress Connector Wall. Per BBII's July 5, 2011 meeting with the Engineer, BBII believes that this approach is acceptable for the CDSM Connector Wall and the CDSM Buttress Connector Wall will not have to be re-mixed in the event that it does not achieve the specified compressive strength of 90 psi at 28 days and 120 psi at 90 days. Please confirm.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Arup will review the strength tests from the connector columns and make a determination of acceptable in-situ strength based on these.

T-0194 **BSE - Unforeseen Buried Obstructions at CDSM Connector Wall in Zone 4** **Closed** **07/12/2011** **07/22/2011** **07/19/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Transbay PMPC Roger Rothenburger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 31 56 13, attached sketches, and photo

During the installation of the CDSM Connector Wall at Zone 4, DND's drill rig hit unidentified buried obstructions at approx. 14' - 15' below the original grade (El. 0 ~ -1). Please see DND's attached sketch for further details. The exact location and composition of the obstructions are yet to be determined but BBII's preliminary findings indicate that they are timber piles that were neither shown on the original contract plans nor found during buttress area pile extraction. Find attached the as-built drawing that depicts the locations and the top elevations of the timber piles that BBII extracted at that location. Please note that the top elevations of the extracted piles range between 2.40 to 3.11 feet.

BBII has just been informed by DND Construction that the other rows of the connector wall cannot be installed while these obstructions are being removed per the committee meeting on 07/11/2011, due to the proximity of the obstruction removal trench to the next two rows. The CDSM connector wall installation has currently ceased until further notice. BBII is currently seeking drill rigs capable of removing these obstructions also as discussed at the committee meeting.

Please direct BBII on how to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

TJPA and its Representative agreed that the reasonable approach for removal of the obstructions as encountered was to mobilize an auger drill rig similar to the Viking drill rig used for the dewatering wells and removal of broken off piles along 181 Fremont sreet to drill out the area. A 36" diameter casing was used in this application. This meeting was held on Monday July 11, 2011 at approximately 12:30pm.

The drill rig arrived on site mid Thursday morning July 14, 2011 (3 work days after the site meeting) and drilled until 7pm exploring the CDSM connector piles in the remaining rows. The material removed was some wood (volume less that a 5 gallon bucket - photos attached) and a number (approximately 15 pieces)of chunks of unreinforced concrete 3" to 10" in size.

At this time without more evidence TJPA believes that this material was inadvertantly left behind in the backfilling of the timber pile removal zone. BBI should prepare a formal claim as to why TJPA should pay for this work or delay. TJPA will give it fair consideration but needs to have this filed as a claim outside the RFI process. BBI did perform the work in accordance with specifications and site agreements made as to means and methods for the way forward. The drill rig requiring 3 work days to mobilize was at the choice of BBI to use their subcontractor Malcolm-DND.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0195	BSE - Unknown Utility on Beale Street West Side	Closed	07/13/2011	07/23/2011	07/14/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Transbay PMPC Roger Rothenburger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference attached photos and drawing

BBI discovered an 8" utility line during the installation of the wheel wash on the west side of Beale Street. The utility indicated in the attached pictures is not shown on the BSE contract drawings. The alignment (North to South

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Remove the obstruction in accordance with the best means and methods. Maintain records of labor, equipment, materials for removal. Inform TJPA Representative of the methods chosen before starting work.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

direction) of this utility appears in conflict with the CDSM wall. On 7/12/2011, BBI was able to confirm that this utility is not active. This utility will need to be removed during the pre-trenching operation, to avoid conflict with the CDSM.

Please advise on the method for removal of this utility line.

T-0196 **BSE - CDSM Shoring Wall Installation Sequence Zone 4 North of A-Line** **Closed** **07/20/2011** **07/30/2011** **07/26/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet GT-2201 and Specification Section 31 56 13

See Note 1 on Sheet GT-2201. DND is concerned that if the row of buttress connector columns (A/26.5 - A/30) immediately adjacent to the shoring wall is installed prior to the shoring wall, the shoring wall will not meet verticality and tolerance specifications due to a difference in strength of the soil on one side and the CDSM on the other side. BBII believes that it will be possible to install the buttress connector columns after the shoring wall without hitting the shoring wall beams.

Is it acceptable to install the shoring wall prior to the immediately adjacent buttress connector columns?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

This is acceptable. Contractor to exercise care to prevent the auger from hitting the soldier pile while achieving the column overlap shown on 9/GT-5101.

T-0197 **BSE - Maximum Allowable Vibration** **Closed** **07/20/2011** **07/30/2011** **08/12/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Sections 31 09 13 and 01 35 65

According to the Final FEIS/EIR, specified in the Specification 01 35 65 as the reference document, the Vibration Impact Criteria, which is the base criteria for the analysis, is shown in the table 5.21-8 (refer to BBI RFI for

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The table reportedly from the FEIS/EIR included in the RFI appears to be in error. This shall be addressed by others.

The Action Trigger Level and Maximum Allowable peak particle velocities listed in Table 1 in

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

table).

The vibration impact criteria used in the Final FEIS/EIR contradicts the Maximum Allowable Movement for the vibration (PPV) specified in Specification 31 09 13. In this specification section, the maximum allowable movement for vibration and the action trigger level is described in Table 1 (refer to BBI RFI for table).

Please clarify where within the project site the vibration impact criteria for fragile structures are applicable (according to Specification 01 35 65), and where the maximum allowable movement for vibration of 1 inch per second is applicable (according to Specification 31 09 13).

specification section 31 09 13 are for separate, transient vibration events rather than continuous construction vibration. It is not known if the values shown in the FEIS/EIR table are intended for transient or continuous events.

The Action Trigger Level and Maximum Allowable peak particle velocities listed in Table 1 in specification section 31 09 13 apply to all structures around the site where vibration monitoring will occur. In drawing up these values we have taken into account the types of plant likely to be employed in construction and the very low probability that the natural frequency of the input vibrations will approach those of the surrounding buildings and utilities.

The RFI question regarding the identification of "fragile structures" shall be addressed by others.

URS - Response by Alana Callagy 8/11/2011

The table in the FEIS/EIR included in the RFI is in error. The table cites the FTA as the source of the potential impact thresholds for vibration. However, the table used in the FEIS/EIR appears to have reversed the FTA's threshold levels. The RFI should cite Table 12-3 (page 12-13) of the FTA's Noise and Vibration Manual (www.fta.dot.gov/documents/FTA_Noise_and_Vibration_Manual.pdf).

FTA Table 12-3 is for potential structural or architectural building damage, which is generally a function of Peak Particle Velocity (PPV), not a time-averaged level. These criteria should be applied to both transient and continuous construction events. Furthermore, the PPV value should be presented/evaluated as the vector sum of the PPV values in the three orthogonal coordinate directions (vertical, transverse, and longitudinal or x,y,z).

The FEIS/EIR called out "fragile structures" however when we reviewed the table (after first identifying that the table should be inverted to be consistent with the FTA's manual) it may be assumed that "fragile" would

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

related to "non-engineered timber and masonry buildings." Based on FTA table 12-3, a little more detailed discussion is as follows:

Class I: buildings in steel or reinforced concrete, such as factories, retaining walls, bridges, steel towers, open channels, underground chambers and tunnels with and without concrete alignment, 0.5 PPV in/sec.

Class II: buildings with foundation walls and floors in concrete, walls in concrete or masonry, stone masonry retaining walls, underground chambers and tunnels with masonry alignments, conduits in loose material, 0.3 PPV in/sec.

Class III: buildings as mentioned above but with wooden ceilings and walls in masonry, 0.2 PPV in/sec.

Class IV: construction very sensitive to vibration; objects of historic interest , 0.12 PPV in/sec.

We are not sure where the maximum allowable value of 1 in/sec (presumably PPV) came from prior to it being put in the spec. This value seems too high relative to the FTA criteria presented in FTA Table 12-3 (which range from 0.12 to 0.5 in/sec PPV for various building categories). Ideally, the vibration values should be measured as close as possible to the edge of the building footprint, preferably in the internal envelop of the building, such as a basement or first floor slab floor within about a foot of the exterior wall nearest to the vibration generating activity. Locations away from the walls and on upper floors should be avoided since these areas could show elevated values due to building amplification. If interior areas are not available, an exterior location close to the edge of the building structure nearest to the construction activity can be used. In either case, care should be taken that the transducer is adequately coupled with the surface being measured and that PPV vector sum values are being reported.

T-0197.1	**BSE - Maximum Allowable Vibration**	**Closed**	**07/20/2011**	**07/30/2011**	**09/12/2011**	**Potentially**	☐

Number	*Subject*	*Status*	*Date Created*	*Date Required*	*Date Answered*	*Cost Impact*	*Proceed*

From: Turner Construction Company Gary Krutsch

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

To: Webcor/Obayashi Joint Ventu Nhi Tran

Answered By: Turner Construction Comp Kevin Chiu

REQUEST:

Refer to RFI #T-0197

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Table 5.21-8: Construction Vibration Impact Criteria in the Project EIS / EIR has a number of typos. Refer to Table 12-3: Construction Vibration Damage Criteria in Transit Noise and Vibration Impact Assessment (FTA document # FTA-VA-90-1003-06) for the corrected version. For the avoidance of doubt, these values shall be considered Action Trigger Levels as defined in Section 31 09 13 of the Specification. All the buildings within 25 ft of the site boundary shall be considered to be Category I with the exception of the following buildings that are to be considered Category III:

177/181 Fremont Street

530 Howard

540 Howard

580 Howard

594 Howard

133 Second St

141 / 143 / 145 Second

163 Second

171 Second st.

90 Natoma

92 Natoma

83 Minna

46 Minna

In accordance with the recommendations at Section 12.2.1 of FTA(2006) , we expect BBI to assess quantitatively the potential groundborne vibration impact from site operations on adjacent buildings using the formula:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

(PPVequip)=(PPVref) x (25/D)**1.5.

Where PPV ref is the reference peak particle velocity for a given item of equipment in Table 12-2 of FTA(2006) and D is the shortest distance between the operating location of the equipment and the building to be assessed.

Where the item of plant is not listed in either FTA(2006) or Caltrans (2004), BBI should carry out calibration measurements at ground surface in order to provide equivalent (PPV ref) values.

BBI should carry out vibration monitoring inside buildings when (PPV equip) is calculated to lie within 90% of the values given in Table 12-3: Construction Vibration Damage Criteria in Transit Noise and Vibration Impact Assessment in FTA-VA-90-1003-06. The Action Trigger and Maximum Allowable movement level for vibration given in Table 1 of Section 31 09 13 is for Category I buildings only.

T-0197.2 **BSE - Maximum Allowable Vibration - VOID** **Closed** **09/12/2011** **09/22/2011** **09/12/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Marina Rosso

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI #T-0197, Specification Section 01 35 65 & 31 09 13, and attached map

BBII recognizes and agrees Table 5.12-8 is in error, and BBII will refer to FTA Table 12-3 as the correct table. However, BBII believes the TJPA's response provides information that is in conflict with the specifications as well as between the two separate responses provided. BBII requests the following clarifications and confirmations:

1. BBII has applied FTA Table 12-3 per [RFI #T-0197]

SUGGESTION:

(Can't find answer in Constructware)

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

(BBI RFI 147) to the attached map. The attached map indicates PPV values for continuous construction events, based on the surrounding buildings. Please review and verify this interpretation. Please note that this table, as also indicated in ARUP's response, applies to "continuous construction events".
2. As also stated in ARUP's response, BBII's interpretation of Section 31 09 13 is that the limits provided in this section apply to "transient construction events". Therefore, contrary to URS' response, the values provided in this section are applicable to transient construction events.

In addition, BBII will apply Table 1 in Specification Section 31 09 13 for transient construction events to all structures around the site. Table 1 indicates the Action Trigger Level for vibration (PPV) is 1/2 inch per second and Maximum Allowable Movement for vibration (PPV) is 1 inch per second.

Please confirm the vibration Peak Particle Velocity (PPV) values indicated above are acceptable for continuous and transient construction events.

T-0198 **BSE - Demolition Drawings in South-West Corner of Zone 1** **Closed** **07/28/2011** **08/08/2011** **08/25/2011** **Potentially** ☐

From: Webcor/Obayashi Joint Venture Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Kevin Chiu

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 02 41 01

BBII is requesting a copy of the added scope demolition drawings issued to EBI, for the South-West corner of Zone 1.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached Transmittal 140-02181, sent to W/O on 8/25/2011.

T-0199 **BSE - Pile Extraction Method For Grid Line 35.2** **Closed** **08/01/2011** **08/11/2011** **08/15/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Reference RFI#T-0188.2

After exposing piles at grid line 35.2 east of Beale Street, BBII intends on extracting these piles as per the method described in RFI#T-0188.2 (BBI 0139.2). This involves backfilling any voids with sand. Please confirm this method is acceptable.

ARUP Response:

Arup did not respond to RFI T-0188.2. As noted in our response to RFI T-0188.1, we recommend that the procedure for removing the piles east of Beale Street follow the procedure described in our response to RFI T-0146.4 with the exception that backfilling with sand is acceptable.

T-0200 **BSE - Unforeseen Buried Obstructions - Zone 4 A Line (Gridline 27-34)** **Closed** **08/02/2011** **08/12/2011** **08/12/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 31 56 13, attached photos, and sketch

On Saturday, July 30th 2011, DND's CDSM drill rig encountered unidentified buried obstructions during the installation of the CDSM Shoring wall panel identified by the pile numbers 285-286 at Zone 4 "A" line between Grid "27 & 28". The newly found obstructions are deeper than the previously excavated timber piles.

DND construction initially attempted to drill through the buried obstructions without success. The drill rig was subsequently moved to further east to drill the next available panel. Between 10:30 am and 3:30 pm, DND made eight drilling attempts along the "A" line between pile numbers # 285 and # 300. All eight drill attempts failed due to the similar obstructions encountered within the 13' - 17' depth range below grade. Consequently, the CDSM shoring wall installation along grid line "A" at Zone 4 had to be suspended. DND is able to provide a drill rig to drill out these obstructions and currently this rig is scheduled to arrive Tuesday morning, August 2, 2011.

These obstructions constitute a differing site condition in accordance with Article 3.05 of Section 00 07 00 of the Specifications.

Please provide confirmation and/or direction regarding the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per Contract Spec. 31-56-13 Shoring wall by CDSM Method Para 3.2 Pretrenching and removal of Obstructions, Contractor is to '' remove any obstructions that might be encountered along the alignment of the walls. The depth and width of trench shall be that required to remove the obstructions from the path of the shoring wall.''

This area was to be Pretrenched per Spec and should have been cleared. The Spec calls for fill the voids from pile removal with 300psi CLSM, However; the area in question had CLSM installed of between 1000psi and 1600psi which may be causing this condition.

''Unforeseen Conditions'' are covered in Section 00 07 00 (General Conditions) Article 3.05.A.2 and 3.05.A.3 (Unforeseen or Changed Conditions).

Article 3.05.C states,

C. Differing Site Conditions shall not include:

1. All that is indicated in or reasonably interpreted from the Contract Documents or Reference Documents;

2. All that could be seen on Site

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

following:

- BBII is to proceed with drilling out these obstructions on 8/2/2011, so CDSM installation in this area can continue.
- These obstructions constitute a differing site condition.

3. Conditions that are materially similar or characteristically the same as those indicated or described in the Contract Documents or Reference Documents.

T-0201 **BSE - Buttress Shift To South** **Closed** **08/02/2011** **08/12/2011** **08/08/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet GT-2201, RFI#T-0151, and attached sketch

Per response to RFI T-0151, the Buttress can expand to the east as long as it doesn't shift to the south. Per discussions with Arup in last week's TG03 BSE Design Team Coordination Meeting (7/27/2011), it is acceptable for the Buttress to shift to the south per the attached sketch. Please confirm.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

The shift shown on the sketch is acceptable.

T-0202 **BSE - Pile Extraction Method For Grid Line 33.5** **Closed** **08/04/2011** **08/14/2011** **08/12/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI#T-0146.2

After exposing 5 piles at gridline 33.5 west of Beale Street, BBII intends on extracting these piles as per the accepted method described in RFI # T-0146 2,

"6. BBII will extract the wood piles with vibratory hammer, with the same stroking procedure without steel casing. BBII will perform dewatering enough to be able to connect the hammer to the pile.
7. BBII will backfill the void with low strength material Central Concrete Mix FOA100CX (RFI #T-0138.1).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractor may wish to consider placing the steel sheet prior to excavating to retain the material under Beale Street to keep it from sloughing into the excavation.

Extract the wood piles with vibratory hammer, with the same stroking procedure without steel casing. BBII will perform dewatering enough to be able to connect the hammer to the pile.

Option: Backfill the void with CLSM low strength material Central Concrete Mix FOA100CX (RFI #T-

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

8. BBII will backfill the piles.

Answer:
Per Brian Dykes, this work is authorized to proceed. Allowable work hours will be established after 199 Fremont pile extraction begins."

This involves backfilling any voids with 1 sack sand. The attached drawing indicates the location and quantity of piles to be extracted. Please confirm that this method is acceptable.
Also, please advise if any work hour restrictions apply.

0138.1).
Option: Back fill the pile voids using a tremie pipe of minimum length 20ft attached to the concrete bucket. The tremie shall be inserted as far into the pile hole as possible prior to pouring the concrete, and the concrete shall be placed using normal tremie techniques. BBII will make efforts to pour the material into the void as possible, but BBII is not responsible to eliminate void completely."(RFI 146.4)

Recommends that the procedure for removing these piles follow the procedure described in Arup's response to RFI T-0146.4. Optional is to use method from RFI 188.2. Sand can used for back fillings instead of the low strength material described in RFI#T-0146.4.

T-0203 **BSE - Clearance From Verticals For CSL Tubes** **Closed** **08/04/2011** **08/14/2011** **08/09/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet GT-5202, Specification Section 31 63 29, and attached photo

In the Phase 1 DFOW Buttress Rebar QC Meeting at Harris-Salinas Rebar's yard in Livermore on 8/01/2011, ARUP suggested moving the adjacent vertical bars away from the CSL tubes to allow for approximately 4" of concrete cover along the entire length of the shaft. Please confirm.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:
The longitudinal bars on each side of each CLS tube shall be shifted so that the clear distance between a given bar and the CSL tube is 3" minimum, 4" maximum. The total number of bars which will be shifted is 8.

T-0204 **BSE - Tie Backs Along 535 Mission Street - Vacant Lot** **Closed** **08/04/2011** **08/14/2011** **08/10/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Reference GT-2102 & Detail 8 - GT-5103

BBII cannot locate the tie backs in the area of the vacant lot on Minna St. described in the Detail 8 on Contract Drawing GT-5103. The BBII crew went to a depth of 17 feet along the Pre-Trench and was unable to locate the tie backs. This was an additional foot more than the specified 15'-0" +/- 1'-0" depth. BBII believes the tie backs do not extend into the Pre-Trench limits and plans to move forward. Please advise if there is information to the contrary.

BBII is to continue plans and specs (Ref: Dwg. Detail 8 GT-5103). Subsequent to this RFI BBII did locate and sever a tie back in Minna Street trench from the 535 Mission St. Project .

BBII was directed to be cautious when installing sheetpile shoring to ensure the Tie Backs are cut back sufficiently to prevent interference with CDSM Drill/Wall installation.

2011-08-09 George Metzger
ARUP Response:
No additional information is available. Turner or PMPC to provide answer to this RFI.

T-0205 **BSE - Testing Weld On Hoops** **Closed** **08/05/2011** **08/15/2011** **08/09/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran
To: Turner Construction Compan Gary Krutsch
Answered By: Adamson Associates, Inc George Metzger
Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet GT-5202 and Specification Section 31 63 29

Per SS03.20.01.3.3.B.4, "Inspect welding as required by Code for compliance with AWS D1.4."

Per AWS D1.4.2, "Other welding processes may be used when approved by the Engineer, provided that any special qualification test requirements not covered here are met to ensure that welds are satisfactory for the intended application will be obtained."

As of this writing, the AWS does not cover Resistance Welding which is the type of welding that Harris-Salinas Rebar is using for the hoops. Caltrans has a written specification for Resistance Welding. Per Caltrans Standard Specifications Section 52, four (4) samples out of a lot of one hundred fifty (150) are taken to the lab for testing. If three (3) or more samples comply with the requirements, the whole lot is accepted. If only two (2)

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

samples comply, one (1) additional test of four (4) samples out of the same lot is allowed. If any of the four (4) fail, the whole lot is rejected.

It was agreed upon in the DFOW meeting this week (8/1/2011) that it is acceptable to test the lots per Caltrans Standard Specifications. Please confirm.

T-0206 **BSE - Smart Hoops For CSL Tubes** **Closed** **08/05/2011** **08/15/2011** **08/09/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet GT-5202, Specification Section 31 63 29, attached photo and sketch

Drawing GT-5202 shows four (4ea) 4" CSL tubes equally spaced around the perimeter of the shaft tied to reinforced steel.

Approved rebar shop drawing shows a square spider designed to serve two purposes:
1. To allow the tremie pipe to pass through.
2. To keep the CSL tubes equally spaced around the perimeter per Drawing GT-5202.

In subsequent discussions the engineer suggested orientating the CSL tubes at a 23 degree angle from the longitudinal center of pile. In the Phase 1 DFOW Buttress Rebar QC Meeting on 8/1/2011 Harris-Salinas Rebar suggested using "smart hoops" to keep the CSL tubes in place and symmetrical around the perimeter at 23 degrees since the square spider could no longer be utilized for CSL tube alignment. This suggestion was well received by meeting attendees. Please confirm that the 23 degree CSL spacing is required. If so, please advise if the added "smart hoop" CSL alignment bars are acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The 23 degree CSL spacing is required. The added "smart hoop" CSL alignment bars are acceptable.

T-0207 **BSE - Unknown Fiber Optic on Fremont Street** **Closed** **08/09/2011** **08/19/2011** **08/12/2011** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Gary Krutsch

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 02 41 01

PG&E was scheduled to have all the utilities and structures confirmed dead on the East side of Fremont Street 8/07/2011 as part of the phase 1 PG&E relocation work. On 8/08/2011, W/O and PG&E conducted a USAR walk-through on Fremont Street to sign off and confirm that all PG&E utilities and structures have been confirmed de-energized and abandoned. PG&E discovered a live fiber optic cable between vaults 1675-1670. This fiber optic cable is in conflict with and causing delays to the CDSM wall and Buttress work commencement.

Please provide a date this fiber will be confirmed de-energized.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Fiber was confirmed de-energized on 8/12/11.

T-0208 **BSE - Long Term Seismic Loading** **Closed** **08/09/2011** **08/19/2011** **08/12/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet GT-1110 and Specification Section 31 55 00

Note 7 on sheet GT-1110 states that "Seismic Increment Loads shall be considered to be long term loading." Per conversation at the 8/03/11 TG03 Design Team Coordination meeting, BBII understands that this note applies only to the lower level struts at the 301 Mission buttress case. Please confirm.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

We refer to Comments and Corrections provided by DBI to TJPA in a document dated July 27, 2011 at item G 23.

With reference to Drawing GT-1110 we clarify that Note 7 applies strictly to the incremental strut loads in Table 7 (301 Mission buttress case shaking analysis) and consequently apply to calculations for the lowest level of struts and walings between Gridlines 26 and 30. The incremental strut loads given in Tables 5, 6 and 8 can be considered as transient, rather than long term, loads on the bracing system.

T-0209 **BSE - Abutment Bearing On CDSM Wall** **Closed** **08/11/2011** **08/21/2011** **08/19/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** URS Corporation David Fyfe

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Reference Specification 01 53 13

During previous discussions with URS, ARUP, and DPW it has been expressed that the temporary bridge abutments should not bear on the CDSM shoring wall. The temporary bridges spec section 01 53 13, however, specifically states that "abutments for bridges shall be supported by the CDSM shoring wall." Please advise if this statement still applies.

Yes, statement still applies.

T-0209.1 **BSE - Abutment Bearing On CDSM Wall** **Closed** **09/02/2011** **09/12/2011** **09/09/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI#T-0209, Specification Section 01 53 13, and attached sheets

Included with this RFI are loading conditions for CDSM supported abutments. Please confirm that the shoring wall as currently designed can accommodate the loading.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Contractor to provide calculations demonstrating the adequacy of the shoring wall to support the loads from the bridges.

T-0209.2 **BSE - Abutment Bearing On CDSM Wall - Follow-Up** **Closed** **09/13/2011** **09/23/2011** **09/16/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI #T-0209.2, Specification Section 01 53 13, and attached sheets

As requested by ARUP, please see the attached loads placed on each individual CDSM soldier beam beneath the proposed temporary bridge abutment. The loads include both the bracing self weight and the combined dead and live loads of the temporary bridges.

BBII requests confirmation from the CDSM shoring wall EOR that these imposed loads do not exceed the assumed vertical loads used during original design

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response: The results of the analysis reported in the table "SUMMARY OF LOADS ON CDSM SOLDIER PILES AT BRIDGE ABUTMENTS" indicates that, for a number of locations, the load per soldier pile is too great and that the pile spacing will need to decrease from 4'-0" o.c. to 2'-0" o.c. to reduce the load per pile. Subsequent analysis by the Contractor shall demonstrate the structural adequacy of the pile shape and the adequacy of the pile embedment.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

analysis.

T-0209.3 **BSE - Abutment Bearing On CDSM Wall - Follow-Up** **Closed** **09/13/2011** **09/23/2011** **09/28/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI #T-0209.2, Specification Section 01 53 13, and attached sheets

As requested by ARUP, please see the attached loads placed on each individual CDSM soldier beam beneath the proposed temporary bridge abutment. The loads include both the bracing self weight and the combined dead and live loads of the temporary bridges.

BBII requests confirmation from the CDSM shoring wall EOR that these imposed loads do not exceed the assumed vertical loads used during original design analysis.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

1. The CDSM wall cannot accept the widely varying point loads as implied by the submitted tables of imposed loads from the cross-lot bridges. We recommend that a spreader beam arrangement is provided for each bridge abutment and is connected to the all the affected W21x201 soldier piles in the CDSM wall. A vertical spring constant of 1150 kips/inch can be used to calculate the pile reactions under such a spreader beam arrangement for the range of loads given.

2. The allowable loads from the bridge deck for the soldier piles on the basis of 1 above is 90 kips/pile at an excavation of 10 feet below grade and can be taken to fall linearly to 60 kips/pile at 60 ft elevation depth.

3. It follows from 2 above that the ability of the CDSM wall to carry the maximum load, the construction crane condition, will reduce as excavation proceeds. This may require disassembly of the construction crane into smaller components in order to remove it from site at the later stages of excavation.

4. The load pathway, from the bridge deck at the abutment into the ground, is in direct shear transfer across 2 interfaces: steel/soil mix and soil mix/in-situ ground. The shear transfer across the steel/soil mix interface cannot be estimated with accuracy, in the absence of an embedded soldier pile test in compression or tension. If the early excavations, down to 10 feet below grade at the bridge abutment, show that soil mix falls away easily from the face of the W21

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

steel soldier pile, the bond/interface shear is likely to be very low indeed and the allowable capacity of the soldier piles will need to be re-evaluated.

T-0209.4 **BSE - Abutment Bearing On CDSM Wall - Follow-Up** **Closed** **01/09/2012** **01/19/2012** **01/16/2012** **Potentially** ☐

From: Webcor Construction LP Kirk Nielsen **To:** Turner Construction Compan Gary Krutsch **Answered By:** Arup Kevin Clinch

Co-Author:

REQUEST:

Reference T-0209.3, Specification Section 01 53 13

Contrary to RFI response T-0209.3, subsequent to the test pile loading CR T-025 during which there was little to no movement please confirm the revised direction to install the bridge abutment atop the CDSM wall at all streets pursuant to specification section 01 53 13.1.2.A.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Arup cannot provide a response to this RFI without seeing the revised design of the bridge bearing on the soldier piles and the revised calculations.

T-0210 **BSE - Pile #498 Top Of Pile Elevation Issue** **Closed** **08/16/2011** **08/26/2011** **08/19/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference W/O NOTICE0010 (attached), Sheet GT-5101, and Specification Section 31 56 13

Please address the following information request from BBII's subcontractor DND:

"The specifications do not specify an allowable tolerance with regard to the vertical position of the beam tip relative to the plan drawings (GT-5101, Note 16). Please clarify the allowable tolerance for the beam tip elevation.

For example, beam 498 (BBII ID #287) was set slightly high. The beam was measured prior to setting to be 97'-5 1/2" long. It was set to a top elevation of approximately +16'-11" which calculates a tip elevation of approximately -80.63'. Specified tip elevation is -81-0" in this wall section (J/27-33.5)."

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

The acceptable variation in bottom of pile elevation (shown on 16/GT-5101) is +/- 1'-6". In order to verify this using the top of pile elevation as the measure, the Contractor shall provide Turner with the length of the piles.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0211	Easement Information	Closed	08/11/2011	08/21/2011	08/23/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jack Adams

Co-Author:

REQUEST:

Reference Email "Fencing Plan at CDSM Wall Radius R2-1 and X1-1" from Turner on 8/10/2011 and attached documents

W/O received the enclosed email "Fencing Plan at CDSM Wall Radius R2-1 and X1-1" and it's attachments from Turner on 8/10/2011, listed below:
- 3192 OR 151 easement.pdf
- Parcel F BNDY-ALTA_AB3721_15A_Rev 1.pdf
- CASFRA_2007 00369409.pdf
- Eminent Domain Fencing Plan .pdf

The information contained in the above documents differs from and/or does not exist in the current contract documents. Please provide a direction on what W/O and our Trade Subcontractors are to do with this easement information. In addition please indicate what requirements the TJPA expects Webcor Obayashi to now comply with.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The information contained in the above documents is provided for information. WO and our Trade Subcontractors are to ensure the 540 Howard has 24 hour access to their easement. The current location of the CDSM wall and protection fencing will accomodate this access.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0212	BSE - Unforeseen Timber Piles At Grid Line 33.5 J	Closed	08/15/2011	08/25/2011	08/16/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Kevin Chiu

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI#T-0148.1, Sheet D-2213, attached photos and sketch

BBII exposed 24 piles at gridline 33.5 J close to Beale Street in Zone 4, as shown in the attached photographs. However, drawing D-2213 indicates five piles inside the CDSM wall limits. BBII intends to extract these piles using the method approved in RFI # T-0148 1. Please confirm that it is acceptable to continue tracking this unforeseen work as CR-T-010, as was practiced in this area previously.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

RFIs shall be used for interpretation or clarification of the Contract Documents (01 10 40) and a change request (CR) is not a Contract Document as defined by the General Conditions. Questions related to construction means, methods, techniques, sequences, procedures and non Contract Documents will not be replied to by the TJPA and will be rejected (01 10 40).

Refer to the procedures of previously issued CR T-010 for further direction.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0213	BSE - Pile Extraction Method For Concrete Piles Between GL 5-10 at Natoma St	Closed	08/15/2011	08/25/2011	08/19/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI #T-0188.1, Specification Section 02 41 19, and attached sketch

BBII intends on extracting the existing concrete piles located between gridlines 5 and 10 on the south side, using the method approved in RFI#T-0188.1. This involves extracting piles using the vibratory hammer without a steel casing and backfilling the void with structural pre-trench sand. Attached is a drawing indicating the locations of the piles obstructing the CDSM wall. Please confirm that this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is acceptable for concrete piles which are 16" x 16" square or less and which are located 16 ft or greater from the nearest face of an adjacent building.

T-0214 **BSE - Instrumentation Protection Slab Zone 4** **Closed** **08/16/2011** **08/26/2011** **08/23/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet GT-5102 and attached shop drawing and BBI sketches

BBII is proposing to pour a 2' thick instrument slab per the attached BBII drawings in lieu of the 1' thick concrete slab shown on Drawing GT-5102 to match the overall thickness of the Buttress Temporary Work Platform Concrete Cap. Approved 6000 psi Central Mix #960PC3Z3 (Submittal Item #TZ1010-033001A10) will be used for the instrument protection slab. Please confirm that this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Pouring a 2' thick instrument protection slab in lieu of the 1' thick concrete slab shown on Drawing GT-5102 is acceptable.

Central Mix #960PC3Z3 is acceptable for use in the instrument protection slab.

The reinforcing steel configuration shown on Section A is acceptable. The bars may be shifted to clear the soldier piles and the instrument locations.

Block-outs shall be placed in the slab for the instruments as noted on GT-5102. Contractor to coordinate locations of block-outs with Arup field staff.

The protection slab shall be extended as noted on the attached sketch.

T-0215 **BSE - Diagonally Cut Unforeseen Piles at Grid Line 33.5 J** **Closed** **08/17/2011** **08/27/2011** **08/17/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jack Adams

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet GT-2103, Specification Section 02 41 19, and attached photos

BBII has extracted four (4) unforeseen piles at GL 33.5 J. Three (3) piles had an average length of 45' long. However, one (1) of these piles appeared to have 20' diagonally cut out of it at the bottom (see attached Photo 3). Another pile was only 23' long and appeared to have broken off underground (see attached Photo 1). BBII has concerns that lengths of pile may still remain in ground and will be an obstruction to the CDSM shoring wall installation. Please advise on how to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to specification 31 56 13, 3.2, A, which states, "The Contractor shall construct a trench along the entire alignment of the shoring wall and the cut-off walls and remove any obstructions that might be encountered along the alignment of the walls. The depth and width of the trench shall be that required to remove the obstructions from the path of the shoring wall."

T-0215.1 **BSE - Diagonally Cut Unforeseen Piles at GL 33.5 J** **Closed** **08/23/2011** **09/02/2011** **08/30/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI #T-0215 and RFI #T-0177, Sheet GT-2103 and Specification Section 02 41 19

As the top of the broken pile is 33' below ground, further trenching to remove this pile is not practical. BBII proposes following the procedure approved by RFI T-0177 (BBII 0126) to extract this pile. In the future, BBII proposes this to be the standard procedure when a broken or lost pile presents an obstruction to the CDSM Shoring Wall installation and needs to be extracted.

Please confirm.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Arup takes no exception to the use of the method described in RFI T-0177 for this pile.

T-0216 **BSE - Revised Buttress Shop Drawings For Record Only** **Closed** **08/18/2011** **08/28/2011** **08/19/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference attached revised CIDH Rebar Shop Drawings, RFI#T-0184, T-0203, T-0205 and T-0206

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Arup takes no exception to the shop drawings included with the RFI.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Per discussions at the TG03 BSE Design Team meeting on 8/17/2011, it was agreed by Adamson and ARUP to confirm the finalized buttress rebar cage shop drawings via RFI because the shop drawings have already been approved in a previous submittal TG0300-320 / TA1020-032001A05.

Attached are the revised shop drawings that incorporate all the changes that were agreed upon in the referenced RFIs. Please confirm that these shop drawings accurately reflects all changes made.

Note that review is only for general conformance with the design concept of the project and general compliance with the information given in the contract documents. Contractor is responsible for quantities and dimensions which shall be confirmed and correlated at the job site; checking for deviations between the field, submittal and the contract documents alerting Arup of same; fabrication processes and techniques; the means and methods of construction; coordination of its work with that of all other trades; and performing all work in a safe and satisfactory manner. This review does not modify contractor¿s duty to comply with the contract documents and any action shown is subject to requirements of plans and specifications. This review does not increase Arup's standard of care or scope of services and contractor shall immediately notify Arup of any intent to make a claim based on this submittal.

T-0217 **BSE - Buttress Shift To The East** **Closed** **08/24/2011** **09/03/2011** **08/30/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI #T-0183.1, Sheet GT-2201, Specification Section 31 63 29, and attached sketch

The sketch that was included in the Engineer's response to RFI T-0183.1 shows Buttress rows S, T, U, V, and W, shifting 4" to the west. Per discussions with the Engineer in the 8/17/2011 TG03 BSE Design Team Meeting, all parties agreed that the 4" shift is not needed. Please confirm that the 4" shift is not necessary and that it is acceptable to install the Buttress shafts per the attached drawing.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response: The proposed northings and eastings shown are acceptable.

T-0217.1 **BSE - Maximum Allowable Spacing Between Buttress Shafts** **Closed** **03/23/2012** **04/02/2012** **03/23/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Becho requests for ARUP to provide the maximum allowed spacing between the tangent shafts East of P-Line and West of C-Line. Allowing such changes could possibly help mitigate Buttress Shaft schedule.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The tangential spacing of the buttress shafts may be increased from 4 inches to 8 inches east of PLine and west of C-Line.

Contractor to verify that this does not impact the trestle pile locations / design.

Contractor to verify tht there is adequate equipment clearance at 301 Mission.

Contractor to provide revised northing and easting coordiantes in a sketch similar to that incuded in RFI 217 for tie-down location coordination.

T-0217.2 **BSE - Increased Spacing Between Buttress Shafts east of P-line** **Closed** **04/12/2012** **04/22/2012** **04/19/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: BBII Spacing Sketch

Per the Engineer's response to RFI T-0217.1, "The tangential spacing of the Buttress shafts may be increased from 4" to 8" east of P-line and west of C-line." Please confirm that the revised Buttress footprint and coordinates shown on the attached sketch is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Confirmed except that the coordinates for shafts A1 and A3 do not appear to reflect RFI 217.1.

T-0218 **BSE - Timber Lagging Underneath Instrument Protection Slab** **Closed** **08/29/2011** **09/08/2011** **08/31/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI #T-0214, Sheet GT-5102, and Specification Section 31 56 13

Contract drawing GT-5102 indicates timber lagging being installed underneath the 2' section of the concrete

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response: It is acceptable to omit the lagging below the protection slab as proposed. Contractor to take appropriate measures to keep any loose material below the slab from falling into the excavation.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

instrumentation protection slab between grids 27 and 30. The original construction sequence foresaw the instrumentation protection slab being installed prior to the adjacent buttress work platform. BBII is planning on pouring the instrumentation slab and the adjacent buttress work platform monolithically on Wednesday 8/31/2011, which makes the timber lagging support redundant.

Please confirm that the timber lagging shown on contract drawing GT-5102 is not required to be installed. Your prompt response is highly appreciated.

T-0219 **BSE - Abutments At Temporary Bridges** **Closed** **08/29/2011** **09/08/2011** **09/15/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Kevin Chiu

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 01 53 13 and Submittal TG0300-201 Item TZ1030-015313A09 response comments (attached)

DPW review comment #40 on the temporary bridge submittal (TZ1030-015313A09, package TG0300-201) calls for BBII to "provide concrete approach slabs similar to Caltrans." URS comment #32 on the submittal states that "Approach slabs are recommended. After seismic event, it is important that emergency vehicles still have access to these temporary bridges."
Concrete approach slabs are not included as a requirement in the temporary bridge specifications. Please advise if approach slabs must be added to the scope of the temporary bridges.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per spec 01 53 13 and David Fyfe's response included herein, approach slabs are necessary items required to provide a coordinated design and a completely functional temporary bridge.

2011-09-14 - David Fyfe

SF DPW requires approach slabs.

T-0219.1 **BSE - Approach Slabs At Temporary Bridges** **Closed** **11/04/2011** **11/14/2011** **11/16/2011** **Potentially** ☐

From: Webcor/Obayashi Joint Venture Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** URS Corporation David Fyfe

Co-Author:

REQUEST:

Reference RFI#T-0219 and Specification Section 01 53 13

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Comments made by PMPC in across the table

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

On 11/3/11 W/O was informed by PMPC during a temporary bridge coordination meeting that contrary to RFI response T-0219 approach slabs were not required at the (3) temporary bridges.

Please confirm.

discussions shall not be considered as modifying the response to RFI# T-0219. As an added clarification to RFI# T-0219, please note that the permitting agency, SF DPW, has expressed the potential need for use of approach slabs to achieve a package which can be approved by the agency. It is recommended that requirements concerning approach slabs be addressed between the contractor and the permitting agency during the building permit submission of the Temporary Bridges Package.

T-0220 **BSE - Pile Extraction Method For The Remaining Timber Piles At GL 33.5 J** **Closed** **08/29/2011** **09/08/2011** **09/02/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI#T-0188.1, Specification Section 02 41 19, and attached sketch

BBII intends on extracting the remainder of the existing timber piles located at gridline 33.5J/Beale St., using the method approved in T-0188.1, as the piles are located a considerable distance from the 199 Fremont building. This involves extracting piles using the vibratory hammer without a steel casing and backfilling the void with structural pre trench sand. Attached is a drawing indicating the locations of the piles obstructing the CDSM wall. Please confirm that this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

We recommend that the procedure for removing the piles east of Beale Street follow the procedure described in our response to RFI T-0146.4 with the exception that backfilling with sand is acceptable. See also answer to RFI T-199.

T-0221 **BSE - Salvage Steel At Temporary Bridges** **Closed** **08/29/2011** **09/08/2011** **09/30/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** URS Corporation Carolina Aguilar

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 01 53 13 and Submittal TG0300-201 Item TZ1030-015313A09 response comments (attached)

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

In order to evaluate compliance, additional information is required. Please submit list of all structural steel members that will be used on each of the three temporary bridges. For each structural steel member

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

DPW review of the temporary bridges submittal (TZ1030-015313A09, package TG0300-201) includes comment #8 that states "salvage materials are not acceptable to be used as structural members for the bridges. The temporary bridge specifications do allow for the use of salvage material as follows:

"2. Steel, Salvage Material: Submit coupon tests for mechanical properties and chemical tests for determination of weldability. For steel materials which are recycled from prior Projects (salvaged materials) and are to be incorporated into temporary works, testing shall be performed on a random sampling basis as follows:
a. Where material properties relied upon for design corresponding to minimum yield strength fy=30,000 psi, sampling shall be performed on 5% of each major series of structure element type.
b. Where material properties corresponding to minimum yield strength fy=36,000 psi, sampling shall be performed on 10% of each major series of structure element type.
c. Where material properties corresponding to minimum yield strength fy=42,000 psi or 50,000 psi is used, sampling shall be performed on 20% of each major series of structure element type.
d. Testing performed per subparagraphs above at sampling rates of 5%, 10%, and 20%, respectively, shall be reported to the Owner's Representative in writing. Testing results must satisfy all samples meeting 100% of materials strength requirements for acceptance of salvage materials. If less than 100% of materials tested meet this requirement, then the sampling rate shall be increased. In this event, the sampling rate for retesting shall be subject to review and approval by the Owner's Representative."

Please advise if salvage material is still acceptable per the project specifications.

listed:

1). Indicate whether the structural steel member consists of new or salvaged material

2). Provide the exact location along the bridge that the steel member is located

3). Provide information on the salvaged material, such as its current condition, when and where it may be inspected by a TJPA Representative, and what its prior use was

4). For each complete temporary bridge, provide the total weight of salvage steel, summarized by element type and usage.

Finally, please provide the weight of total salvaged steel material that will be used at each temporary bridge.

T-0222 **BSE - Temporary Bridge Pier Locations** **Closed** **08/29/2011** **09/08/2011** **09/01/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST: **SUGGESTION:** **ANSWER:** **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Reference Specification Section 01 53 13 and Submittal TG0300-201 Item TZ1030-015313A09 response comments (attached)

Temporary bridge review comments (Submittal TZ1030-015313A09, package TG0300-201) call for the end piers on all three bridges to be relocated to avoid interrupting chamfer rebar (see attached markups). With the information provided to BBII in the plans and specifications, there was no indication that this reinforcement must be avoided, nor was there a required clear zone from the shoring wall to the first pier. Please advise if these piers absolutely need to move, or if their current locations can be accommodated. Increasing the span between the abutments and the first pier will have commercial impacts.

Thornton Tomasetti Response: The piers shall not be in conflict with the mat foundation chamfer (chamfer shown in plan and section S1-3201). Minimum clear distance from face of pier to bottom edge of chamfer shall be 2'-0."

8/31/2011 George Metzger
ARUP Response: Arup takes no exception to the referenced pier locations that are shown in the submittal.

T-0223 **BSE - Temporary Bridge Pedestrian Barrier Height** **Closed** **08/30/2011** **09/09/2011** **09/27/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** URS Corporation David Fyfe

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 01 53 13 and Submittal TG0300-201 response comments (attached)

DPW review of the temporary bridges includes comment #42 that calls for the pedestrian barrier to be designed as a combination railing with a minimum height of 4'-6" while the specifications only call for a 3'-6" barrier. Please advise if the minimum height must be increased to 4'-6".

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Response to RFI No.T-0223 is provided herein and on attached sketch titled, "Sketch - RFI Nos.T-0223 and T-0228." This attached sketch is a mark-up of BBII's traffic plan figure, "Non-Working Hours, Temporary Bridge Traffic Plan" (submittal package TG0300-204, submittal item TZ1030-015313, page 3 of 6) because this is the latest presentation of the Contractor proposed product.

This attached sketch shows an installation in conformance with current coordination comments completed between the Project and CCSF DPW and SFMTA. Where the handrail/guardrail system occurs separating pedestrian and vehicle traffic, required height equals 3'-6" measured from the top of pedestrian walking surface.

Note, these comments provided on this attached sketch pertain only to RFI Nos.T-0223 and T-0228, a full review and response of Traffic Plan Submittal

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Package TG0300-204 will be finalized and transmitted at a later date.

T-0224 **BSE - Temporary Bridge Deflection and Suspended Utilities** **Closed** **08/30/2011** **09/09/2011** **09/09/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Service Eric Zagol

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 01 53 13 and attached cut sheets

Where utilities transition from direct bury to hanging under the temporary bridges, BBII believes there must be some allowance for deflection to prevent damage to the conduits during a seismic event. Attached are cut sheets for an expansion fitting and deflection fitting that BBII has seen used in combination at bridge transitions. Watertight flexible steel conduit may be an option as well.
Please confirm that all Phase 2 utilities to be suspended below the temporary bridges will include some means of handling bridge deflection.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please provide information on the predicted movement and hanger support system such that the condition can be assessed.
Movement direction; lateral or longitudinal?
How much movement is being predicted and at what location?
Are the steel conduits rigidly connected to the hanger supports? Please provide the hanger support design for review.

T-0224.1 **BSE - Temporary Bridge Deflection and Suspended Utilities** **Closed** **09/23/2011** **10/03/2011** **09/27/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Service Eric Zagol

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI #T-0224, Specification Section 01 53 30, and attached e-mails

The response to RFI T-0224 requested additional information about bridge movements. This information was provided by email to AECOM on 9/9/11. Follow on questions were answered on 9/15/11. Please see the attached email string.

Please provide the make, model, location and quantity per conduit run for all the utilities supported by the bridge

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

In reference to the request in RFI T-0224, it has been confirmed that all Phase 2 utilities (Verizon and PG&E) to be suspended below the temporary bridges will include means of handling bridge deflection.

Verizon has indicated the use of O-Z/GEDNEY expansion fittings for rigid steel conduit type EX, or equal. One fitting is proposed on each conduit located along the supported section staggered such that no two are aligned. This design element will be incorporated into construction documents being prepared by Verizon.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

PG&E has indicated the use of O-Z/GEDNEY Expansion fittings for rigid steel conduit type EX, or equal. One fitting is proposed on each conduit located along the supported section staggered such that no two are aligned. This design element will be incorporated into construction documents being prepared by PG&E.

T-0224.2 **BSE - Temporary Bridge Deflection and Suspended Utilities** **Closed** **10/05/2011** **10/15/2011** **10/12/2011** **Potentially** ☐

From: Webcor Construction LP Masashi Kojima **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Service Eric Zagol

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI T-224, 224.1, CR T-017 and Specification Section 01 53 30

The response to RFI T-0224.1 The 4" EX model is not readily available (8 week lead time), however the very similar AX is. Please see the attached data sheets for each model and advise if this revised material is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Response from PG&E (attached) is as follows:

The type AX expansion fitting for 4" steel conduits is an acceptable substitute for the type EX expansion fitting. Type BJ external bonding jumper will still be required.

T-0224.3 **BSE - Temporary Bridge Deflection and Suspended Utilities** **Closed** **10/24/2011** **11/03/2011** **11/08/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Service Eric Zagol

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference CR T-017R1 and Response to RFI#T-0224.2

BBII have been advise that only 1 deflection fitting is required on per rigid conduit run, between gridline A and J.

The PG&E construction drawings attached, indicate (highlighted in yellow) 2 locations A and J line; request expansion fitting to be used.

It is not clear from the drawings attached if PG&E require 1 deflection fitting per conduit run as previous stated in RFI # T-0224.2. Please confirm only 1 deflection fitting per

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1 deflection fitting per conduit run as described in RFI # T-0224.2 is required.

Submit proposed configuration of deflection fittings coordinated with temp bridge supports and other bridge elements for review.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

conduit run between GL A-J is required by PG&E.

Please provide a drawing showing, the deflection fitting configuration for individual conduit runs.

T-0225 **BSE - CDSM Alignment Conflict With Existing Utilities GL 1-J** **Closed** **08/31/2011** **09/10/2011** **08/31/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet D-2231, Specification Section 31 56 13, and attached photo

BBII laid out centerline of the CDSM on Gridline 1 and Gridline J. The centerline of the shoring indicates that the existing utilities PG&E/Water is in direct conflict with the location of the CDSM shoring wall. These utilities appear to be capped east of the centerline.

Drawing D-2231 BSE contract states "Unless specified otherwise all utilities have been cut and capped outside the limits of the work by Transbay Transit Centre program relocation of utilities"... Please see photos attached.

Please confirm the status on the relocation of these utilities.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Shoring wall changed per the response to BSE RFI-0017. Basis of the AECOM Plans is the pre RFI-0017 shoring wall. We are planning to issue revisions to TJPA early next week to address the shoring wall change.

T-0225.1 **BSE - CDSM Alignment Conflict With Existing Utilities GL 1-J** **Closed** **08/31/2011** **09/10/2011** **09/09/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI#T-0225

The response received for RFI #T-0225 does not provide the requested information.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Status is as follows, RUP ASI-015 has been created to address the relocation of utilities impacted by the change to the CDSM shoring wall resulting from BSE RFI-0017. ASI-015 was issued for pricing and implementation on 9/8/11.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

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Question from RFI#T-0225

Reference Sheet D-2231, Specification Section 31 56 13, and attached photo

BBII laid out centerline of the CDSM on Gridline 1 and Gridline J. The centerline of the shoring indicates that the existing utilities PG&E/Water is in direct conflict with the location of the CDSM shoring wall. These utilities appear to be capped east of the centerline.

Drawing D-2231 BSE contract states "Unless specified otherwise all utilities have been cut and capped outside the limits of the work by Transbay Transit Centre program relocation of utilities"... Please see photos attached.

Please confirm the status on the relocation of these utilities.

T-0225.2 **BSE - CDSM Alignment Conflict GL 1-J - PG&E Vault Utility Conflict on Natoma** **Closed** **09/12/2011** **09/22/2011** **09/14/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI #T-0017, #T-0225.1, Sheet U-1110, and Specification Section 31 56 13

Please refer to RFI No. T-0017, which revised the southwest corner of the CDSM shoring wall alignment. Your attention is also directed to the utility drawing U-1110, which depicts the utilities to be abandoned and the ones to be protected in place with respect to the old CDSM wall alignment. According to U-1110, the PG&E vault on Natoma Street shall be protected in place. However, based on the field layout, the PG&E vault on Natoma St. is in conflict with the southwest corner of the CDSM wall alignment, which was revised per RFI No. T-0017.

Based on BBII's field measurements, the clearance between the PG&E vault on Natoma St. and the centerline

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Based on provided field information, the existing PG&E MH is located 11" clear of the CDSM shoring wall revised per resonse to RFI T-0017, please clarify what/where the conflict is.

If safety is of concern while working in close proximity to a live PG&E MH, coordinate with PG&E through TJPA's Representative to de energize the existing MH prior to and during CDSM wall construction. Existing PG&E MH 1348 exists to provide power to 90 Natoma. 90 Natoma is owned by the TJPA and is currently vacant.

The 36" demarcation line mentioned in the RFI is an arbitrary scope division line established between the RUP and BSE packages to differentiate abandon utility removal between the two packages.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

of the CDSM wall is 29", which is less than the 36" typical distance required by the contract plans as the minimum clearance between the demarcation lines and the CDSM wall alignment.

BBII requests the PG&E vault on Natoma St. to be relocated to a safe distance outside the work limits of the revised CDSM wall alignment.

T-0225.3 **BSE - CDSM Alignment Conflict GL 1-J - PG&E Vault Utility Conflict on Natoma** **Closed** **10/03/2011** **10/13/2011** **10/20/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Kevin Chiu

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI #T-0225.2, Sheet D-2231 and ASI-015, Specification Section 31 56 13, and attached photos and sketch

BBII in discussions with DND will be able to work adjacent to PG&E vault #1348, referenced in RFI #T-0225.2.

BBII is currently considering removing the concrete over pour on the vault, de-energizing the power in the vault and installing CDSM Shoring Wall without relocating the vault.

Please confirm it is acceptable to remove any concrete over pour within 20" from the centerline of CDSM wall.

Also, please confirm it is acceptable to install CDSM Wall at the location close to the PG&E vault #1348 without potential damages.

Please refer to the attached photos

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is noted that prior to receiving the response to this RFI, the contractor installed CDSM panel #W0001 adjacent PG&E vault 1348 without chipping away the concrete over pour. A PG&E standby crew was present and observed the installation.

It is understood that during this work the outside tooth of auger may have broken off during install of piles in this area. W/O to confirm there is no damage to Vault #1348 due to CDSM work

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T-0226 **BSE - Revised Instrument Protection Slab** **Closed** **09/02/2011** **09/12/2011** **09/06/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Reference RFI #T-0214 and attached sketch

Per discussion with the engineer, it is acceptable to install the Instrument Protection Slab per the attached sketch and the following revisions to RFI T-0214:

1. W-beams cut so that the top mat will be resting on them.
2. #6 rebar thru the W-beam, tie-wired to the top mat in lieu of Nelson Studs.

Please confirm.

ARUP Response:

This is acceptable.

T-0227 **BSE - Buttress Anti-Washout Admixture** **Closed** **09/02/2011** **09/12/2011** **09/08/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 03 30 01 and attached Rheomac product data

Per the recommendations from both Becho and Central Concrete, BBII would like to propose the use of an Anti-Washout Admixture, Rheomac UW 540 in all submitted and approved Buttress Primary and Secondary Shaft Concrete. Please review and confirm that this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:
This is acceptable.

T-0228 **BSE - 6-inch Sidewalk At Temporary Bridges** **Closed** **09/02/2011** **09/12/2011** **09/27/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** URS Corporation David Fyfe

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 01 53 13 and attached sketches

During a temporary bridge traffic coordination meeting on 8/29/11, SFMTA suggested the use of a 6" elevated

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Response to RFI No.T-0228 is provided herein and on attached sketch titled, "Sketch - RFI Nos.T-0223 and T-0228." This attached sketch is a mark-up of BBII's traffic plan figure "Non-Working Hours, Temporary Bridge Traffic Plan," (submittal package TG0300-204,

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

sidewalk curb in lieu of the crash rated pedestrian barrier. The crash rated barrier would be relocated to the outside edge of the temporary bridge.

BBII believes this layout has numerous advantages and resolves some concerns as well:
- SFMTA brought up the obvious concern of damage to side mirrors with tall barriers directly adjacent to the traveled lanes. To compensate for this, drivers will shy away from barriers in already tight lanes. Moving the barrier alleviates this problem on one side of the road.
- A barrier between the sidewalk and traveled lanes has a blunt ends that pose a hazard (see sketch). Relocating the barrier eliminates this hazard.
- The area formerly occupied by the pedestrian barrier (approx 14" in width) can be used as extra traveled width for vehicles (distributed per SFMTA's discretion)
- An elevated sidewalk curb will make trestle crossings feel like a typical street crossing, especially for the visually impaired. As such, pedestrians will be more likely to treat the trestle intersection as a
true signalized intersection.

SFMTA has indicated that the elevated sidewalk is preferred over a pedestrian barrier. Attached are several sketches of the proposed layout - please confirm this is acceptable.

submittal item TZ1030-015313, page 3 of 6) because this is the latest presentation of the Contractor proposed product.

This attached sketch shows an installation in conformance with current coordination comments completed between the Project and CCSF DPW and SFMTA. As shown on attached Sketch - RFI Nos.T-0223 and T-0228, a handrail/guardrail providing separation of pedestrian and vehicle traffic is required.

Note, these comments provided on the attached sketch pertain only to RFI Nos.T-0223 and T-0228, a full review and response of Traffic Plan Submittal Package TG0300-204 will be finalized and transmitted at a later date.

T-0229 **BSE - Concrete Time of Discharge Requirement** **Closed** **09/06/2011** **09/16/2011** **09/08/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification 03 30 01

Per SS 03 30 00, 3.3.D, "Discharge of concrete shall be completed within 1½ hours or before the drum has revolved 300 revolutions, whichever comes first, after the introduction of the mixing water to the cement and aggregates or the introduction of the cement to the aggregates."

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:
This is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Per ACI 301 (Section 4.1.2.9), "Time of discharge - When it is desired to exceed the maximum time for discharge of concrete permitted by ASTM C 94C/ 94M, submit a request along with a description of the precautions to be taken."

BBII is planning for discharging concrete with the following precautions: As concrete hydration can be controlled for a maximum of 10 hours, BBII suggests discharge of concrete shall not be restricted to 1½ hours. In order to sustain the requirements of Becho, BBII purposes to replace the 1½ hour time restriction to 3 hours with an 80° F maximum temperature requirement.

Please confirm that this discharging plan is acceptable for Buttress Concrete per ACI 301.

T-0230 **BSE - Concrete Sampling Location** **Closed** **09/12/2011** **09/22/2011** **09/16/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran

To: Turner Construction Compan Gary Krutsch

Answered By: Turner Construction Comp Kevin Chiu

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 03 30 01

Per the Pre-Construction Buttress Shoring Phase 1 DFOW Meeting on 8/30/2011, BBII proposes to conduct concrete sampling of Central Concrete Trucks in Lot P in lieu of Zone 4 due to site congestion and safety concerns. In order to sustain the requirements of Becho and to provide safe disposal of concrete for sampling, BBII purposes Lot P for all concrete sample inspections.

Please confirm that this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Contractor shall bear all additional costs associated with changing the concrete sampling location from Zone 4 to Lot P (including, but not limited to, additional inspectors)

2011-09-15 George Metzger

ARUP Response:

Arup takes no exception to sampling the trucks in Lot P provided the concrete is sampled and tested in accordance with the ASTM Standards. For example, in accordance with the Standards, sampling of the concrete shall be obtained after 10 % and before 90 % of the batch has been discharged from the truck.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0231	BSE - 24-Hour Inspection of Buttress Shoring Shaft	Closed	09/12/2011	09/22/2011	09/12/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Kevin Chiu

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 03 30 01

Per the Pre-Construction Buttress Shoring Phase 1 DFOW Meeting on 8/30/2011, Becho requests that a TJPA representative be available to observe the 24 hour Buttress Shoring drilling operation and to perform any/all specified inspections. This includes: verticality of shaft, shaft cleanliness, verification of bed rock, concrete and rebar. In addition, Becho requests that a TJPA representative be available 24 hours of the day to provide Becho/BBII with full support and contact information of all available representatives.

Please confirm that this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

TJPA Representatives will be available to inspect the work as specified in 31 63 29 (referenced in 03 30 01).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0232	BSE - Buttress Red Color Concrete	Closed	09/15/2011	09/25/2011	09/16/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 03 30 01 and Sheet GT-2201

Per discussion with the Engineer, it is acceptable to place red color concrete in Secondary Buttress Shafts C3 and C5 in lieu of Primary Buttress Shafts C2, C4, and C6.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

This is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0233	BSE - Internal Bracing Design Coordination with Structural Design	Closed	09/20/2011	09/30/2011	09/23/2011	Potentially	☐

From: Webcor/Obayashi Joint Venture Masashi Kojima **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Specification Section 31 55 00

The BSE submittal TG0300-542.1 Internal Bracing Design was approved by TJPA and the fabrication will start as soon as permission is issued by the City.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Thornton Tomasetti's response is pending receipt and review of revised internal bracing submittal.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please confirm the design was acceptable to permanent structural designer (Thornton Tomasetti) and incorporated into their design for future trade packages.

T-0233.1 **BSE - Internal Bracing Design Coordination with Structural Design** **Closed** **09/23/2011** **10/03/2011** **10/03/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference RFI #T-0233 and TJPA Transmittal No. 140-02321

The SFDBI-approved Internal Bracing drawings and related calculations was sent to W/O on 9/22/2011 as TJPA Transmittal No. 140-02321 - Approved Internal Bracing for Shoring Wall Permit Drawings, and available in Constructware.

RFI #T-0233 Question:

The BSE submittal TG0300-542.1 Internal Bracing Design was approved by TJPA and the fabrication will start as soon as permission is issued by the City.

Please confirm the design was acceptable to permanent structural designer (Thornton Tomasetti) and incorporated into their design for future trade packages.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

TT is currently reviewing the Internal Bracing Design Documents, which was received by TT on 09/29/2011.

TT's comments to this document will be marked up on the Internal Bracing Design Document.

T-0233.2 **BSE - Internal Bracing Design Coordination with Structural Design** **Closed** **10/05/2011** **10/15/2011** **10/10/2011** **Potentially** ☐

From: Webcor Construction LP Masashi Kojima **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference RFI #T-0233, T-0233.1, Submittal TG0300-542 and TJPA Transmittal No.140-02321.

W/O is in receipt of TJPA Submittal Package #TG0300-

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Thornton Tomasetti will be issuing comments to Transmittal #140-02321.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

542 for the internal bracing from which W/O is proceeding per specification section 01 13 00.
W/O is aware the design team did not review and comment on Transmittal #140-02321 (DBI's comments) to Submittal Package #TG0300-542.
Please confirm no design team changes or comments will be made to Submittal Package #TG0300-542 rather future trade packages.

----- RFI #T-0233.1 Response -----
TT is currently reviewing the Internal Bracing Design Documents, which was received by TT on 09/29/2011. TT's comments to this document will be marked up on the Internal Bracing Design Document.

----- RFI #T-0233.1 Question -----
The SFDBI-approved Internal Bracing drawings and related calculations was sent to W/O on 9/22/2011 as TJPA Transmittal No. 140-02321 - Approved Internal Bracing for Shoring Wall Permit Drawings, and available in Constructware.

----- RFI #T-0233 Response -----
Thornton Tomasetti's response is pending receipt and review of revised internal bracing submittal.

----- RFI #T-0233 Question -----
The BSE submittal TG0300-542.1 Internal Bracing Design was approved by TJPA and the fabrication will start as soon as permission is issued by the City.
Please confirm the design was acceptable to permanent structural designer (Thornton Tomasetti) and incorporated into their design for future trade packages.

T-0233.3 **BSE - Internal Bracing Design Coordination with Structural Design** **Closed** **10/10/2011** **10/20/2011** **10/10/2011** **Potentially** ☐

From: Webcor Construction LP Masashi Kojima **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Kevin Chiu

Co-Author:

REQUEST:

Reference RFI #T-0233, T-0233.1, T-0233.2, Submittal TG0300-542 and TJPA Transmittal No.140-02321.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This RFI contains a statement, not a question and is inappropriate for the RFI process.
RFI T-0233.2 will remain closed but unresolved until

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

This RFI shall not be closed until the information / confirmation received from the Design team.

----- RFI #T-0233.2 Response -----
Thornton Tomasetti will be issuing comments to Transmittal #140-02321.

----- RFI #T-0233.2 Question -----
W/O is in receipt of TJPA Submittal Package #TG0300-542 for the internal bracing from which W/O is proceeding per specification section 01 13 00.
W/O is aware the design team did not review and comment on Transmittal #140-02321 (DBI's comments) to Submittal Package #TG0300-542.
Please confirm no design team changes or comments will be made to Submittal Package #TG0300-542 rather future trade packages.

----- RFI #T-0233.1 Response -----
TT is currently reviewing the Internal Bracing Design Documents, which was received by TT on 09/29/2011.
TT's comments to this document will be marked up on the Internal Bracing Design Document.

----- RFI #T-0233.1 Question -----
The SFDBI-approved Internal Bracing drawings and related calculations was sent to W/O on 9/22/2011 as TJPA Transmittal No. 140-02321 - Approved Internal Bracing for Shoring Wall Permit Drawings, and available in Constructware.

----- RFI #T-0233 Response -----
Thornton Tomasetti's response is pending receipt and review of revised internal bracing submittal.

----- RFI #T-0233 Question -----
The BSE submittal TG0300-542.1 Internal Bracing Design was approved by TJPA and the fabrication will start as soon as permission is issued by the City.
Please confirm the design was acceptable to permanent structural designer (Thornton Tomasetti) and incorporated into their design for future trade packages.

the requested information is provided.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0233.4	BSE - Internal Bracing Design Coordination with Structural Design	Closed	10/10/2011	10/20/2011	10/11/2011	Potentially	☐

From: Webcor Construction LP Masashi Kojima **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Kevin Chiu

Co-Author:

REQUEST:

Reference RFI #T-0233, T-0233.1, T-0233.2, Submittal TG0300-542 and TJPA Transmittal No.140-02321.

When will the Design team provide the information / confirmation for RFI #T-0233?

----- RFI #T-0233.3 Response -----
This RFI contains a statement, not a question and is inappropriate for the RFI process. RFI T-0233.2 will remain closed but unresolved until the requested information is provided.

----- RFI #T-0233.3 Question -----
This RFI shall not be closed until the information / confirmation received from the Design team.

----- RFI #T-0233.2 Response -----
Thornton Tomasetti will be issuing comments to Transmittal #140-02321.

----- RFI #T-0233.2 Question -----
W/O is in receipt of TJPA Submittal Package #TG0300-542 for the internal bracing from which W/O is proceeding per specification section 01 13 00.
W/O is aware the design team did not review and comment on Transmittal #140-02321 (DBI's comments) to Submittal Package #TG0300-542.
Please confirm no design team changes or comments will be made to Submittal Package #TG0300-542 rather future trade packages.

----- RFI #T-0233.1 Response -----
TT is currently reviewing the Internal Bracing Design Documents, which was received by TT on 09/29/2011. TT's comments to this document will be marked up on the Internal Bracing Design Document.

----- RFI #T-0233.1 Question -----
The SFDBI-approved Internal Bracing drawings and related calculations was sent to W/O on 9/22/2011 as TJPA Transmittal No. 140-02321 - Approved Internal Bracing for Shoring Wall Permit Drawings, and available in Constructware.

----- RFI #T-0233 Response -----

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Comments will be returned by 14 October 2011.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Thornton Tomasetti's response is pending receipt and review of revised internal bracing submittal.

----- RFI #T-0233 Question -----
The BSE submittal TG0300-542.1 Internal Bracing Design was approved by TJPA and the fabrication will start as soon as permission is issued by the City.
Please confirm the design was acceptable to permanent structural designer (Thornton Tomasetti) and incorporated into their design for future trade packages.

T-0233.5 **BSE - Internal Bracing Design Coordination with Structural Design** **Closed** **10/17/2011** **10/27/2011** **10/18/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Gary Krutsch

Co-Author:

REQUEST:

Reference RFI #T-0233, T-0233.1, T-0233.2, T-0233.3, T-0233.4, Submittal TG0300-542 and TJPA Transmittal No.140-02321.

Per response to RFI#T-0233.4, comments from the design team were to be received by October 14, 2011.

Please provide the design team comments and confirmation for RFI #T-0233.

----- RFI #T-0233.4 Response -----
Comments will be returned by 14 October 2011.

----- RFI #T-0233.4 Question -----
Reference RFI #T-0233, T-0233.1, T-0233.2, Submittal TG0300-542 and TJPA Transmittal No.140-02321.

When will the Design team provide the information / confirmation for RFI #T-0233?

----- RFI #T-0233.3 Response -----
This RFI contains a statement, not a question and is inappropriate for the RFI process. RFI T-0233.2 will remain closed but unresolved until the requested

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Comments have been sent to W/O previously, see attached transmittal.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

information is provided.

----- RFI #T-0233.3 Question -----
This RFI shall not be closed until the information / confirmation received from the Design team.

----- RFI #T-0233.2 Response -----
Thornton Tomasetti will be issuing comments to Transmittal #140-02321.

----- RFI #T-0233.2 Question -----
W/O is in receipt of TJPA Submittal Package #TG0300-542 for the internal bracing from which W/O is proceeding per specification section 01 13 00.
W/O is aware the design team did not review and comment on Transmittal #140-02321 (DBI's comments) to Submittal Package #TG0300-542.

Please confirm no design team changes or comments will be made to Submittal Package #TG0300-542 rather future trade packages.

----- RFI #T-0233.1 Response -----
TT is currently reviewing the Internal Bracing Design Documents, which was received by TT on 09/29/2011. TT's comments to this document will be marked up on the Internal Bracing Design Document.

----- RFI #T-0233.1 Question -----
The SFDBI-approved Internal Bracing drawings and related calculations was sent to W/O on 9/22/2011 as TJPA Transmittal No. 140-02321 - Approved Internal Bracing for Shoring Wall Permit Drawings, and available in Constructware.

----- RFI #T-0233.0 Response -----
Thornton Tomasetti's response is pending receipt and review of revised internal bracing submittal.

----- RFI #T-0233.0 Question -----
Reference Specification Section 31 55 00
The BSE submittal TG0300-542.1 Internal Bracing Design

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

was approved by TJPA and the fabrication will start as soon as permission is issued by the City.

Please confirm the design was acceptable to permanent structural designer (Thornton Tomasetti) and incorporated into their design for future trade packages.

T-0234 **BSE - Buttress Shaft Post Pour Settlement** **Closed** **09/20/2011** **09/30/2011** **09/22/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet GT-2201 and Specification Section 31 63 29

Please be informed that an uncontrolled settlement was observed at Buttress shaft C2, which was poured on Sunday 9/18/2011. The settlement led to the formation of a 13' deep unstable hole on the buttress working pad. After consulting with ARUP representative and W/O's field personnel, BBII/Becho Inc. decided to fill the newly formed hole with concrete to mitigate the settlement risk of the working pad. Additional concrete was poured into the 13' deep hole on Monday 9/19/2011.

Please confirm that pouring additional concrete/CLSM will be considered as an acceptable method, if such settlements will occur during the future installation of the upcoming buttress shafts.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

The Contractor shall place concrete (or CLSM, where specified) up to the gound surface as specified in the Contract Documents. The Contractor shall employ the means and methods necessary to properly measure the level of concrete before concrete placement is terminated, and to verify that the material at the ground surface is quality concrete rather than the concrete / water / concrete plug mixture that rises to the surface in advance of the quality concrete due to the tremie method. If some consolidation of the concrete occurs over time, then the top of the shaft shall be filled to the ground surface with conrete (or CLSM, where specified).

T-0235 **BSE - Unforeseen Reinforced Concrete Slab at GL 7.5 J** **Closed** **09/20/2011** **09/30/2011** **09/27/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Transbay PMPC Roger Rothenburger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet D-2210, Specification Section 31 56 13, attached photos and sketch

While excavating a pre trench at gridline 7.5J close to

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This slab is a Cal Trans slab and is located within TJPA property limits. The slab is not unknown and is shown in the set of Drawings listed in Section 00-03-31 Part 1.2.D.6 (Existing Condition: Buildings and

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Natoma Street, BBII uncovered an unforeseen reinforced concrete slab. This slab is 3ft thick, uncovered at grade and a section of it is in the direct line of the proposed CDSM wall. Indicated at this location in drawing D-2210 are grade beams and pile caps which BBII assumes will be encountered under this mat slab. However, this slab is not indicated on contract drawing D-2210.
The concrete shown in contract survey sheet 5 appears to be a concrete driveway and it does not indicate the 3ft thick concrete slab that BBII are encountering. Measurements taken in the field also indicate a larger area than this. The attached photos and drawing indicate the scale of this obstruction. It is required to be removed.

Please advise if this is acceptable.

Improvements - Drawings "Project Plans for Construction from Figth Streeet to Beale Street, 2000" (168 pages). Removal of the slab is acceptable.

9/22/2011 - George Metzger

ARUP Response:

It is Arup's understanding that the slab encountered is a remnant of the Caltrans seismic retrofit work of the previous, now-demolished bus ramps. Therefor, removal of the portion of the slab within the shoring wall alignment is acceptable, but ownership of the property on which the slab is located should be confirmed by the PMPC / TJPA.

T-0236 **BSE - Unforeseen Concrete Section Found at Grid Line 1E** **Closed** **09/22/2011** **10/02/2011** **09/26/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet D-2210 (attached), Specification Section 31 56 13, and attached photos

While DND were drilling at panel 28 and 29 on grid line 1E at the locations of piles 839-843, an unknown section of concrete was encountered. The concrete was found at a depth of 9.5ft. The quantity of concrete is unknown at this point. The concrete is not indicated on contract drawing D-2210. It is in direct conflict with the CDSM shoring wall and must be removed. Shown below [attached] are photos of the debris removed from the excavation.

Please advise on how to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Contract documents require obstacles that may interfere with installation of the CDSM wall to be removed by pre-trenching. The concrete shall be removed.

T-0237 **BSE - Bridge Welding Code** **Closed** **09/26/2011** **10/06/2011** **10/03/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Kevin Chiu

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference Specification 01 53 30

Temporary Bridge Specification 01 53 13 (1.6H) requires the welding qualifications for the bridges to be in accordance with AWS D1.5 "Bridge Welding Code", however BBII's design was based on AWS D1.1 "Structural Welding Code" as specified in General note 3.2-A4.2 of Sheet SH-0100. BBII and their designer felt AWS D1.1 is more applicable for the temporary bridge structure for the following reasons:

- The members that make up BBII's temporary bridge consists of readily available standard grade mill rolled shapes, comprised of a variety of base metals (A36, A53, A572, A992, A500, and A252) which are joined by simple prequalified joints (fillets). D1.1 provides the flexibility to weld all of these base metals in any combination utilizing prequalified procedures, since they are all in the same base metal group. D1.5 only allows prequalified welding of A709 plate material only.

- BBII's temporary bridge structure contains structural tubing (piers and rails), which D1.5 does not cover tubing

- The bridge as designed has short spans and very simple welded connections. All welds shown are fillet welds (mostly single pass). Additionally there are no complete penetration welds as are typically seen on steel plate girder bridges.

- The life span of these temporary bridges are less than 5 years

- The temporary bridge's intended use and the site specific geometry restraints led to a steel framing design much more similar to a structural steel building than to a typical Highway bridge. The steel columns with angle cross-bracing, and the girders and cap beams as detailed are similar to building with columns and floor beams.

The submittal review did not take exception to the general note specifying D1.1. therefore please confirm it is acceptable to submit weld procedures and welder qualifications per AWS D1.1 as specified by the bridge's Engineer of Record.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ISI Commentary:

"We have been requested to provide a commentary/discussion regarding AWS D1.5-2002 Bridge Welding Code in reference to RFI #T-0237. The scope of our discussion is limited to an interpretation of D1.5 and not to the design/use of welded temporary steel bridges. The RFI's request by BBII is to accept WPSs/WQTRs to AWS D1.1 rather than to AWS D1.5.

Base Materials: Although D1.5 specifies A709 as the approved steel, it also states that other steels may be approved by the Engineer [D1.5 Section 1.2.2].

Fillet Welding: The RFI states all welding to be fillet welds (mostly single pass). D1.5 state fillet welding may be performed, within given limitations, without performing WPS qualification tests [D1.5 Section 2.8.1].

Welder Qualifications: We note that the qualification requirements for both groove and fillet welds are similar between AWS D1.1 and D1.5 with exception of base metal restrictions.

Engineer's Discretions: See Commentary Sections C1.1.2, C1.2.1 and the "Forward" section of D1.5 Pgs. vii and viii."

9/26/2011 - David Fyfe

See Specification Section 01 53 13, 1.6H;

Welding Qualifications: Qualify procedures and personnel according to the following:

1. AWS D1.5/D1.5M, "Bridge Welding Code - Steel."

2. AWS D1.4/D1.4M, "Structural Welding Code - Reinforcing Steel."

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

This does not allow use of AWS D1.1. Comply with paragraph 1.6H requirements.

T-0237.1 **BSE - Bridge Welding Code** **Closed** **10/03/2011** **10/13/2011** **10/03/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Kevin Chiu

Co-Author:

REQUEST:

Reference RFI #T-0237 and Specification Section 01 53 30

RFI #T-0237 was returned to W/O with two responses regarding the temporary bridge welding. Please clarify which is the governing response or provide one coordinated response.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Response provided in RFI T-0237 by David Fyfe, dated 9/26/2011, is the governing response.

T-0238 **BSE - Zone 1 CDSM Crossing Over Existing Wall** **Closed** **09/26/2011** **10/06/2011** **09/29/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet GT-5101, Specification Section 31 56 13, attached photos and sketch

Please address the following information request from BBII's sub contractor DND:

"The new CDSM shoring wall crosses an existing CDSM wall at 2 locations. Following CR T-005B, both of these crossings are perpendicular to the existing CDSM wall, as shown in Note 1 on GT-5101. Note 1 shows the new wall making a jog to avoid hitting the beams of the existing CDSM wall. The detail shown on contract plan GT-5101 is constructible only if the existing CDSM wall was built exactly as shown, without any room for construction tolerances for both the new and existing wall. Instead of trying to install this section of the CDSM wall according to the detail shown on GT-5101, which would potentially cause damage to the CDSM equipment, DND proposes to

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

This is acceptable provided there is no additional cost to the TJPA.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

remove the existing CDSM beams that are in conflict. The contract plan GT-5101 shows two CDSM panels to jog around the existing beam and one offset panel parallel to the new wall.

DND's proposed solution would eliminate the 2 panels in the jog but still maintain the additional offset panel parallel to the wall line. This additional offset panel would act as insurance so a seal is maintained through any deflection caused by the hard in-situ soil mix. This would present a potential cost savings to the project (due to 2 less panels being installed), providing the conflicting beams can be successfully removed.

DND has mobilized a drill rig with an auger to this area to pre-drill the wall prior to the removal of beams. This will substantially reduce the amount of vibration that will be required to remove the beams. DND proposes to utilize the same method at the other wall crossing near Natoma Street. Is this proposed method of removing the existing beams and soil mixing through the existing CDSM wall acceptable?"

T-0239 **BSE - Rebar Cages for Deeper Buttress Shafts** **Closed** **09/28/2011** **10/08/2011** **10/03/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet GT-5202 Detail 12, RFI T-0216, and Approved Rebar Shop Drawings

The approved rebar cages per RFI T-0216 are sized for 241' deep shafts. Rebar cages for shafts C-1 and M-1 have already been released and fabricated. Note that the depth after airlifting of shafts C-2 and M-2 have been 247' and 252.7' respectively. Please advise on how to proceed with the installation of the cages for shafts C-1 and M-1 and with the fabrication of the rest of the cages assuming these shafts extend beyond planned depth.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Detail 12/GT-5201 requires the reinforcing steel to be placed up to 1'-0" below the top of the concrete. The top of concrete is shown on GT-5201. Longitudinal bar extensions shall be spliced as needed to achieve this. If the top of the fabricated cage is within 3'-0" of the top of the concrete, no bar extensions are required.

The 24" tie spacing shown on the shop drawings at the setting cage (Drawing SC1) is acceptable at the bar extensions.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0240	BSE - Demo AT&T Duct on Natoma at Second	Closed	09/29/2011	10/09/2011	10/07/2011	Potentially	☐

From: Webcor Construction LP — Nhi Tran
To: Turner Construction Compan — Gary Krutsch
Answered By: AECOM Technical Servic — Eric Zagol
Co-Author: Balfour Beatty Infrastructure, Inc. — Ural Yal

REQUEST:

Reference Sheets U-1110, D-2231, ASI-015, Specification Section 31 56 13, attached email and BBI RFI 222

It was discovered on 9/27/2011 while performing the utility demo for the revised shoring wall alignment (TG03 BSE CR T-005B) issued in ASI 15 that the abandoned AT&T line servicing the demolished buildings on Natoma was never fully abandoned by AT&T. According to the attached email from Huan Huynh of AT&T, AT&T was never notified that these lines needed to be abandoned due to the revised shoring wall alignment of the Transbay Project.

Please confirm when CDSM Shoring Wall can be installed in the area. Currently, BBII is installing the CDSM Shoring Wall on line 1 and the confirmation of the line abandonment is required as quickly as possible to avoid any project delay.

Please also refer to the attached BBI RFI 0222 for this issue

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

AT&T has de-energized the abandon telecommunications lines referenced in the RFI. Proceed with CDSM wall installation at this location following demolition of existing utilities per RUP contract documents and execution of a USARs.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0241	BSE - Brick Wall at GL 2, J Line In Conflict With The CDSM Wall	Closed	09/29/2011	10/09/2011	10/07/2011	Potentially	☐

From: Webcor Construction LP — Nhi Tran
To: Turner Construction Compan — Gary Krutsch
Answered By: Turner Construction Comp — Jack Adams
Co-Author: Balfour Beatty Infrastructure, Inc. — Ural Yal

REQUEST:

Reference Specification Section 31 56 13 and attached meeting minutes and photos

The brick wall remaining from the 580 Howard building, at grid line 2 J, is protruding into the CDSM wall limits, as noted in BBII's previous RFI #203 (The question was responded by TCCO at the job site meeting on 9/6/2011. Refer to the attached meeting minutes). While attempting to remove, BBII has discovered that the fence and patio pavement are founded on this remaining portion of brick wall. This condition does not allow for the removal of the wall without damage to the fence and patio.

Please provide direction on how to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. The 580 Howard courtyard fencing can be removed from the corner because it is owned by TJPA and located on TJPA property.
2. After removal of this corner section of fence, a section of temp fence and signage shall be placed on TJPA property.
3. During demolition of this corner section the temp fence and signage will likely have to move in towards the 580 Property as a safety precaution.
4. The demolition and backfill shall be expedited so that the courtyard can be restored (preferably same day).
5. The temp fence section and signage shall be moved back on to TJPA property until CDSM wall is complete.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

6. The permanent fence will be reinstalled on TJPA property as soon as possible after CDSM wall installation at the corner.

CR T-5B excluded this scope. These costs will be issued under forthcoming CR.

T-0242 **BSE - Becho's Request For Rock Classification Data** **Closed** **09/29/2011** **10/09/2011** **10/11/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Nhi Tran

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet GT-2201, Specification Section 31 63 29, and attached letter from Becho

Please find attached BBII's sub-contractor Becho's letter that requests the following information:

"... during the drilling of buttress shaft M4 rock socket, at a depth of approximately 250 feet below ground level, Becho encountered rock formations of unmeasured hardness. At a depth of 250 feet, Becho's steel grab, used for rock drilling, fractured under the increased stress. Please see attached photos. The incident occurred between the hours of 9.30 am and 10.00 am on Wednesday, 09.28.11. BBII immediately notified W/O and called for an emergency meeting to discuss the hardness of the rock formation and the status of drilling. During the meeting, Arup confirmed and accepted the 250 foot depth to be adequate and sufficient to stop the rock socket drilling. Immediately, following Arup's confirmation at 11.09 am, Becho proceeded to clean the remaining rock debris from the bottom of the shaft and prep for air lifting operation. The total down time recorded as a result of the incident is 68 minutes, not including adjustments of airlift, tremie pipe and repair of grab.
Please advise, if shafts are to be drilled and excavated to new depths not indicated on plan GT-5201. Becho will need to mobilize additional non-conventional drilling equipment to successfully achieve depths currently being directed to drill to (255 ft). In addition, Becho requests that a soil report be generated containing borings pertaining to

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Regarding the question: "Please advise, if shafts are to be drilled and excavated to new depths not indicated on plan GT-5201": the specifications note "Depth of piers shown on drawings may vary due to field conditions based upon TJPA's Representative¿s assessment of actual conditions."

The Geotechnical Data Report and the Prototype Test Report, included in the Contract Documents as references, provide sufficient information for the Contractor to plan and execute their work.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Zone 4 Buttress drilling operations which include rock classification, strength and location."

T-0243 **BSE - Emergency Exit at 530 Howard GL 10 J** **Closed** **09/29/2011** **10/09/2011** **10/10/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Kevin Chiu

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 31 56 13 and attached sketch

Pre-trenching and CDSM wall installation at the rear of the 530 Howard building will have an impact on the accessibility to the emergency exit at that location. In order for the pre trench and the CDSM wall installation to safely proceed past this location, the rear exit must be closed for 1-2 days for each operation. The attached drawing indicates the location of the emergency exit and its proximity to the CDSM wall.

Please confirm if this is acceptable. BBII is available to meet with the property owner to coordinate this work.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Coordination with 530 Howard property management cannot be obtained without specific dates. Once the dates are known, coordinate through Jason Padavich (jpadavich@tcco.com 510-453-8598).

T-0244 **BSE - Request for Additional Geotechnical Data Pertaining To Zone 4** **Closed** **09/29/2011** **10/09/2011** **10/11/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet GT-2201 and Specification Section 31 63 29

Please address the following information request from BBII's sub contractor Becho Inc.:

"... for each of the shafts completed and under construction, Becho has excavated deeper than the elevations shown for boring logs. Becho is requesting soil samples, boring logs, torque requirements, skin friction values, and rock strengths be provided for these depths.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

The elevation of the bedrock is highly variable as indicated by the contour plan in the Geotechnical Data Report. It is for this reason that the specifications include the requirement: "Excavation and drilling equipment: shall have adequate capacity, including power, torque, and down thrust to advance the temporary casing to the depths shown on the drawings, excavate a hole of both the maximum diameter and to a depth of 20 percent beyond the

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

(Currently 254 ft below elevation +14.00).

The requested information is similar to what was provided up to the depths of 234 and 237.5 feet in the "Final Geotechnical Data Report" prepared by Arup dated February 2010, and "Prototype Test Program and Monitoring During Construction of Drilled Shafts" prepared by Arup dated May 2010. Becho requests this information for drilling beyond the depths specified in the Geotechnical Report."

depths shown on the plans."

T-0244.1 **BSE - Becho Request for Buttress Field Logs** **Closed** **03/23/2012** **04/02/2012** **04/24/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

BECHO formally requests to obtain the Daily Field Logs from every ARUP field engineer/geotech/geologist, TJPA representative involved with the Buttress Shaft work. More specifically, field notes/logs from engineers and TJPA representatives involved with the field data collection, sample collection and inspection process. Becho requests the Daily Field Logs for the following dates:
- September 12th 2011 through October 20th 2011
- February 22nd 2012 through Today

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The TJPA Representative Daily Field Logs are attached to the Field Observation Reports that are posted to and available in Constructware.

T-0244.2 **BSE - Becho Request for Buttress Field Logs Follow-Up** **Closed** **04/18/2012** **04/28/2012** **04/24/2012** **Potentially** ☐

From: Webcor Construction LP David Fields **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Gary Krutsch

Co-Author:

REQUEST:

After reviewing Constructware as directed in RFI T-0244.1; W/O is unable to locate ARUP field reports for the dates between 9/12/11-9/30/11. Please advise as to the location of the aformentioned documents.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per Arup on 04/10/2012, "The first report begins on October 1, 2011. Prior to that, Arup was not documenting the project progress and deficiencies through these field reports."

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0244.3	Becho's 3rd Request for Arup's Field Logs	Closed	07/24/2012	08/03/2012	08/01/2012	Potentially	☐

From: Balfour Beatty Infrastructure, Inc. Ernie Cortez **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Stacy Wilson

Co-Author:

REQUEST:

Becho formally requests to obtain any and all documentation Arup has for logging and documenting soil samples retrieved from the Buttress shafts starting 9/12/2011 thru 10/1/2011, including all documentation pertaining to quality control as specified in section 31.63.29.3.8.B.

Reference attached Becho Letter BI-0244.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractor is to refer to Constructware or the ISI special inspection website for the available field logs/test reports/field samples. All necessary parties have access to these sources.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0245	BSE - Ground Conduits detail for PG&E phase 2 works on First Street	Closed	10/05/2011	10/15/2011	10/12/2011	Potentially	☐

From: Webcor Construction LP Masashi Kojima **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference: CR No. T-017 - BSE - First Street Phase 2 Utility Relocation

For the installation of the PGE 6" and PGE 4" GRS conduit between the CDSM walls, is grounding of the PGE conduits required? If so, please provide grounding details/requirements.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Response from PG&E (attached) is as follows:

Yes and at both ends of the conduits. As a suggestion, we would propose to tie into the bonding jumpers of the AX and EX expansion fittings with a bare copper solid stand #6 copper wire. The #6 wire can be either soldered or crimped to the bonding jumper. All the #6 ground wires would then be brought together and connected to a single bare #2/0 copper wire. The 2/0 copper ground wire would then be routed and cadwelded to the nearest I-beam that support the traffic bridge.

If it is not possible to attached the #6 copper wire to the AX and EX grounding jumpers, we will require a separated bonding clamp that can be used in a wet or dry location.

One grounding point is usually sufficient but I am asking for grounding at both ends of the steel conduits in case one ground is accidentally cut.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0246	BSE - PG&E Sweep Radius Requirements	Closed	10/10/2011	10/20/2011	10/11/2011	Potentially	☐

From: Webcor Construction LP Masashi Kojima **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Kevin Chiu

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference CR T-017.

(The attached drawings provided at the PG&E / BBII / Verizon Coordination Meeting on 9/29/2011) refer to 10ft radius elbows and bends. PG&E standards refer require 6ft radius elbows and bends. Please confirm radius requirements for 6" conduit installation for the Phase 2 utility on First Street.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per PG&E (see attached), the requirement is 10ft radius.

T-0247 **BSE - Proposed Corrective Action Plan for Sunken CDSM Soldier Piles** **Closed** **10/10/2011** **10/10/2011** **10/12/2011** **Potentially** ☐

From: Webcor Construction LP Masashi Kojima **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 31 56 13

Please address the following information request from BBII's sub contractor DND:
"As of to date, the following three soldier piles have sunk below grade during their placement into the CDSM wall.
- Beam # 154 installed on 09.08.11
- Beam # 631, installed on 09.29.11
- Beam # 602, installed on 10.01.11

DND was unable to recover those piles and set them to their plan elevations without disturbing the adjacent beams that were already in place. To mitigate this issue, DND proposes to conduct the below course of remedial action:
1) Wait until mass excavation commences. Excavate with caution the locations, and determine the top elevation of the sunken beams.
2) Provide this information to the Engineer for evaluation.
3) Implement corrective action based on Engineer's evaluation. Possible corrective measures are:
a. No action necessary. The strength of the CDSM material may be sufficient to support the unreinforced depth.
b. Install lagging between the adjacent beams above the top of the sunken beam.
c. Splice a beam on the top of the sunken beam and backfill with low strength concrete.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

The proposed sequence is not acceptable. The Contractor shall submit a corrective action plan at least four weeks prior to the start of excavation for evaluation by the TJPA's Representative. The plan shall assume a range of depths to the top of the sunken beam and shall describe the impact on the waling and strutting plan. The plan shall be location-specific and shall include a drawing indicating the location of the sunken beam.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please advise, if the proposed course of remedial action and/or any of the three possible corrective measures are acceptable."

T-0247.1 **BSE - Proposed Corrective Plan for the following Sunken Solider Piles** **Closed** **01/10/2012** **01/20/2012** **01/12/2012** **Potentially** ☐

From: Webcor/Obayashi Joint Venture Kirk Nielsen **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: Attached Corrective Action Plan

Message:
Please find attached BBII's proposed corrective plan for the following sunken solider piles:
1. Pile #59, Notice #47, Vela Issue #J-00007.
2. Pile #154, Vela Issue #J-00001.
3. Pile #602, Vela Issue #J-00008.
Please approve and or comment.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The written RFI above is not a clear question and is not acceptable. The content in the attached document should be provided in a submittal, not an RFI. GC to conform to comments in RFI 247.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0248	BSE - First St. Verizon Utilities Relocation	Closed	10/10/2011	10/20/2011	01/04/2012	Potentially	☐

From: Webcor Construction LP Masashi Kojima **To:** Turner Construction Compan Gary Krutsch **Answered By:** Transbay PMPC Roger Rothenburger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 01 53 13

Attached is an as-built sketch of Verizon utilities potholed and located along First St. on 10/4/10. These utilities were originally scheduled to be relocated during phase two to allow for CDSM installation and subsequently temporary bridge construction. BBII has learned that in an effort to save time, the TJPA is considering leaving the utilities in their current locations and working around them. As shown on the attached section of the First St. temporary bridge, the Verizon utilities will be in direct conflict with the temporary bridge structure. Please confirm these utilities will be relocated as planned to allow for installation of the CDSM shoring wall and temporary bridge.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

"Yes, they will be relocated. This RFI was related to the lateness of Verizon relocation and the idea of installing CDSM wall with Verizon still in place. Due to delays in starting PGE is now taking longer than Verizon so that PGE work governs duration and we no longer have to install last CDSM wall with Verizon in place to save time on bridge installation on First Street."

Solcom has a start date of 1.03.2012 and a finish date of 2.29.2012.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0249	BSE - Pavement lights at the rear of 580 Howard	Closed	10/10/2011	10/20/2011	10/12/2011	Potentially	☐

From: Webcor Construction LP Masashi Kojima **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Kevin Chiu

Co-Author:

REQUEST:

Reference Specification Section 31 56 13 and CR T-005B.

There are two lights located on the ground inside the boundary fence at the rear of 580 Howard. The lights are located 4ft away from the brick wall (which is due to be demolished) as shown the attached photos. A preliminary investigation indicates that the lights are de-energized. Please confirm that access to the property's electrical system will be available to confirm that the lights are de-energized.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Access to 580 Howard cannot be obtained at this time.

See attached, "RFI T-0249 Field Photos 11 Oct 2011," which shows that as of 2PM on 11 OCT 2011 the lights have been removed and wires capped by an unknown entity.

Contractor to verify status of electrical lines by alternate means.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0250	BSE - Soil Classification of South West Area of the Work Site	Closed	10/13/2011	10/23/2011	11/03/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Kevin Chiu

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Specification Section 01 13 50 and Treadwell & Rollo site maps (attached)

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Treadwell and Rollo response-

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

BBII needs the soil classification listed and mapped for the lot between Natoma Street and Howard Street, and between Gridline A to Gridline 10.
Please see the attached Treadwell & Rollo's Site Mitigation Map of the Soil Classification for the area in question.

"See attached site plan, figure 1. Where encountered, up to 4' of State of California hazardous waste exists."

T-0251 **BSE - Drawings To Coordinate Trestle Pile Locations** **Closed** **10/13/2011** **10/23/2011** **10/14/2011** **Potentially** ☐

From: Webcor/Obayashi Joint Venture Masashi Kojima **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Kevin Chiu

Co-Author:

REQUEST:

During the 10/12/11 trestle submittal review meeting, statements were repeatedly made with regard to incrementally complete underground drawings in which to coordinate trestle pile locations. As of 10/13/11, W/O has not received any future package documents accompanied with the direction to coordinate with the TG03 documents. If such documents are available please make available the entire series to include, however not limited to, A, S, M, E, & P.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The question being asked is unclear. Please rephrase the question and resubmit the RFI.

T-0251.1 **BSE - Drawings To Coordinate Trestle Pile Locations** **Closed** **10/14/2011** **10/24/2011** **11/03/2011** **Potentially** ☐

From: Webcor/Obayashi Joint Venture Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

RFI T-0251 original inquiry:
During the 10/12/11 trestle submittal review meeting, statements were repeatedly made with regard to incrementally complete underground drawings in which to coordinate trestle pile locations. As of 10/13/11, W/O has not received any future package documents accompanied with the direction to coordinate with the TG03 documents. If such documents are available please make available the entire series to include, however not limited to, A, S, M, E, & P.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Thornton Tomasetti Reply:

"See attached PDF files SKS-0130 through SKS-0137 for exclusion zones for trestle and pin pile locations, per requested additional TT review. W/O to review for constructability. Submit updated pile locations for review.

Note:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

RFI T-0251.1 Clarification to RFI T-0251:
The TG03 package was executed with limited documents in which to coordinate future packages with. Please provide all documents the TJPA requests BBII coordinate the TG03 package with and to.

As it pertains to structural columns (round/pill/rectangle/ect.) please provide the minimum clear distance to trestle pile penetrations in the mat slab so BBII may coordinate.

Should there remain any ambiguity in the inquiry above please indicate the nature of misunderstanding.

Penetrations through the Mat slab shall not intersect the hatched zones in the attached sketches. Note hatched zones at and near columns and at side walls.

Any Lower Concourse level penetrations within 3'-0" on either side of primary column lines (e.g. 1.4, 2, ..., 35, V, W, X) will impact construction of primary concrete moment frame beam elements; coordinate with W/O. Block outs in moment frame beams shall not encroach into the hatched zones in the attached sketches.

Coordinate interruptions of lower concourse slabs and secondary framing beam elements with W/O.

24" Diameter columns located 21'-3" west of GL 23 and 21'-3" east of GL 23 along GL D.8 and E.2, extending between mat level and lower concourse level.

Verify construction sequence of Light Column at GL 23 in relation to cross lot bracing and re-bracing; coordinate with W/O.

Penetrations that interrupt Mat reinforcement shall not be placed closer than 3xDia clear spacing between penetrations, with Dia = larger diameter of two adjacent penetrations. Penetrations are those causing interruptions of mat reinforcement in the structure in its final condition. Note especially conflict between pin pile 22 and trestle pile 107 (GL 9), trestle piles 18 and 103 (GL 10), and temporary bridge piers close to pin piles 13 and 14 (GL 34)."

Adamson Associates Note: "The additional A, S, and MEP documents you requested are currently in design progress and the information is not availble at this time."

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0251.2	**BSE - Drawings To Coordinate Trestle Pile Locations - "No Pin Pile Zone" at Lowe**	**Closed**	**11/04/2011**	**11/14/2011**	**11/14/2011**	**Potentially**	☐

From: Webcor Construction LP Nhi Tran **To:** **Answered By:**

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Turner Construction Compan Gary Krutsch — Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

On 11/3/11 W/O was informed by PMPC during an Access Trestle Criteria Discussion meeting with URS and W/O that PMPC will request Thornton Tomasetti to provide "no pine pile zone" sketches for the Lower Concourse Level similar to the Sketches provided through RFI T- 251.1 response. Also, PMPC is requesting Thornton Tomasetti to provide criteria of concrete connection details around pin piles/trestle piles for the future Below Grade Concrete Package.

Please confirm.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

TT Response:

The response to RFI T-0251.1 and the associated sketches included criteria for Lower Concourse. As stated in the response, BBII is to coordinate the Lower Concourse framing elements with Webcor. Although the block out at the lower concourse level is a means and methods issue, TT further clarifies the implication of the block out if it affects the primary moment frames along the column grids as noted below:

The primary moment frame girders at the Lower Concourse level are to act as a brace when the Second level braces are removed as shown in the GT drawings. If a complete moment frame girder is not poured due to conflict with the trestle piles, those bracing elements immediately adjacent to that girder will need to remain in place until the blocked-out beam is re-cast and reaches its design strength. Alternatively, BBII shall establish another method of temporary bracing and submit for review.

Concrete connection details around pin piles/trestle piles are included in the Below Grade Package.

T-0251.3 **BSE - Drawings To Coordinate Trestle Pile Locations - "No Pin Pile Zone" at Lowe** **Closed** **11/28/2011** **12/08/2011** **12/13/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Adamson Associates, Inc. George Metzger **Answered By:** Webcor Construction LP David Fields

Co-Author:

REQUEST:

Reference RFI #T-0251.2

So W/O may coordinate as requested in RFI response T-0251.2 please provide a drawing that depicts the column configurations, dimensions, and minimum clearance requirements, for both the platform and concourse levels. This information is required to locate trestle piles and internal bracing struts.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached SKS-0138 through SKS-0178 (41 total) for requested
information. Note that these sketches are in progress, for reference only,
and subject to change.
Refer to RFI T-0263 response regarding minimum clearance requirements.

T-0252 **BSE - Buttress Rebar Cage Length Adjustment** **Closed** **10/19/2011** **10/29/2011** **10/24/2011** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Nhi Tran
To: Turner Construction Compan Gary Krutsch
Answered By: Adamson Associates, Inc George Metzger
Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI #T-0216, #T-0239, Sheet GT-2201, Specification Section 31 63 29, and attached sketch

Per the response to RFI T-0239, BBII needs to extend the length of rebar cages to accommodate buttress shafts that are deeper than 240'. The exact length of the rebar cage cannot be known until the drilling of the adjacent shaft. Due to this uncertainty, and the long lead time required to fabricate cages with varying lengths, BBII proposes to fabricate all rebar cages to a pre-extended length of 260'.

Once the depth of the adjacent shaft is known, the final length of the rebar cage will be adjusted by cutting the top of the rebar cage and the CSL tubes to the desired length. The length of the bottom "structural cage" section that consists of 24 Ea. vertical rebars will remain unchanged at 186'. The length of the top "setting cage" section that consists of 8 Ea. vertical rebars will be adjusted as described above. Please refer to the attached documents and the original shop drawings for the "structural cage" and the "setting cage" details.

BBII proposes to accommodate this change at no additional cost to TJPA beyond the bid item quantity payment per drilled shaft lengths.

Please advise, if it is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

The proposal is acceptable with the following notes. Detail 12/GT-5201 requires the reinforcing steel to be placed up to 1'-0" below the top of the concrete. The top of concrete is shown on GT-5201. Longitudinal bar extensions shall be spliced as needed to achieve this (as noted on the sketch; attached). If the top of the fabricated cage is within 3'-0' of the top of the concrete, no bar extensions are required.

The 24" tie spacing shown on the shop drawings at the setting cage (Drawing SC1) is acceptable at the bar extensions.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0253	BSE - Trestle Design Criteria Confirmation	Closed	10/19/2011	10/29/2011	11/01/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran
To: Turner Construction Compan Gary Krutsch
Answered By: Turner Construction Comp Kevin Chiu
Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Attachment 3 of Exhibit A of the TG03 Bid Package and attached memo from PB&A

Pursuant to the trestle design meeting held on October 12, 2011, Balfour Beatty Infrastructure Inc.' (BBII) requests clarification regarding their interpreted design criteria of the Temporary Access Trestle

As the only Contract document regarding the Trestle,

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

PMPC repsonse per Roger Rothenburger, 11/01/11:

"1. The RFI process is not the appropriate venue to "review the provided information and confirm whether or not BBII's design criteria is appropriate." The RFI requested at the October 12, 2011 meeting was to request clarifying instructions to specific perceptions of conflict between Exhibit A - Attachment 3 and Specification Section 01-53-13 (Temporary Bridges)

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Attachment 3 of Exhibit A of the TG030 Bid Manual has the following instructions:

In the second sentence of the second paragraph, the following statement is made, "For the design criteria for the Access Trestle, the Contract Documents and applicable standard shall be referred to." The next sentence states, "All requirements in the Temporary Bridge Specification in the Contract Documents, Section 01 53 13, shall apply to the Access Trestle."

Attachment 3 goes on further to provide very specific design load conditions and structural elements (i.e. Deck & barrier) that contradict the requirements of the Temporary bridge Spec Section 01 53 13. Based on the more "Trestle Specific" requirements of Attachment 3 and the interpreted function, being for construction use and not public use, of this type of temporary works structure, BBII and its Engineering Team arrived at the criteria /(basis of design) described in the attached memo from PB&A. This document was included with BBII's original design submittal; however for this RFI BBII has expanded some of the explanations.

Please review the provided information and confirm whether or not BBII's design criteria is appropriate for the Temporary Access Trestle.

2. As for the design criteria, the fourth sentence of "Exhibit A - Attachment 3" is explicit; "All requirements in the Temporary Bridges Specification in the contract Documents, SECTION 01 53 13, shall apply to the Access Trestle." This would include the requirement in Section 01-53-13 Part 1.3.A.1 (Temporary Bridges - Performance - Design Loads) stating the use of seismic design load for 475 year earthquake (earthquake with 10% probability of being exceeded in 50 years),

3. Among other criteria, wood decking material, "wheel stops, hand rails, special working access, etc listed in the balance of Attachment 3 modify the requirements in Section 01-53-13 and are not contradictory.

4. Attachment 3 does not address crash barriers or lateral bracing, among other criteria, which would defer to section 01-53-13. (Temporary Bridges)

5. PMPC recommends a small group meeting of the constructing parties to discuss the technical details to meet as many requirements as possible for BBI to get approval for Zones 1 and 2 and proceed with the Access Trestle work in a timely manner."

T-0253.1 **BSE - Trestle Design Criteria Follow-Up** **Closed** **11/21/2011** **12/01/2011** **12/02/2011** **Potentially** ☐

From: Webcor/Obayashi Joint Venture Nhi Tran

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

To: Turner Construction Compan Gary Krutsch

Answered By: URS Corporation David Fyfe

REQUEST:

Reference RFI#T-0253, Attachment 3 of Exhibit A of the TG03 BSE Bid Package, Specification Section 01 53 13, and attached memo from PB&A

Follow up to RFI T-0253 and the meeting held 11/16/11

As noted in the 11/16/11 meeting, the cross lot bracing "struts" are supported by the Trestle substructure and analysis requires limiting trestle deformations to be

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

If the Access Trestle is designed to resist the full 475 year earthquake design requirement with all response being elastic (R=1), then the Access Trestle system is not subjected to inelastic deformation for the design event. If the design is additionally shown to be capable of sustaining significant overload (no connection failures, no weld failures, no member failures, remaining stable under loading corresponding to at least two times the required design load, or

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

compatible with the allowable strut deflections (approximately 2"). As a result the "push over" analysis as required by the AASHTO Seismic Design Criteria "SDC" (requirement of bridge spec 01 53 13) is not applicable. This was discussed in detail during the 11/16 meeting and it was concurred that due to unique structural configuration and deflection requirements, an alternate analysis method other than the SDC would be required. Discussions were had that a site specific elastic analysis using the 475 year seismic loads that is controlled by the deflection limits of the cross lot bracing would be necessary. Please confirm that a "push over" type analysis of SDC will not be required for the trestle and that the attached detailed Design Criteria (and analysis method) is acceptable.

(W/O added clarification)
BBII believes the site specific analysis would demonstrate the trestle substructure will not deform greater than 2" however the trestle superstructure will deform greater than 2".

corresponding to a ductility demand requiring R=2), then a pushover analysis is not necessary to verify performance. If there are questions raised regarding if this is sufficient, then the response could be demonstration that the system remains fully stable without connection or member failures at a load level corresponding to the deterministic earthquake load corresponding to the maximum event capable of being delivered by the earthquake fault system at the project location. If the design presented is in accordance with the above, then URS would be able to assist with technical engineering discussions to validate this design approach to the City of San Francisco during the building permitting process.

Further clarification: The procurement specification requires an integrated model capturing interaction between the Cross Lot Bracing and the Access Trestle, note the Cross Lot Bracing is not a component against which the trestle reacts but the Cross Slot Bracing delivers load to the Access Trestle. This behavior must be captured with sufficient accuracy and within all project criteria.

If another alternative is proposed that meets all required design criteria at all structure elements, including contractor teams identified maximum allowable deflection of 2 at the Cross Lot Bracing, URS takes no objection to the contractor pursuing this potential design alternative.

T-0254 **BSE - Modified CDSM Installation Plan for Verizon Lines at First St.** **Closed** **10/20/2011** **10/30/2011** **11/01/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Specification Section 31 56 13 and attached sketches from PMPC

W/O received the modified CDSM Installation plan for

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

The minimum overlap of columns and panels defined in specification section 31 56 13 shall be satisfied full

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Verizon lines at First St. without the relocation of the lines from PMPC as the attached.
Please confirm the plan is acceptable for CDSM Shoring Wall Designer (ARUP).

depth on each side of the obstruction.

The Contractor's means and methods, e.g., rig type, lowering the Verizon lines and protecting the Verizon lines, have not been reviewed as this is the Contractor's responsibility.

Since the RFI was submitted by the Contractor, we assume that the subcontractor doing the work, DND, has reviewed and approved the proposed methodology, including the "Plate Sealing Detail".

The efficacy the "Plate Sealing Detail" will need to be demonstrated in the field. If used, the plate should be applied to the excavation - face of the steel beam flange rather than behind the flange and removed when it is time to apply the permananent waterproofing.

T-0255 **BSE - Verizon Spacing Requirement on First Street (Phase 2 Utility Installation)** **Closed** **10/21/2011** **10/31/2011** **10/31/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference

BBII have commenced the PG&E Phase 2 installation on First Street, in order to co-ordinate the PG&E utility locations and the future Verizon phase 2 utility indicated on the attached drawing. The attached drawing was issue to BBII in the field, please confirm this drawing has been co-ordinated with the PG&E construction drawings.

BBII require the following:
- Provide a profile/section drawing indicating accurate clearances between PG&E and Verizon,
- Include (Verizon) Trench dimensions, on First Street for the phase 2 installation.
- Site meeting with Verizon representative to discuss Verizon configuration.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Verizon has prepared preliminary design drawings for their Phase II work and is in the process of coordinating with PG&E.

As indicated on RUP Sheet U-4005, the intent of the Phase II utility relocations is such that utilities of different proprietor are to be separated by 1' min.

Coordinate with TJPA's Field Representative (Turner) to arrange a site meeting with Verizon to discuss Verizon's configuration.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0256	BSE - CR T-018 Design Omissions	Closed	10/21/2011	10/31/2011	11/03/2011	Potentially	☐

From: Webcor Construction LP Masashi Kojima **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jack Adams

Co-Author:

REQUEST:

Reference CR T-018

Neither the original albeit incomplete CR T-018 dated 9/21/11 or the flurry of subsequent email clarifications furnished the following design omissions required to complete the CR T-018:

1. Emergency egress signage requirements?
2. Lighting: Location, lumen, schedule, and if emergency lighting is required?
3. Gates & crash bar requirements?
4. Although the driveway design was not provided until 10/20/11, no dimensions were provided and there are proximity conflict(s) with the fire hydrant relative to the vent & DI.

Please provide and or remove from scope so the contractor may complete the work.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Emergency egress signage is not required by Contractor.

2. Lighting: Relocate the two portable street lights installed under EBi contract and connected overhead to the Streetlight circuit on Natoma as shown on EBi demolition drawing D-1084 (NOTE This circuiting was approved by BLHP (Robert Kawano and Roman Muros BLHP 415 - 554-1688. Light #1 install midway along the north south K Rail fence @ 540 Howard. Light #2 install midway of K Rail fence at 580 Howard. Owners of both properties have installed lighting at their exit doors.

3. Gates and Crashbars are no required at this time - install 10 foot saw horse barricade with signage Private Property - No Trespassing.

4. Driveway curb cut for 540 Howard will be 12 feet wide, with the centerline placed midpoint between the Fire Hydrant and sidewalk fresh air vent. Curb cut per DPW standard.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0257	BSE - Request to Sonic Caliper 20 feet from Projected Bottom of Rock Socket	Closed	10/24/2011	11/03/2011	10/31/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Kevin Chiu

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Please address the following information request from BBII's sub contractor Becho Inc.:

"... Becho would like to start performing Sonic Caliper analyses within 20 feet of the projected final bottom elevation of the shaft(s) to expedite the "Drill, Place, Pour" process. In order to continue the Buttress Drilling Operation without interruptions, Becho would like to utilize the hours between 1am - 6am to perform the Sonic Caliper test. For example, if Becho anticipates the completion of shaft at 10am, it would be beneficial to perform the Sonic Caliper test during the hours of 1am - 6am. This allows crews to prep, setup and perform the airlift process without having to wait for Becho engineers

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger's response is limited to the first sentence of this RFI which states, "... Becho would like to start performing Sonic Caliper analyses within 20 feet of the projected final bottom elevation of the shaft(s) to expedite the "Drill, Place, Pour" process." Acceptance of permissible work activities between 1am-6am will come in the form of a TJPA Night Noise Permit. Please be sure to include the proposed work activity on the Night Noise Permit application.

10/27/2011 - George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

to test the shaft(s) during normal hours of operation, thus expediting the "Drill, Place, Pour" process.

Please advise, if it is acceptable.

Arup Response:

This is acceptable.

T-0258 **BSE - Demolition Status of Pile Cap at GL 33.5** **Closed** **10/27/2011** **11/06/2011** **12/09/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Kevin Chiu

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference Sheet D-2213 (attached) and Specification Section 02 41 19

The underlined sections of Notes A and B state that pile caps have already been removed. This area clearly includes the pile cap at GL 33.5.
However, Note C implies that the pile cap at GL 33.5 was not removed.

Please confirm that the existing pile caps have already been removed within the "triangle" line boundary shown on drawing D-2213.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Existing pile caps at GL 33.5 have not been removed.
CR to follow

T-0259 **BSE - Request for approval of alternate backfill compaction inspection method** **Closed** **10/31/2011** **11/08/2011** **12/01/2011** **Potentially** ☐

From: Webcor Construction LP Masashi Kojima **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Kevin Chiu

Co-Author:

REQUEST:

Reference Specification Section 32 12 17

With regard to the areas of non-conforming backfill compaction inspection i.e. FCR #TCB-00246: In lieu of contemporaneous compaction inspection by ISI, BBII has proposed the methodology described in attached letter #4225-000-00238. Please confirm the alternate methodology, assuming acceptable results, would suffice to meet the contract requirements.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The proposed methodology will be evaluated pending receipt of the test results.

Submit test results for review and evaluation.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0260	BSE - D.I. Installation at Natoma Street and First Street	Closed	11/01/2011	11/11/2011	11/08/2011	Potentially	☐

From: Webcor Construction LP — Nhi Tran
To: Turner Construction Compan — Gary Krutsch
Answered By: AECOM Technical Servic — Eric Zagol
Co-Author: Balfour Beatty Infrastructure, Inc. — Ural Yal

REQUEST:

Reference Sheet U-3012 and attached sketch

BBII carried out an investigation of the active catch basin around the perimeter of the BSE project; and has a concern regarding the street elevation relative to the flow line on Natoma Street between GL 10-17.

The flow line directs surface water in a North East direction towards First Street. The only active catch basin at the intersection of Natoma and First Street is CB #305, which is approximately +8.5" higher than the currently decommissioned CB located at the intersection of Natoma St and First St (see sketch attached).

Noted during the last rain fall, surface water was directed to the decommissioned catch basin at the North East corner of Natoma Street and First Street intersection, BBII recorded approximately 6" of standing rain water accumulating at First Street and Natoma intersection. Please note that existing catch basin was decommissioned during the new sewer installation on First Street (see attached mark up drawing).

BBII recommends 2 options to control rain water from outside the BSE work area:
A) modify the flow line on Natoma Street to direct the flow toward CB # 305,
B) Install a new catch basin and connect it to the existing lateral connection CB # 305 to the combine sewer system, or connect directly to the existing MH.

Please advise on TJPA method to prevent water collecting on First Street.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The referenced decommissioned CB"at the north west corner of Natoma and First streets was to be protected in place per RUP documents.

AECOM understands that the CB was decommissioned by BSE contractor in accordance with D-2230 Detail 1 and not RUP as claimed. D-2230 Detail 1 states (E) sewers, MH(s) and CB(s) are to remain active until construction of (N) CDSM perimeter shoring wall along northern end of site.

The decommissioned CB is within the excavation site. In accordance with the specifications referenced in the Recommendation section (i.e. 011560 STORMWATER POLLUTION PREVENTION, EROSION AND SEDIMENT CONTROL) submit for review storm water control plans indicating contractor's method of addressing storm water entering the site in accordance with 011560 1.4.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0260.1	BSE - D.I. Installation at Natoma Street and First Street	Closed	11/28/2011	12/08/2011	12/02/2011	Potentially	☐

From: Webcor Construction LP — Nhi Tran
To: Turner Construction Compan — Gary Krutsch
Answered By: Turner Construction Comp — Kevin Chiu
Co-Author: Balfour Beatty Infrastructure, Inc. — Ural Yal

REQUEST:

Reference RFI #T-0260 and Sheet U-3012 (attached)

RFI response T-0260 does not address the issue request

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The contractor shall control storm water in accordance with specification 01 15 61 and approved submittals.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

information, to resolve the surface water from outside the BSE project. BBII recommend a catch basin should be installed at the corner of Natoma and First Street, as part of BBII storm water control. The catch basin will need to be installed at the low point of Natoma Street, across from CB #305.

BBII request confirmation and approval to install a catch basin at the above location. Also confirm the lateral from the new catch basin can discharge directly into SSMH#305.

Per field walk by Turner on 12/02/11 and prior to return of this RFI, it was observed that the contractor had installed measures that appear to have resolved this issue.

T-0261 **BSE - Natoma Street Trestle Access** **Closed** **11/01/2011** **11/11/2011** **11/02/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran

To: Turner Construction Compan Gary Krutsch

Answered By: Turner Construction Comp Kevin Chiu

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference CR T-018, Specification Section 01 53 13, BBI Letter #4225-000-0145 (attached), and attached sketch

CR T-018 included drawings for access to the side and rear of 540 Howard St. BBII issued letter 4225-000-0145 in response and included a sketch highlighting a conflict between the proposed building access and the Natoma St. trestle offshoot.

The Natoma St. trestle offshoot was originally specified to span from Grid 11.5 at the center of the excavation to Grid 10 at the edge of excavation. The offshoot was moved further west per [W/O] response to the conflict with 530 Howard St.

The 540 Howard St. building access arrangement as proposed in CR T-018 does not provide sufficient access to the Natoma offshoot (see attached sketch). Please provide direction if the offshoot is to be relocated or eliminated.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

W/O shall coordinate the location of the offshoot with its subcontractor(s) such that it does not conflict with other required elements of the project.

If the 540 Howard egress per CR T-018 is an issue, provide W/O's original egress plan (i.e. plan prior to issuance of CR T-018) that was coordinated with the Natoma St offshoot for review.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0262	BSE - CAD File for trestle/pin pile exclusion zones	Closed	11/09/2011	11/19/2011	11/17/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI#T-0251.1 and Specification Section 01 53 13

The response to RFI T-0251.1 included a set of sketches showing hatched "exlusion zones" where trestle/pin pile placement is not allowed.
Please provide the CAD file for these sketches for BBII use in coordinating pile locations.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

TT Reply:

See attached for requested CAD file for RFI No. T-0262.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0262.1	BSE - CAD File for Micropile Exclusion Zones	Closed	05/17/2012	05/27/2012	05/29/2012	Potentially	☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference:
Specification 31 63 33
RFI T-0262

Please provide the CAD file for Micropile "Exclusion Zones," if they differ from the exclusion zones subjected to RFI # T-262.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The exclusion zones provided in response to RFI T-262 do not apply to micropiles (detail 1/S1 - 3003). Please reference IFB - Below Grade package for coordination of micropile layout and submit micropile design and coordinated layout for review by design team via submittal process per Specifications.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0263	BSE - Strut Conflicts to Thornton Tomasetti's comments on the approved Internal	Closed	11/09/2011	11/19/2011	11/17/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference RFI #T-0251.1 and Transmittal No. 140-02329

Subsequent to W/O's receipt of an approved 100% internal bracing submittal and procurement, Thornton Tomasetti's comments in the plans transmitted via Transmittal #140-02329 added both columns & dimensions and revised column configurations relative to the location of the internal bracing struts not otherwise included in the base contract BSE documents. So as W/O may accurately coordinate strut locations in order to mitigate conflicts, please provide the minimum allowable dimension from column to strut.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

TT's response to RFI No. T-0263:

This is a means and methods topic. GC to coordinate clearance requirements.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0264	BSE - Bridge / Trestle Piles in Exclusion Zones	Closed	11/09/2011	11/19/2011	11/18/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI#T-0251.1 and Specification Section 01 53 13

BBII is in receipt of the drawings included in RFI T-251.1 that illustrate trestle pile "exclusion zones" where piles cannot penetrate the mat slab. Of the 24 piles that are currently in conflict with the pile exclusion zones, 20 of them can be relocated with relatively minor member changes. The other 4 as indicated in the attached drawings will require significant redesign and re-procurement, especially at the bridges. Can an exception be made at these four locations?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See the attached TT response.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0264.1	BSE - Beale St Bridge Pile Conflict (Follow up to RFI T-264)	Closed	01/26/2012	02/05/2012	02/03/2012	Potentially	☐

From: Balfour Beatty Infrastructure, Inc. Shad Gardner **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: BBI Marked-Up SKS-0135, SH-3103

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

The previous response to RFI T-264 requested BBII move one of the Beale St. Bridge piles 3' west to avoid mat slab reinforcing congestion. BBII has investigated this request and found that the cap beam already has a significant cantilever on the east side of the pile in question. In order to comply with the request to move the pile, we would have to extend the cap beam and support it off the CDSM wall as shown on the attached sketch. Please advise if this is acceptable, otherwise the pile will need to remain in its current position.

This cannot be evaluated properly by Arup without more information regarding the loads on the shoring wall. Contractor shall submit calculations for review. Calculations shall include the load, if any, which will be imposed on the shoring wall due to settlement of the bridge supports.

Note that we have not yet seen the calculations and details for the bridge abutments at the north and south ends of the bridges.

T-0264.2 **Beale St Bridge Pile Conflict (Follow up to RFI T-264.1)** **Closed** **02/08/2012** **02/18/2012** **02/16/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Shad Gardner **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Gary Krutsch

Co-Author:

REQUEST:

The response to RFI T-264.1 requested BBII provide the loading that would placed onto the CDSM wall.
This response leads us to believe that the option to leave the pile in the current location was unacceptable.
Please confirm that the pile must be moved and provide a detailed location of where the pile placement would be accepted.
Upon receipt of this information BBII can accurately determine the load to placed on the Wall for Arup's review.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The bridge pier near 35-E must be relocated. See attached SKS-0179 for acceptable range of pier shift.

T-0264.3 **BSE -Bridge-Trestle Piles in Exclusion Zones Beale St** **Closed** **08/13/2012** **08/23/2012** **08/17/2012** **Potentially** ☐

From: Webcor Construction LP Kirk Nielsen **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

W/O in in receipt of RFI response T-0264.2 (Exhibit-A).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

TT will allow the proposed location of the "bent-3" East

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

BBII is purporting any shift of the "bent-3" East pile West will cause excessive bridge cantilevering to the extent the Beale St. bridge must be reconfigured (less the sidewalk) and relocated (East) atop the CDSM wall.

Since the issuance of the TG03 package a third pit for an oil & sand interceptor appears to have been added in room B2761 reference:
1. TG06 4/P1-3006 (Exhibit-B) room B2761 floor plan
2. TG03 1/S1-2027 & C/S1-3004 (Exhibit-C) for original room configuration
3. TG06 1/S1-2057 & 2/S1-3007 (Exhibit-D) for revised room configuration

Please reference marked-up sheet S1-3007 (Exhibit-E). W/O is unaware of why the bridge pile could not be located 12" off the edge of the sump pit as depicted. The corner of the oil & sand interceptor pit which is shallow and could easily be formed, reinforced, and poured after the bridge pile is removed.

Please advise.

pile along grid E as depicted in Exhibit E (pile is east of the sump pit and the edge of pile is 12" from the east face of pit). Note that a pile in this location will require the pile to be cut off at a lower elevation than the typical detail, which will involve a larger block-out. The mat shall be re-braced at the block-out by TG03. Acceptance of this pile location will result in a Change Order for TG06.

T-0264.4 **BSE - Inquiries with Regard to Proposed Beale St Bridge Atop East CDSM Wall** **Closed** **08/22/2012** **09/01/2012** **08/29/2012** **Potentially** ☐

From: Webcor Construction LP Kirk Nielsen **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

On 8/22/12 Beale St. bridge submittal #TG0300-206 was returned to W/O marked not reviewed (Exhibit-A). Upon W/O's
review of BBII's Beale St. bridge design W/O encountered the following inquiries relative to the CDSM wall:

1. BBII's bridge design relies on ARUP's RFI response #T-0209.3 (Exhibit-B). Please confirm ARUP's RFI response #T-0209.3 (Exhibit-C) is applicable as the basis of the design for the Beale St. bridge, given unlike First and Fremont
Streets, the length of the Beale St. bridge is resting atop the East CDSM wall.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

VOID - SEE RFI T-0305

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

2. The decision to allow the North and South bridge abutments to be located atop the CDSM wall was predicated on
the CR #T-025 load testing reference RFI #T-0209.4 (Exhibit-D). Given the testing was performed on different soldier
piles (by others) and differing soil conditions between Zone-1 and Zone-4, is the load capacity derived from the CR #T-
025 testing applicable given the different bridge location and configuration?

3. BBII's Beale St. bridge design relies on resting the length of the Beale St. bridge atop the East CDSM wall. As the
designer of the CDSM wall, does ARUP endorse further loading of the East CDSM wall with the forces imposed by the
Beale St. bridge?

T-0264.5 **BSE - Inquiries Regarding Proposed Beale St Bridge Relative to Below Grade Stru** **Closed** **08/23/2012** **09/02/2012** **08/29/2012** **Potentially** ☐

From: Webcor Construction LP David Fields **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

Reference: TG0300-206 Beale St. Bridge Structural Design

On 8/22/12 Beale St. Bridge submittal TG0300-206 was returned to W/O marked not reviewed. In lieu of piers the proposed bridge relies on the eastern shoring wall for structural support along the bridge. As a result, the design utilizes the additional capacity of the internal bracing to restrain lateral loads imposed by the bridge.

Upon W/O's review of BBII's Beale St. bridge design W/O encountered the following inquiries relative to below grade structure:

-Do the below grade foundation walls as designed have the additional capacity required to support the lateral loads

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

VOID- SEE RFI T-0305

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

imposed by the proposed Beale St. bridge?

-Will the below grade foundation walls be required to achieve additional strength prior to removal of re-bracing as a result of the additional laterals loads in which they are subjected by the proposed Beale Street bridge?

T-0264.6 **BSE - Pedestrian Connection Across the Construction Excavation at Beale St.** **Closed** **08/23/2012** **09/02/2012** **08/29/2012** **Potentially** ☐

From: Webcor Construction LP David Fields **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

Reference: TG0300-221 BBI - Temp Bridges - Civil and Drainage Plan - Beale St

Contrary to specification section 01 53 13.1.2.A BBII's proposed Beale St. bridge utilizes an on-grade sidewalk for pedestrian travel though the parcel "Lot-N". Please confirm this is acceptable and that no other pedestrian connection across the construction excavation at Beale St. will be required for the entire required life of the bridge.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

VOID - SEE RFI T-0306

T-0264.7 **BSE - Beale Street Bridge Layout** **Closed** **10/03/2012** **10/03/2012** **10/11/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Per TCCO Request RFI being submitted in lieu of a submittal:

Based on the response to Webcor Submittal No. TG0300-206.1, BBII has shifted the bridge superstructure west between the grid lines 34 and 34.8 beams as directed. This necessitates the installation of 2 rows of 5 bridge columns as shown in the attached drawings. The west row will be located 7' east of GL 34 and the east row will be located a further 25' east as shown. All 10 columns have been positioned clear of the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Note that for Option 1, the accepted location in RFI 264.3 was based on an edge of a sump pit, which locates the centerline of bridge pier 10'-1 3/4" west of grid line 35 (not 10'-6"). However, the response for RFI 264.3 is still applicable for a centerline of pier location 10'-6" west of grid line 35.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

internal bracing. The sidewalk will be located in Lot N.

There are two options for the location of east bridge column 3 as shown in the attached layout drawing.

- Option 1 is the preferred option. This is located on E line 10'-6" west of Grid line 35 (Pile exclusion zone penetration approved via response to RFI 264.3).

- Option 2 is located a further 5' west of option 1 to the location on the TG-06 drawing. The impacts of option 2 to the superstructure are not known at this time. The irregular alignment of the eastern row of piles in option 2 will create local stress concentration in both the diaphragm and superstructure in the longitudinal seismic analysis. This is not a preferable configuration.

Please confirm the location of the superstructure and the piles. Advise on the location of east bridge pile 3.

The Option 2 location (15'-6" west of grid line 35) has been accepted via RFI 264.2.

Please notify Design Team of selected option.

Any cost impact for the two proposed locations shall be reviewed with TJPA prior to moving forward with the work.

T-0265 **BSE - TG03 BSE CDSM Cut-off Wall** **Closed** **11/09/2011** **11/19/2011** **11/17/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawings GT-2102, GT-2103, QBD TG0300-0098

Balfour Beatty Infrastructure, Inc. (BBII) is planning to start dewatering and excavation without installing cut-off walls and sectionalized dewatering. According to the response for QBD TG0300-0098, BBII can eliminate cut-off walls as their means and methods although contract drawings/specifications indicate cut-off walls. Please confirm.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

These cut-off walls were shown on the drawings at the request of the Contractor during preconstruction review. The installation of these, or not, is at the discretion of the Contractor.

Arup has not yet received the dewatering submittal for the mass excavation.

T-0266 **BSE - Moratorium Conflict With Phase 2 Utilities In 1st Street** **Closed** **11/23/2011** **11/23/2011** **12/06/2011** **Potentially** ☐

From: Webcor Construction LP Manuel Saldana **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jack Adams

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Balfour Beatty Infrastructure, Inc. Jeff Molloy

REQUEST:

BBII is in receipt of the moratorium waiver expire date of 12-09-2011. BBII/PEC will not be able to complete the Phase II utility work by 12/9/11 without accelerating the schedule. Our original request for extension was December 19, 2011. A 12/9/11 completion date may be achievable if PEC is allowed to work 10 hr shifts during the day beginning 11/28 through 12/2 as well as working on 12/3 and 12/4. In addition, we propose to have a separate night crew to work near / around the Minna Street intersection to alleviate impacts to heavy demand of day traffic. The majority, if not all, of the demolition can occur during the dday to mitigate noise at night. The night work would need to begin on 11/28 and run through 12/2. Please keep in mind that implenting an accelerated schedule may also impact PG&E. We have no control over their work and the completion of the utlity tie-ins and Mandral testing is contingent on PG&E's availability per the new adjusted completion date.

In summary we are requesting direction for the following items to meet the 12/9/11 moratorium deadline:
1) W/O to permit BBII / PEC to work the extended hours, and night shift i.e. 10 Hours Days and Night work operations,
2) Permit from MTA to extend working hours (closure times) during the day
3) Permit from MTA and DPW to work at night within lane closures
4) Permit from TJPA to work in Zones 1 & 2 at night
5) Agreement / Approval for compensation of additional cost (premium time and or shift rate) BBII will have magnitude of cost for the Monday morning discussion

We respectively request a meeting with W/O on Monday morning (11-28-2011) to discuss direction regarding the above items.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Holiday Moratorium waiver is extended to 12/21/11 by SFMTA. BBII/PEC work can continue on day shift Monday-Friday in accord with SFMTA Special Traffic Permit 11-7786 issued on 12/2/11.

T-0269 **BSE - Mass Excavation Pile Extraction Clarification** **Closed** **12/13/2011** **12/23/2011** **12/27/2011** **Potentially** ☐

From: Webcor Construction LP David Fields **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Dean Wallahan

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Reference: 31 00 00 1.4 C.2 and Attached Sketch

31 00 00 1.4.C.2 Pile Extraction - To occur in two (2) stages per Zone.
Stage 1 extraction will remove the piles within the footprint of the trestle the middle 60' of the work zone, dewatering wells and piles that are in conflict with the bracing pin pile locations. Piles will be removed using a non ground deformation control method and be removed full length to be utilized for offsite LEED projects and to help achieve sustainability for this material.
Trestle piles will be installed after Stage 1 pile extraction and concurrently with Stage 2 pile extraction.

Stage 2 extraction will remove the piles within the 50' +- area adjacent to the CDSM walls along A and J lines. Piles will be extracted using a ground deformation control method as per Section 02 41 19 - 3.1.B of the specifications utilizing both casing and backfilling of the void or removal by means of cutting the pile off at the grade of each level of excavation as the work proceeds.
Please reference the attached drawing for details of the above procedure.

The 80 Natoma shoring wall will be removed in stages coinciding with the stages of excavation.

Please confirm this method of pile extraction during mass excavation is acceptable.

ARUP Response:

The method described is not in accordance with the Contract Documents which require the existing piles to be removed using Ground Deformation Control Methods (as defined in 02 41 19) except where Non-Ground Deformation Control Methods are allowed and noted as such on the drawings.

The method described is acceptable with the following notes: this is acceptable for timber piles only, and if they are longer than 30 feet, Arup may re-evaluate the methods used. If the density of existing piles exceeds 30 piles per 1000 square feet, Arup may re-evaluate the methods used. If excessive ground movements are observed, the Contractor shall switch to using a Ground Deformation Control Method.

T-0269.1 **BSE - Zone 2 Free Pull Pile Extraction Test Section** **Closed** **01/25/2012** **02/04/2012** **02/07/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Shad Gardner **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

BBII are proposing to perform "free pull" pile extraction on a 'test section' in Zone 2. The proposed piles will be extracted near GL14, close to CDSM wall on the south side using a 'non ground deformation control

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

method' by free pulling each pile without using steel casing. Any movement that may occur in the CDSM wall will be monitored by the inclinometer located close to GL 14. This test section will give us give us the information we need to determine:
1) If free pulling the piles using a non ground deformation control method affects the CDSM wall by causing movement.

Reference: DD-2211

W/O Note: W/O understands this RFI is the result of ongoing conversations between BBII, ARUP, & PMPC. W/O remains concerned that should the CDSM wall experience movement, the use of the 'Free Pull' method beneath or outside the trestle area, would significantly increase the difficulty in determining the cause of the CDSM wall movement.
2) If it is a suitable method to adopt for removing the remainder of the piles in Zone 2 located outside the trestle area.
The attached drawing (D-2211) conveys the test section in red.
Please advise on the suitability of this test to determine if free pulling can be used outside the trestle zone.

Contractor to provide details of the instrumentation that will be installed by the Contractor to demonstrate compliance with Minimal Ground Loss defined in 02 41 19 3.2 G.

Arup's response to RFI 269 continues to be our position regarding pile removal during mass excavation

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T-0269.2 **BSE - Zone 2 Free Pull Pile Extraction Test Section** **Closed** **05/01/2012** **05/11/2012** **05/04/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: BBII 4/30/12 Ground Deformation Control Drawing

BBII are proposing to perform "free pull" pile extraction on a "test section" in Zone 2. The proposed piles will be extracted near GL14, close to CDSM wall on the north side using a "non ground deformation control method" by free pulling each pile without using steel casing. Inclinometer (I-011) located close to GL 14 will be monitored during the test. This test section will give the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The test set-up and monitoring are acceptable. Since they differ from that used in the area of the buttress, Arup will draw conclusions on the suitability of free pulling outside the trestle zone after we evaluate the test results.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

information needed to determine:
1) If free pulling the piles using a non ground deformation control method affects the CDSM wall by causing movement.
2) If it is a suitable method to adopt for removing the remainder of the piles in Zone 2 located outside the "trestle area".

The attached drawing conveys the test section in green. Please advise on the suitability of this test to determine if free pulling can be used outside the trestle zone.

T-0269.3 **BSE - Zone 2 Pile Extraction Test Section** **Closed** **06/15/2012** **06/25/2012** **06/21/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

BBII completed the timber pile extraction test section in zone 2 on 06/12/2012. Based on the data recorded by ARUP inclinometers, please advise if BBII can continue with the timber pile extraction in Zone 2 using non ground deformation control methods ("free pull').

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attachmed memo for Arup's review of the Contractor's test program and proposed method of removing piles, and actions required by the Contractor going forward.

T-0269.4 **BSE Zones 3/4 Pile Extraction Methodology** **Closed** **09/27/2012** **10/07/2012** **10/05/2012** **Potentially** ☐

From: Webcor Construction LP Kirk Nielsen **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please confirm ARUP's 9/25/12 verbal revision to RFI response T-0269.3, to employ the originally specified ground deformation control method (not free pull) when pulling timber piles between: Soldier piles 251 and 276 & between A-line and the north edge of the access trestle.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Arup confirms this verbal revision.

The Contractor shall employ the originally specified ground deformation control method (not free pull) when pulling timber piles in the portion of Zone 3 and Zone 4 which is defined by soldier pile 251 to the west and solder pile 276 to the east, and A-line to the north and the north edge of the trestle to the south.

Additionally, due to the excessive movements caused by the timber pile pulling in the southwest corner of

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Zone 3, the Contractor shall revert to using the original timber pile pulling as specified in the construction documents for removal of any piles within 30 feet of the CDSM shoring wall.

T-0269.5 **BSE Zone 3 & 4 Pile Extraction Methodology** **Closed** **10/10/2012** **10/20/2012** **10/12/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Dean Wallahan **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Specification Reference: 02 41 19
Drawing Reference: GT-2102 / GT-2103

The response to RFI # T-0269.4 says to revert to using timber pile pulling as specified in the contract documents.

Per notes on GT-2102 and GT-2103, non-ground deformation control methods (free pull) can be used between Grid Lines 20 and 24.

Upon field conversations, please confirm BBII's interpretation of the designer's intent is correctly shown on the attached drawing.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Arup confirms this verbal revision.

The Contractor shall employ the originally specified ground deformation control method (not free pull) when pulling timber piles in the portion of Zone 3 and Zone 4 which is defined by soldier pile 251 to the west and solder pile 276 to the east, and A-line to the north and the north edge of the trestle to the south.

Additionally, due to the excessive movements caused by the timber pile pulling in the southwest corner of Zone 3, the Contractor shall revert to using the original timber pile pulling as specified in the construction documents for removal of any piles within 30 feet of the CDSM shoring wall.

T-0269.6 **BSE Zone 3 & 4 Pile Extraction Methodology** **Closed** **10/15/2012** **10/25/2012** **10/19/2012** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Specification Reference: 02 41 19
Drawing Reference : GT-2102 & GT-2103

Please confirm that the direction is to excavate and cut timber piles for all remaining timber piles.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to the Specification 02-41-19 Pile Removal. Due to contractors inability to control settlement and increased vibration levels using the non ground deformation control methods contractor is directed to use Spec Paragraph 3.1B. Refer also to SPEC 01-35-

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

65 MITIGATION MEASURES AND MONITORING.

T-0269.7 **BSE - Timber pile extraction method in the footprint of the Zone-4 trestle** **Closed** **04/11/2013** **04/21/2013** **04/16/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Webcor Construction LP Kirk Nielsen

REQUEST:

Ref: GT-2102, GT-2103

Please confirm ARUP's 4/10/13 verbal comment that the contractor may the use non-ground deformation method (free pulling) for Zone-4 timber piles in the footprint of the trestle.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

In Zone 4, timber piles which are in the footprint of trestle piles may be extracted using non-ground deformation method (free pulling).

T-0270 **BSE - Clarification for Existing Ground Water Elevation** **Closed** **12/28/2011** **01/07/2012** **12/30/2011** **Potentially** ☐

From: Webcor Construction LP David Fields **To:** Arup Kevin Clinch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Jeff Molloy

REQUEST:

Reference: 31-23-29 and Attached Document

As discussed during the meeting on 12/22/11, to help obtain an accurate dewatering model, BBII is requesting the recent piezometer data for Zones 1 and 2. In addition, BBII has reviewed the data for piezometers 1182, 1229 and 1255 located adjacent to 301 Mission St (see attachment) and would like to clarify the initial ground water level to use in the model for Zone 4. Based on our review, the existing natural groundwater condition fluctuates between 1.6 E.L and -8.1 E.L in this area. BBII would like to agree upon a starting groundwater elevation of -5.0 E.L for Zone 4.
Also, BBII would like clarification as to the base groundwater level to use for Zones 1, 2 and 3 based on the project data.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Available piezometer data for zone 1 and 2 has been recently transmitted through an email to Turner dated 12/28/2011.

The baseline water level for piezo P-06F (aka 1262) is +1.6 ft NAVD88.

The baseline water level for piezo P-06MS (aka 1182) is +1.1 ft NAVD88.

The baseline water level for piezo P-07MS (aka 1229) is +1.0 ft NAVD88.

Additional baseline data will need to be collected in the piezometers in Zone 1 and 2 prior to establishing a baseline datum.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

T-0271 **BSE - CRT-021 Gate Fence Clarifications** **Closed** **01/05/2012** **01/05/2012** **01/10/2012** **Potentially** ☐

From: Webcor Construction LP David Fields
Co-Author: Turner Construction Company Jack Adams

To: Turner Construction Compan Gwynne Powell

Answered By: Turner Construction Comp Jack Adams

REQUEST:

In regards to the Proposed Driveway shown on the CRT#021 drawing and outlined in Bullets #1 and #2 in the Scope of Work, please clarify the following:

-Per the location of the 18ft Gate, a 10ft fence would need to be constructed to connect the existing 9ft tall fence to the Proposed Driveway gate location (see 1/4/12 Photo attached). Please confirm the 10ft fence should be included in this CRT-021.
-Should the 24'-10" section of the existing 6ft tall fence (see 1/4/12 Photo attached) be replaced?

Confirm Howard St shown on the CRT#021 attached drawing should read "Folsom St"

Confirm that Bullet #3 under the "Scope of Work" refers to Gate #1 in the CRT#021 attached drawing.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Proposed Driveway, Gate and Fence shown on the CRT#021 drawing:

-Not Confirmed. The location of new gate and curb cut is where the Contractor is currently driving trucks and equipment over city sidewalk and curb north of this light pole. Contractor has misinterpreted the locations of curb cut and gate provided by TJPA. The location of proposed driveway curb cut and new gate is to be north of existing light pole as shown - dimensions were provided only as guidance.

- Confirmed the added fence cost should be included in this CR T-021. Contractor to add small section of fence as required to install new gate (fence added both north and south side of gate). Fence can be nine foot and align with top of existing Parcel P'-P" fence and/or step down to align with existing 6 foot fence. Note: green slats are to be eliminated at both gate and fence in this area to assist Truck Drivers and pedestrian vision.

-Not Confirmed. Section of the existing 6ft tall fence up to AC Transit Fence corner is acceptable as is.

- Confirmed. "Howard St" shown on the CRT#021 attached drawing should read "Folsom St" .

- Confirmed. Bullet #3 under the "Scope of Work" refers to "Current Driveway" Gate #1 in the CRT#021 attached drawing

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0272	BSE - D1 Casing Recovery Inquiries	Closed	01/27/2012	02/02/2012	01/27/2012	Potentially	☐

From: Webcor Construction LP Joanne Filipas **To:** Turner Construction Compan Gary Krutsch **Answered By:** Arup Kevin Clinch

Co-Author:

REQUEST:

BBII is requesting the following to complete its D1 casing retrieval plan:
1. Condition specific engineering calculations to mitigate earth and water heave from the bottom of the casing.
2. Condition specific engineering calculations to substantiate no casing buckling.
3. Condition specific plan engineering calculations for dewatering, specifically expected water quantity.

Note - This RFI is high priority and an expedited review/response is necessary.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

NOTE: Void. Answered in RFI T-0272.1

ARUP Response:

Arup is in receipt of the Contractor's Buttress Shaft D1 Casing Retrieval Plan (Constructware Transmittal item 140-03134). Designing and executing the plan to retrieve the casing is the Contractor's responsibility. The Contractor shall provide calculations for Arup to review which demonstrate that the method does not lead to ground loss beneath and around the casing. Arup will not provide calculations in support of the Contractor's plan.

1. Arup cannot comment without a more complete plan that includes the methodology by which they intend to retrieve the casing. The plan should include, but not be limited to, the current height and composition of the soil plug in the shaft, the planned height and composition of the soil plug during the retrieval process, the depth of maximum dewatering, the method by which the shaft will be backfilled upon retrieval of the casing, and the measures they will take to monitor heave at the plug.

2. Arup will not perform these calculations. The Plan (Constructware Transmittal item 140-03134) states that calculations are being prepared.

3. Refer to response to question 1.

Answered by Kevin Clinch (ARUP)
01/27/2012

T-0272.1	BSE - D1 Casing Recovery Inquiries	Closed	01/27/2012	02/06/2012	01/27/2012	Potentially	☐

From: Webcor Construction LP Kirk Nielsen **To:** Arup Kevin Clinch **Answered By:** Arup Kevin Clinch

Co-Author:

REQUEST:

BBII is requesting the following to complete its D1 casing retrieval plan:
1. Condition specific engineering calculations to mitigate

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Arup is in receipt of the Contractor's Buttress Shaft D1

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

earth and water heave from the bottom of the casing.
2. Condition specific engineering calculations to substantiate no casing buckling.
3. Condition specific plan engineering calculations for dewatering, specifically expected water quantity.

Note - This RFI is high priority and an expedited review/response is necessary.

Casing Retrieval Plan (Constructware Transmittal item 140-03134). Designing and executing the plan to retrieve the casing is the Contractor's responsibility. The Contractor shall provide calculations for Arup to review which demonstrate that the method does not lead to ground loss beneath and around the casing. Arup will not provide calculations in support of the Contractor's plan.

1. Arup cannot comment without a more complete plan that includes the methodology by which they intend to retrieve the casing. The plan should include, but not be limited to, the current height and composition of the soil plug in the shaft, the planned height and composition of the soil plug during the retrieval process, the depth of maximum dewatering, the method by which the shaft will be backfilled upon retrieval of the casing, and the measures they will take to monitor heave at the plug.

2. Arup will not perform these calculations. The Plan (Constructware Transmittal item 140-03134) states that calculations are being prepared.

3. Refer to response to question 1.

Answered by Kevin Clinch (ARUP)
01/27/2012

T-0273 **BSE - Clarification for Driveway Desgin at 540 Howard CR -018R2** **Closed** **01/30/2012** **02/09/2012** **02/06/2012** **Potentially** ☐

From: Webcor Construction LP David Fields **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Gary Krutsch

Co-Author:

REQUEST:

Reference: Attached BBI Sketch
CRT-018Rl directs BBII to complete a 12ft driveway at the 540 Howard Street. The existing conditions/location of the curb, USPS facilities and water fire hydrant prevents the driveway from being installed within compliance with the DPW and ADA standards.
DPW/Tumer/W/0 and BBII discussed various solutions to

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per Alberto Herrera of DPW, Mike Pavich of BSM, and Pete Arnautoff of BFP, the proposed modification is acceptable. See (2) linked documents for the full breadth of their responses.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

bring the driveway into confmmance with ADA and DPW standards at the field meeting held on January 17th 2012 and again 01/24//2012.
Pursuant to the field meeting and direction of CRT-018R2, BBII is requesting detailed plans to allow for construction of a compliant driveway at 540 Howard Street. BBII has been directed in the field by W /0/Tumer, to complete modification to the driveway at 540 Howard Street. Per our field meeting please refer to the attached drawing, indicating BBII understanding on the modifications required.
Please confirm the modification per the attached drawing is compliant with City and ADA driveway standards.

T-0274 **BSE - Conflict between CDSM & Dewatering specification** **Closed** **02/10/2012** **02/20/2012** **02/16/2012** **Potentially** ☐

From: Webcor Construction LP Kirk Nielsen **To:** Turner Construction Compan Gary Krutsch **Answered By:** Arup Kevin Clinch

Co-Author:

REQUEST:

Section 31 56 13.3.12.F.1 states "The performance of the shoring wall shall be such that the groundwater levels around the excavation are maintained within (3.0) feet from the pre-excavation levels." The section further states "In the event the water levels begin to drop below the specified limit, the Contractor shall be responsible to implement appropriate measures to control groundwater levels within the specified limits."

Section 31 23 19.1.5.B.10 states "Include description of emergency procedures to follow when system failure or other problems arise."

In the event the CDSM wall fails to mitigate the effects of the dewatering within the excavation should not previously drilled recharge wells be ready to recharge the affected area outside the excavation?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Recharing wells may be used at the Contractor's discretion pending Arup's review of the well details.

These wells shall be at no additional cost to the TJPA

T-0275 **BSE - Request for relief from 1" deep dimension of CDSM cavities** **Closed** **02/15/2012** **02/25/2012** **02/16/2012** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Kirk Nielsen **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP David Fields

Co-Author:

REQUEST:

Section 31 00 00.3.8.L states
"On vertical surfaces of CDSM shoring walls, scarify high areas and fill in cavities exceeding 1" deep with patching cement to provide a reasonably uniform surface over which protection board, installed in a later contract, will span without buckling."
The trade subcontractor is seeking relief from the 1" deep requirement. Please advise as to:
1. Acceptance.
2. Revised dimension.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This RFI does not comply with the RFI definition in Spec 00 07 00 Section 6.02. WOJV must comply with Spec 31 00 00 Section 3.8.L.

T-0275.1 **BSE - Request for relief from 1" deep dimension of CDSM** **Closed** **02/16/2012** **02/26/2012** **02/17/2012** **Potentially** ☐

From: Webcor Construction LP Kirk Nielsen **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Gary Krutsch

Co-Author:

REQUEST:

Section 31 00 00.3.8.L states
"On vertical surfaces of CDSM shoring walls, scarify high areas and fill in cavities exceeding 1" deep with patching cement to provide a reasonably uniform surface over which protection board, installed in a later contract, will span without buckling."
The trade subcontractor is seeking relief from the 1" deep requirement. Please advise as to:
1. Acceptance.
2. Revised dimension.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

WOJV must comply with Spec 31 00 00 Section 3.8.L.

T-0276 **BSE - Request to Change Buttress Concrete Slump Requirements** **Closed** **02/16/2012** **02/26/2012** **02/17/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Emre Erzen **To:** Turner Construction Compan Gary Krutsch **Answered By:** Arup Kevin Clinch

Co-Author:

REQUEST:

Reference: 31 63 29

Currently, the primary and the secondary shafts utilize a superplasticizer to achieve slump as the water content of the mixes is low. Typically, mixes that utilize a

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

superplasticizer are intended for slump ranges between 9" and 12," however, project specifications require an 8" +/- 1" slump. Unfortunately, the addition of the superplasticizer has made it difficult to achieve slump as specified. BBII and Central Concrete are requesting an 8" + 1" - 2" slump (giving a range of 6" to 9") in lieu of the specified 8" +/- 1". There will be no adverse effect to the strength as slump is achieved through chemical admixtures and not by adding water. Please advise.

T-0277 **BSE - Request for Buttress Shaft Design Documentation** **Closed** **02/16/2012** **02/26/2012** **02/23/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Emre Erzen **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Gary Krutsch

Co-Author:

REQUEST:

Please address the following information request from BBII's sub contractor Becho Inc.:
" ... Becho requests to obtain all and any documentation used in the design ofthe Buttress Shafts. Documentation should include, but is not limited to, submitted and approved calculations, sketches, preliminary designs and calculations, conceptual drawings, all site investigation, and all other work documents and ·work papers that were utilized to develop the buttress shaft design in addition to ·what's provided in the contract documents and specifications. "

Please advise, if it is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The request for documents contained in this RFI is rejected as overly broad, burdensome and seemingly unrelated to any legitimate enquiry relating to the contract or the required work. This is not the proper use of an RFI.

T-0277.1 **BSE - Becho's 2nd Request for Buttress Design Doc** **Closed** **03/23/2012** **04/02/2012** **03/28/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Gary Krutsch

Co-Author:

REQUEST:

Becho requests to obtain all work documents, sketches, preliminary calculations and approved calculations which show how the designer arrived the final skin friction values used in the design of the buttress shafts as well as the buttress shafts minimum 10 feet embedment into bedrock.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per the TJPA, refer to response given in RFI T-0277.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0277.2	BSE - Request for Buttress Shaft Design Documentation	Closed	04/04/2012	04/14/2012	04/11/2012	Potentially	☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Turner Construction Compan Gary Krutsch **Answered By:** Transbay PMPC Douglas Jacobson

Co-Author:

REQUEST:

Per the agreement at the 4/4/12 TCCO Progress Meeting BSE Buttress Shoring and Excavation please find Becho's Request for additional design documentation below:

Becho is in receipt of RFI # T-0277.1 regarding the Buttress Shaft Design Documentation. As per the TJPA response, Becho more specifically requests the Reference Shoring Design work documents pertinent to zone 4.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

We are able to reply to a more specific information request. Per Contract Spec 00 03 20 - GEOTECHNICAL DATA, sections 1.2 A.1 and 1.3 A.1 and A.2, three documents (listed below) are available for the Contractor to review. Please specify which report is requested.

00 03 20 1.2 A.1 Transbay Transit Center, Final Geotechnical Data Report, Volumes 1, 2, and 3. Transbay Joint Powers Authority. Prepared by Arup North America Limited, February 2010.

00 03 20 1.3 A.1 Final Report, Results of Prototype Test Program, Installation of Shoring Walls Using the Cement Deep Soil Mixing Method. Transbay Transit Center, Prepared by Arup North America Limited, May 2010.

00 03 20 1.3 A.2 Final Report, Results of Prototype Test Program and Monitoring during Construction of Drilled Shafts. Transbay Transit Center, Prepared by Arup North America Limited, May 2010.

T-0278	BSE - Access Trestle Bump Out Coordination	Closed	02/16/2012	02/26/2012	02/24/2012	Potentially	☐

From: Webcor Construction LP David Fields **To:** Turner Construction Compan Gary Krutsch **Answered By:** Arup Kevin Clinch

Co-Author:

REQUEST:

Reference: Attached BII Sketch
Due to the deletion of the "Natoma Finger" portion of the access trustle BBII is proposing to install additional "bump outs" (per the attached sketch). For coordination purposes, please provide "no fly" zone information for these locations.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Arup understands that the design team's response to RFI-251.1 shows the "no-fly-zones". Contractor shall refer to the RFI-251.1 response for this information. Regarding the addition of the "bumpouts", Arup will review the geotechnical aspects of the revised design when they are submitted.

T-0279	BSE - Trestle Welding Code Compatibility	Closed	02/27/2012	03/08/2012	03/20/2012	Potentially	☐

From: Balfour Beatty Infrastructure, Inc. Shad Gardner **To:** Turner Construction Compan Gary Krutsch **Answered By:** URS Corporation David Fyfe

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Reference:
ASHTO/AWSS D1.5M/D1.5:2008
SH-0200

The Temporary Access Trestle Design submitted in December specified AWS 01.1 as the required welding code. During the review process the reviewers requested that the welding code be changed to AWS 01.5- Bridge Welding Code. This request was complied with by revising general note A5.2 on the conformed trestle drawings.

Since issuing these documents, BBII has been informed by both our shop and field welding inspectors that a compatibility discrepancy exists between the 01.5 welding code and base metals/ member shapes originally specified in the trestle design.

D1.5 is specifically intended for use on bridges and it is not intended for use on "structures composed of structural tubing" as noted in section 1.1.1 attached. This causes a discrepancy because unlike most bridges, our trestle contains a substructure completely comprised of structural steel tubing. (ie Pipe pile, lateral and longitudinal X-bracing).

In addition to the pipe incompatibility, there is also an incompatibility between the specified base metals. 01.5 requires base metals to be ASTM A709 and the trestle design specified a variety of different base metals depending on their structural shape as shown in general note 2.28 also attached
Since Article 1.1.1 of 01.5 permits the Engineer to choose to reference an alternate applicable welding standard when fabrication or structure components are not specifically addressed within its sections, BBII proposes keeping AWS 01.1 as the specified welding code because of its base metal compatibility, but adding a supplemental trestle specific welding specification written by the EOR that increases the quality control to a level equal to that of 01.5. This supplemental specification will include applicable portions of 01.5 section 3 "Workmanship" and section 3 "Inspection" when the requirements are greater than that of 01.1. (ie: fit-up tolerances, NOT frequency, etc).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

URS Response to RFI No. T-0279 Trestle Welding Code Compatibility:

A series of typographic errors occur within the RFI, referencing the AWS documents D1.1 and D1.5 as 01.1 or 01.5. References to AWS documents should be correctly identified by the correct AWS document numbers to avoid any future confusion within the project documentation. This RFI should be corrected or annotated to reflect these typographic errors.

No exception has been taken to use tubular steel elements as components within the trestle structures.

Note AWS D1.5 section 1.2.2 Approved Base Metals: This AWS section provides a list of approved base metals, and prefaces this with Unless otherwise specified, and furthermore specifically states Other steels may be approved by the Engineer. We understand other steels have been recommended for approval by the Engineer (EOR = Pirooz Barar of PB&A) as they are included for use in the set of contract drawings for the Access Trestle. With the recommendation by the EOR and concurrence by the Peer Reviewer that the base metals proposed for use are suitable for the intended usage including an assessment of fatigue and potential for cracking of welding for the required service loading an service life, URS takes no exception to the use of the alternate base metals.

Use of AWS D1.5 is a requirement of the procurement specification, not simply a request made by technical reviewers. Reference 01 53 13 Rev 1.

Where materials within the trestle structure are not addressed by AWS D1.5, then use of AWS D1.1 is approved for connection of these elements where D1.5 is not applicable as follows:

Where preapproved joint geometry for welding is required, geometry in accordance with preapproved welding procedures per AWS D1.1 are approved for use;

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please advise if the proposed resolution is acceptable.
Upon concurrence, BBII will submit the EOR's
Trestle Welding specification for review.

Provide all inspections for AWS D1.1 elements in accordance with all requirements of AWS D1.1;

Where an element that is addressed by AWS D1.5 is connected to an element governed by AWS D1.1 (for example, plate to structural tube), the most stringent inspection requirements of AWS D1.1 vs. AWS D1.5 shall be provided; and,

Minimum and maximum fillet weld sizes and other requirements applicable to fillet welding per AWS D1.5 shall apply to all fillet welding irrespective of the base metal to which welding is applied.

Use of a supplemental welding specification in place of use of AWS D1.5 is not acceptable. Provide full compliance with AWS D1.5 for all procedures and inspections except where AWS D1.1 has been approved for use per the notes above.

T-0279.1 **BSE - Trestle Welding Code Compatibility** **Closed** **03/28/2012** **04/07/2012** **04/09/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Shad Gardner **To:** Turner Construction Compan Gary Krutsch **Answered By:** URS Corporation David Fyfe

Co-Author:

REQUEST:

Reference:
BBII Demarcation Sketch
PB&A Trestle Welding Inspection Plan

The response to RFI T-279 provided a method of dealing with the trestle welding code compatibility issues that would be difficult to enforce, track and document. BBII proposes making a clear demarcation line at the bottom the cap beam that will clearly differentiate the two welding codes.

Additionally the RFI response appears to infer that the Temporary Bridge Specification 01-53-13 requires full compliance with AWS D1.5 as described in the third and last paragraph. 01-53-13 Paragraph 1.6.H (revB) only requires Welding Qualifications (procedures and

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Use of AWS D1.1 and AWS D1.5 for superstructure and substructure as indicated on bridge cross section figure prepared by BBII and attached to this RFI No. T-0279.1 is acceptable.

Submission of the Trestle Welding Inspection Plan (by PB&A and attached to this RFI No. T-0279.1) for review and acceptance via the RFI process is not an acceptable method, therefore we have no comment on it.

For clarity we respond to the welding inspection plan with the following: All requirements, including inspection, of AWS D1.1 apply to AWS D1.1 areas. All requirements, including inspection, of AWS D1.5 apply to AWS D1.5 areas.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

personnel) to be performed in accordance with AWS D1.5.

Therefore in order to comply with the project specifications and the appropriate welding codes, BBII will Perform all welding below the demarcation line (substructure) with weld procedures and welder qualifications in conformance with AWS D1.1 since the members are predominately comprised of tubular material.

Perform all welding above the demarcation line (superstructure) with weld procedures and welder qualifications conformance with AWS D1.5 since the main members are Wide flange beam.

Inspection will be performed by the project special inspector in accordance with recommendations of the EOR attached.

Please confirm this is acceptable.

T-0280 **BSE - Request to shorten depth on shaft D/1** **Closed** **02/29/2012** **03/10/2012** **03/02/2012** **Potentially** ☐

From: Webcor Construction LP Joanne Filipas **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Ref - Attached RFI from BBI/Becho

Due to the blowout conditions previously encountered on Buttress Shaft D1, BECHO requests to install Shaft D1 to a depth of 180 feet as previously proposed by ARUP. BECHO believes the blowout condition still exists and thus would like to proceed with caution to prevent another occurrence. Alternatively, if ARUP feels this is no longer an option, BECHO requests that ARUP increase the maximum spacing allowed between the tangent shafts, in event to mitigate possible schedule delay, and/or re-break of casing while advancing D1. By allowing such changes will help mitigate Buttress shaft schedule.

W/O acknowledges that BBII has yet to demonstrate that a "blowout" condition has in fact occurred. W/O would

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:
Earlier discussions regarding the consideration of shortening shaft D-1 was based on having E-1 and E-2 in place to depth and abandoning the casing at D-1 beneath the sheared break. Shafts E-1 and E-2 are not complete and the casing has been painstakingly removed, therefore shaft D-1 shall be installed in accordance with the Contract Documents.

The Contractor shall submit a proposal for achieving the increased spacing that acknowledges the fixed distance between shaft rows C and M which were established based on RFI 151.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

request the design team consider short pouring D-1 due to drilling difficulties encountered. Alternatively, W/O would request the spacing revision described above.

T-0281 **BSE - Survey Site Drawing and Certificate Submittal** **Closed** **03/06/2012** **03/16/2012** **03/09/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Danny Walsh **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

BBIII is unclear on what is required for the "site drawing and certificate" submittal listed in section 01 10 50 1.3B. As the first contractor working on the construction of the terminal, no previous work is in place. Please confirm that the requirement is intended for future trade packages (to verify the work already completed by previous trade subcontractors), or provide additional clarification on what is required of BBII to complete this submittal requirement.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Contractor with certification of the GC's surveyor is to provide items specified in Division 01 10 50 1.3B for the purpose noted in the specification: to certify "the elevations and locations of the Work are in conformance with Contract Documents".

T-0282 **BSE - News/Advertisement Stand Removal** **Closed** **03/16/2012** **03/26/2012** **03/19/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jack Adams

Co-Author:

REQUEST:

The unused news/advertisement stand on the Westside of Fremont Street needs to be removed to accommodate the Buttress drilling on shafts A & B. BBII intends to modify the sidewalk at this current location to provide 3 - 11ft lanes on Fremont Street per specification section 01-15-70. (see attached sketch)

Please provide direction to relocate or remove these stands.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per Jack Adams of Turner, at no cost to the owner the Contractor may remove the news/advertisement stand and store in Parcel M

T-0283 **BSE - Backfill Material For Pre-Trench** **Closed** **03/15/2012** **03/25/2012** **03/20/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Jeff Molloy **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jack Adams

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference:
Proposed 1 sack sand mix design

BBII is not able to achieve the required compaction per SFDPW requirements due to inclement weather conditions. We have been advised from suppliers that the sand backfill material is saturated, and from past experience will not achieve the required compaction.

If the weather persists as forcasted BBII is proposing to backfill with 1 sack sand as a substitute to dry material. This will allow us to maintain the scheduled CDSM wall installation on 3/23/2012, and maintain the DPW compaction standards. Note sand slurry is only required in the street or public right of way.

Note: According to BBII this will not impact DND/Malcolm in the installation of the CDSM wall.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

BBII has requested use of sack sand slurry mix design FOA100CX. This use of sand/slurry is specified in Section 31 23 10, 2.2, H of the utility relocation spec. See also RFI U-0156.

This use is acceptable per SFDPW requirements due to inclement weather conditions. Also, this use of slurry is important for the upcoming CDSM wall at the pretrench locations. Per correspondence attached from Webcor-Obayashi the CM/GC, they state that their Trade Subcontractor "BBII has considered and coordinated with DND/Malcolm in this regard." (see uploaded document under 'Supporting Documents')

Substituting this slurry versus soils compaction and testing is acceptable. However this sand slurry use is a Contractor scheduling decision and will be at no additional cost to the TJPA from WOJV, BBII, and/or Malcolm-DND.

T-0283.1 **BSE - Backfill for Pretrenching** **Closed** **03/29/2012** **04/08/2012** **03/30/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal

To: Turner Construction Compan Gary Krutsch

Answered By: Turner Construction Comp Jack Adams

Co-Author:

REQUEST:

As a supplement to RFI 283 regarding the use of a CDF mix for backfill of the pre-trench at A-line across First Street, BBII is submitting the attached mix design for review and acceptance. The previously submitted mix design was not pumpable and due to the nature of the pile extraction and backfill operation a pumpable mix is required so backfill compaction can be achieved. The attached mix will allow us to achieve the DPW compaction requirements and also allow for the installation of the CDSM wall.

The use of this mix design is scheduled for this afternoon in order to maintain the CDSM installation schedule for this weekend. BBII would much appreciate an expedited review and acceptance of this mix design.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

CDF mix for backfill of the CDSM pre-trench locations is acceptable. CM/GC Webcor-Obayashi to confirm with their Trade Subcontractor such that "BBII has considered and coordinated with DND/Malcolm in this regard.

Substituting this mix versus soils compaction and testing is acceptable for the upcoming CDSM walls at the pretrench locations First and Fremont Streets.

However, again this use is a Contractor scheduling decision and will be at no additional cost to the TJPA from WOJV, BBII, and/or Malcolm-DND

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0284	BSE - Request to Borehole Coordinates TTB-07 TTB-09	Closed	03/21/2012	03/31/2012	03/23/2012	Potentially	☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP David Fields

Co-Author:

REQUEST:

After further review of the Geotechnical Report produced by ARUP it has come to BECHO's attention that Boreholes TTB-07 and TTB-09 were not surveyed. BECHO respectfully requests to obtain Northing and Easting coordinates for TTB-07 and TTB-09.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

These boreholes were not surveyed. The approximate coordinates are listed in Table 3 in the Geotechnical Data Report.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0285	BSE - Buttress Rebar Cage Length Adjustment	Closed	03/21/2012	03/31/2012	03/26/2012	Potentially	☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please refer to RFI T-0252, where the Engineer accepted BBII's proposal of fabricating the buttress rebar cages to a pre-extended length of 260' in order to accommodate the buttress shafts that are deeper than 241'. In RFI T-0252, BBII had suggested to extend the overall length of all rebar cage assemblies to 260' by increasing the length of the top "setting cage" 19 feet more. In this proposal, the lengths of structural cage segments were to remain unchanged.

BBII's proposal of extending the length of the setting cage by 19' got accepted with the added requirement of splicing vertical rebar extensions on the job site. BBII takes exception to the added requirement of splicihg vertical rebar extensions on the job site, which would lead to an increase in durations of the rebar cage installations.

In order to eliminate splicing, BBII now proposes to fabricate the setting cage segments up to 9 feet longer than shown on the plans. The structural rebar cage segment lengths will remain unchanged. The top of the structural cage sections will be within up to 9 feet proximity from the top of concrete. This proposal will accommodate the rebar cages with a maximum total length of 250' (241 '+9'=250').

If the rebar cage assembly needs to be longer than 250 feet, BBII will direct the rebar cage manufacturer to also extend the bottom structural cage segment by an added distance equal to the required total length of the rebar cage assembly less 250 feet.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Detail 12/GT-5201 requires the reinforcing steel to be placed up to 1'-0" below the top of the concrete. The top of concrete is shown on GT-5201. Longitudinal bar extensions shall be spliced as needed to achieve this, or the cage shall be fabricated long to achieve this. However, if the top of the fabricated cage is within 9'-0" of the top of the concrete, no bar extensions nor extended cages are required.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0286	BSE - Use of Actual Utility Weights	Closed	03/26/2012	04/05/2012	03/29/2012	Potentially	☐

From: Balfour Beatty Infrastructure, Inc. Shad Gardner **To:** Turner Construction Compan Gary Krutsch **Answered By:** Transbay PMPC Douglas Jacobson

Co-Author:

REQUEST:

Reference:
Marked-Up SH-3101
Marked-Up SH-3102
Utility Weight Calculations
PG&E Weights Email
Verizon Weights Email

Temporary Bridge specification 01-53-13 (1.3B) requires the bridge design to include a 3000 lb/lf allowance for hanging utilities below the bridge. Extensive coordination between the RUP designers and the utility owners, BBII has attained the exact location and actual weight of the utilities to be supported by the bridge structures. These weights are shown in the attached document and have been used in the design of the bridge structure as well as the utility hangers. Through our coordination efforts we also know that future utilities will not be added until the temporary bridges are removed. Please confirm that use of the actual utility weights in our design is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Reply to RFI 286.0 Use of actual utility loads versus 3000lb per lf in Specifications

RFI T-0286.0 regarding the use of actual weight of utilities versus the nominal 3000 lb/lf required in Specification Section 01-53-13 Part 1.3.B (Temporary Bridges - Performance Requirements) first requires the correct actual weight of the utilities and the application to each of the streets, First, Fremont, and Beale respectively..

First Street Utility Unit Weights

The BBI/PBA temporary bridge design for First Street shows the following utilities suspended from the bridge:

Girder #3 & Girder #4 (Counting from left to right facing north)

PG&E (6) each 6" diameter steel ducts (17.7 lb/lf) + cable (8.2 lb/lf) @ 25.9lb/lf = 155.4 lb/lf under 2 girders #3 & #4 (counting left to right)
Girder #5 & Girder #6 (Counting from left to right facing north)

PG&E (9) each 6" diameter steel ducts @ 25.9lb/lf = 233.1 lb/lf under 2 girders #5 & #6)
PG&E (1) each 4" diameter steel duct @ 25.9lb/lf = 25.9 lb/lf under 2 girders #5 & #6)
Verizon (6) each 4" diameter steel duct @ 11.59lb/lf = 69.54 lb/lf under 2 girders #5 & #6
Subtotal utility load used by BBI/PBA for girders #3 & #4 = 155.4 lb/lf

Subtotal utility load used by BBI/PBA for girders #5 &#6 = 328.54 lb/lf

Total utility load used by BBI/PBA for all girders #3~#6 = 483.94 lb/lf

There are several slight errors in this BBI/PBA calculation:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Verizon has incorrectly used the weight of 4" diameter PVC duct rather than steel duct used in the temporary bridge crossing (4" diameter steel @ 10.3lb/lf duct + 3lb/lf fiber cable x 6 each lines = 6ea x 13.3 lb/lf = 79.8 lb/lf versus 69.54 lb/lf)

PG & E weight for 6" diameter steel duct is slightly less than the weight for 6" diameter pile Schedule 40 (17.7lb/lf versus 18.4 lb/lf x 15 ducts = 0.7 x 15 = 10.5 lb/lf differential)

Total differential = 10.5 lb/lf + (79.8 - 69.5) = 10.5 lb/lf + 10.3 lb per lf = 20.8lb/lf

Corrected Utility weight = 483.9 lb /lf + 20.8 lb/lf = 505 lb/lf

This small differential weight is unlikely to have a major impact on the temporary bridge design based on the capacity/demand ratios calculated by the Engineer of Record.

AASHTO Section 1.1.1 (General Provisions - Design Analysis) states:

"When these Specifications provide for empirical formulae, alternate rational analysis, based on theories or tests and accepted by the authority having jurisdiction, will be considered as compliance with these Specifications".

Based on AASHTO Section 1.1.1 (General Provisions - Design Analysis) the use of actual utility loads now known rather than the provisional 3000 lb/lf loading stated in Specification 01-53-13 Part 1.3.B is acceptable with the following provisions:

Contractor accepts responsibility for the statement regarding the City plans not to install any additional utilities in the bridge streets until the below grade structure is completed and the streets are restored.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

BBI's Engineer of Record (PBA) has calculated the Demand over Capacity ratio is a minimum of 47% (2:1 Safety Factor) for the crane girders and the other girders Demand over Capacity ratio is 67% (Safety Factor 1.5:1)

T-0287 **BSE - Drain Inlet at the Northwest Corner of Minna and First street** **Closed** **04/04/2012** **04/14/2012** **04/12/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Shad Gardner **To:** Turner Construction Compan Gary Krutsch **Answered By:** URS Corporation David Fyfe

Co-Author:

REQUEST:

Reference:
TG0300-210.1
TG0300-205.2
City Planning/KCA Emails

In order to comply with city standards BBII intended to install a standard city drain inlet on the north west corner of the Minna and First street intersection as required by our site civil drainage plan (submittal TG0300-205.2, TZ1030-01513A08.2 see also submittal TZ1030-015313A04.1 package TG0300-210.1 for product data). When potholing where this drain inlet is to be located, it was discovered that it would be in conflict with an existing gas line. BBII's design engineer KCA contacted the city planning department and got pre approval of the attached catch basin per the attached email and details. Please confirm that it is acceptable for us to install this catch basin in lieu of what was submitted in the aforementioned submittals.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Submission of the storm water inlet detail (attached to this RFI No. T-0287) for review and acceptance via the RFI process is not an acceptable method, therefore we have no comment on it.

In an effort to help expedite resolution of this conflict the following questions/requests are provided below:

What is the location (depth of cover and horizontal offsets to existing and proposed features) of the existing gas line (and electrical conduits/conductors) relative to the proposed storm water inlet?
The proposed storm water inlet appears to extend approximately 41" deep from top of rim/grade. From review of RUP sheets U-3409 and U-3410/Section T, it appears that there could be as little as 36" of cover over top of the existing PG&E gas line. If PG&E gas line is located within limits of proposed storm water inlet (plan view), there does not appear to be sufficient vertical clearance to install the proposed storm water inlet?
Specify engineered base material that is to be placed beneath proposed storm water inlet.
Provide a detailed sketch (plan and section) with submittal illustrating location of proposed storm water inlet and adjacent existing/proposed features.
Has PG&E reviewed and approved the proposed storm water inlet location?

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Provide comfirmation that the proposed storm water inlet is in compliance with PG&E separation requirements

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T-0288 **BSE - Request to Relocate Rathole to D9** **Closed** **04/05/2012** **04/15/2012** **04/10/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Attached please find Becho's request to relocate existing rathole to Shaft D9 where it will remain until Buttress work is complete. Below is Becho's exact wording:

"Due to the upcoming bridge construction on Fremont Street, Becho will be losing the existing location of the rathole. Becho requests that the existing rathole be relocated to Shaft D9 where it will remain for the duration of the Buttress Shaft Work. Becho proposes to pour Shaft D9 30 to 35 feet short from grade to accommodate the new rathole. Please advise if this is acceptable."

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Arup understands there was no attachment, only the one page RFI.

Provided the hole remains cased at all times, or backfilled with CSLM (or an approved equal) whenever the casing is removed, this is acceptable.

T-0289 **BSE - Becho Requesting 9-20-2011 Meeting Minutes** **Closed** **04/11/2012** **04/21/2012** **05/08/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Gary Krutsch

Co-Author:

REQUEST:

"On September 20th, 2011 a meeting was held in the TJPA's office to discuss Noise Issues, Coring thru the Concrete Slab and Buttress Work. Present in the meeting where the following key representatives: Brian Dykes, Maria Ayerdi-Kaplan, Rebecca Armenta, and Steven Rule. Please request the meeting minutes for the meeting on 9/20/2011."

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

No meeting minutes were taken during this meeting.

T-0290 **BSE - Stabilization of Unimproved Soil Conditions Along the Interior Face of the C** **Closed** **04/11/2012** **04/21/2012** **04/18/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP David Fields

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference: 31 56 13 3.7 C
BBII Photo of CDSM Wall J-Line

BBII is requesting direction for a method to stabilize the unimproved soil conditions along the interior face of the CDSM wall.

The current condition of the CDSM wall includes unimproved soil conditions that have the potential to become detached from the wall and create large voids at the face of the wall. Please reference attached photo for visual details.

Based on our records, the CDSM wall met all the specification requirements for uniformity and improved soil as per section 31 56 13 of the contract specifications. Please note: Section 31 56 13 3.7 C's requirements (10% and 6") are satisfied by during the TJPA's Representative inspection of double-tube samples at the time of installation.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The quality of the CDSM wall is dependent upon the Contractors' chosen means and methods. If the Contractor has concerns regarding the integrity of the wall, the Contractor shall provide a remedial plan to the TJPA for consideration.

Conformance with the criteria within a sample does not relieve the Contractor of their responsibility that the entire wall meet the specifications.

T-0290.1 **BSE - Relevance of Unimproved Soil Pockets in CDSM Wall as it Relates to Waterp** **Closed** **05/28/2012** **06/07/2012** **06/05/2012** **Potentially** ☐

From: Webcor Construction LP Kirk Nielsen **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Neither section 31 00 003.8.L or 07 12 10.3.2.C anticipated +1" cavities in the surface of the CDSM wall. However there are +6" cavities in the surface of the CDSM wall the result of unimproved soil pockets although BBII would contend the CDSM wall was installed in accordance with section 31 56 13.3.7.C. On 5/25/12 W/O spoke with Jonathan Lawrence President of Laurenco Systems (888) 321-3338 specified per section 07 12 10.2.1. Sections 31 00 00.3.8.L and 07 12 10.3.2.C speak of "buckling" due to cavities of the face of the CDSM wall. Mr. Lawrence was not concerned over the cavities in the face of this project's CDSM wall for two reasons:

1. Subsequent to his review of the bid documents the substrate for the waterproofing is the INS-1, depicted on 4/A1-8710, rather than the CDSM wall.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per specification section 31 00 00 / 3.8 L: "On vertical surfaces of CDSM shoring walls, scarify high areas and fill in cavities exceeding 1" deep with patching cement to provide a reasonably uniform surface over which protection board, installed in a later contract, will span without buckling." Repair wall as required in the contract documents.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

2. Due to the thickness of the substrate system:
a. ¼" Protection board
b. 3/16" (2) plys #15 felt
c. ¼" Drainage composite panel.
d. ½" INS-2
1-3/16" thick in total Mr. Lawrence was not concerned over a CDSM cavity less than

1'- 0" x 1'-0" x ½" deep.

When asked why he thought section 07 12 10.3.2.C was included in the below grade waterproofing section, if in fact the CDSM was not the substrate for the waterproofing, Mr. Lawrence responded that section 07 12 10.3.2.C was part of the Laurenco's template boiler plate specification really inapplicable to this application.

Please confirm that given the CDSM wall is not the waterproofing substrate system, rather items a-d above, and in light of the frequency of unimproved soil pockets, the project needn't infill the unimproved soil pockets less than 1'- 0" x 1'-0" x ½" deep.

T-0290.2 **BSE - Waterproofing preparatory work on CDSM wall** **Closed** **09/27/2012** **10/07/2012** **10/01/2012** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Stacy Wilson

Co-Author:

REQUEST:

Specification Reference: TG06 BGP 07 12 10.3.2C

Please confirm that any preparatory work of filling cavities within the CDSM wall for stabilization of the waterproofing board is the sole responsibility of the TG06.0 Trade Subcontractor

W/O comments in follow up to 9/27/12 TCCO / W/O meeting:

1. TG06 package is independent of the TG03 package.
2. BBII should refer to Earthwork specification section 31

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

CM/GC to respond.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

00 00.3.8.L
3. BBII should refer to RFI response #T-0290.1 forwarded to BBII 6/5/12

T-0291 **BSE - Arup Requesting Exploratory Cores on Buttress Shaft D1** **Closed** **04/16/2012** **04/26/2012** **04/24/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Arup is requesting exploratory core samples at Buttress Shaft D1. Please provide direction on depths, sizes, and locations of cores.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Shaft D1 is, so far, non-conforming. It is in the Contractor's best interest to perform exploratory drilling to ascertain why they are unable to reach the required depth. Arup recommends that the Contractor do so, and that a plan be developed based on the observations made during the two previous attempts to place the shaft.

T-0291.1 **BSE - Arup Requesting Exploratory Cores on Buttress Shaft D1 Follow-Up** **Closed** **04/25/2012** **05/05/2012** **05/04/2012** **Potentially** ☐

From: Webcor Construction LP David Fields **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Arup has requested to revise the response to RFI T-0291 in which the following question was presented -

"Arup is requesting exploratory core samples at Buttress Shaft D1. Please provide direction on depths, sizes, and locations of cores."

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

There has been further discussion regarding this proposal. Arup retracts the request to core within the footprint of buttress shaft D1.

T-0292 **BSE - First St Bridge Pier 1 Relocation** **Closed** **05/02/2012** **05/12/2012** **05/03/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Gary Krutsch

Co-Author:

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Reference:
Revised Drawings and Calculations for Revised Pier 1 Location

The western Pier 1 CIDH pile was rejected due to an anomaly. The corrective action is to replace it with a new pile 6'-0" south. Attached is the revised Bridge Drawings and the revised calculations. This package was emailed to the Bridge Design reviewers on 4-24-12 for expedited review. Please confirm that the new pier 1 location does not cause conflicts with the future structure.

The attachments are not appropriate for an RFI, they should be submitted through the submittal process. Resubmit RFI with pertinent information only

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T-0292.1 **BSE - First St Bridge Pier 1 Relocation** **Closed** **05/03/2012** **05/13/2012** **05/04/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference:
SH-2100
SH-2101

Detail: The western Pier 1 CIDH pile was rejected due to an anomaly. The corrective action is to replace it with a new pile 6'-0" south. Attached are the revised Bridge Drawings showing new pile locations. Please confirm that the new pier 1 location does not cause conflicts with the future structure. Please note the revised design documents were emailed to the Bridge Design reviewers on 4-24-12 for expedited review.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The 2 northernmost First Street temporary bridge piers to be shifted as depicted in this RFI is acceptable.

ARUP Response:

Arup takes no exception to this.

T-0293 **BSE - First Street Natoma blind spot hazard** **Closed** **06/05/2012** **06/15/2012** **06/15/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Turner Construction Compan Gary Krutsch **Answered By:** URS Corporation David Fyfe

Co-Author:

REQUEST:

Regarding the temporary first street bridge. Contract specification section 01 53 13-1.3.A.4 requires us to provide a "8' -high solid barrier system" consisting of 1" plywood which does not allow viewing through the barrier.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Alternative barrier system shall be provided for pedestrian protection to mitigate vehicle/driver sight line obstructions (such as chainlink or other similar product). Contractor to verify alternative barrier

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

This is creating a blind turn hazard for traffic entering First street from Natoma street on the south side of First street. Please advise on how you would like to mitigate/fix this hazard.

product meets visibility requirements. Required height of barrier system is not changed.

Alternative barrier system system shall be designed by the temporary bridges design engineer of record and shall meet all code requirements including size of openings and resistance to all loading. Final product shall be continuous (including at transitions to other barrier systems), climb proof and topped with barbed wire. Contractor/engineer of record shall obtain all required approvals for alternate barrier system.

Vehicle barrier system/guardrail(s) are not modified by this RFI response.

T-0293.1 **BSE - First Street and Natoma blind spot hazard.** **Closed** **06/29/2012** **07/09/2012** **07/09/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Turner Construction Compan Gary Krutsch **Answered By:** Transbay PMPC Douglas Jacobson

Co-Author:

REQUEST:

Please find attached sketch SK-0293 for proposed pedestrian barrier at the First st. bridge. Please confirm this is acceptable in lieu of previously installed plywood barrier.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractor to install 9 gauge galvanized chain link fence with 2" mesh along zone of previously installed plywood barrier on First Street Temporary Bridge. Secure to existing bridge posts MC6x18 with 1/2" diameter galvanized bolts 2' o.c. on each post with full-length 1" x 3/16" flat bar. Install 1/4" galv. top and bottom wire with 3/8" turnbuckles. Secure fence to wire with 11 gauge wire ties. Double twist ends of chain link mesh are on top. See TJPA Spec 32 31 13 Chainlink Fences and Gates. For barbed wire at the top, see 32 31 13 2.5 and 2.8 for requirements. Install barbed wire support arms at 45° tilted away from bridge.

Temporary Bridge engineer of record shall verify that the loading from 1" thick plywood to chain link mesh is not detrimental to the Temporary Bridge design.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0293.2	BSE - Blind Spots at Fremont St. and Beale Street Bridges	Closed	08/13/2012	08/23/2012	08/21/2012	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jack Adams

Co-Author:

REQUEST:

Reference:
RFI T-0293.1
RFI T-0293

Blind spots similiar to the those in RFI T-0293 at First street and Natoma street exist at the following locations:

Fremont Street - Northwest & Southwest Corners (Cars exiting from 301 Mission and 400 Howard)
Beale Street - Southwest Corner (Cars exiting from 199 Fremont and 301 Mission)

Please confirm that similiar fencing as per response to RFI T-0293.1 should be installed at these locations.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

Reference: CR T-043

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0293.3	BSE Blind Spots at Fremont St. and Beale Street Bridges	Closed	08/28/2012	09/07/2012	08/29/2012	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jack Adams

Co-Author:

REQUEST:

Reference:
RFI T-0293.1
RFI T-0293.2

In RFI T-0293.2 there was an error in requesting confirmation for fencing in the Northwest corner when it was meant to request fencing in the Northeast corner.

Please confirm that fencing as per response to RFI T-0293.1 should be installed on Fremont Street on the Northeast corner rather than the Northwest corner.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed. Install fencing (versus plywood) in the Northeast corner of the bridge to eliminate blind spot at 301 Mission driveway.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0293.4	BSE - Blind Spots at Beale Street Bridge	Closed	04/08/2013	04/18/2013	04/11/2013	Potentially	☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Webcor Construction LP Kirk Nielsen

REQUEST:

Reference: RFI #T-0293.2

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

RFI T-0293.2 provided the fence vs. plywood locations on Beale Street Bridge and the Change Request

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Blind spots similar to what was alleviated at First & Fremont Streets, the result of the originally specified "8'-high solid barrier system", exist on Beale St. at the following locations:

1. Making a right at the Southwest corner exiting 199 Fremont's garage.
2. Making a right at the Northwest corner exiting 301 Mission's garage (the concern being if someone is coming down Beale the wrong way.)

Please confirm if and where chain link, similar to what was specified in RFI response #T-0293.1, is required and what CR # to reference.

number (CR No. T-043A).

Install fence in lieu of plywood at both 199 Fremont and 301 Mission ends of the Beale Street Bridge - west side only. Fence should replace plywood from the end (@ A line and J line) and be installed midway to the construction gate - verify in field.

T-0294 **BSE - Expected CDSM wall deflection** **Closed** **06/14/2012** **06/24/2012** **07/02/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jack Adams

Co-Author:

REQUEST:

BBII requests the anticipated deflection values for the CDSM wall obtained in ARUP's design of the shoring wall and used to determine appropriate action trigger levels specified in section 31 09 13.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The request for information contained in this RFI is rejected as overly broad, burdensome and seemingly unrelated to any legitimate enquiry relating to the contract or the required work. This is not the proper use of an RFI. Please follow the requirements specified in section 31 09 13 regarding maximum allowable movements and corrective action trigger levels.

T-0295 **BSE - 301 Mission drive way** **Closed** **06/19/2012** **06/29/2012** **06/24/2012** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Kirk Nielsen

Co-Author:

REQUEST:

Per conversation in previous coordination meeting between Balfour Beatty Webcor, Turner, TJPA and 301 Mission¿s management. We are confirming direction to extend the sidewalk past the limits shown in our grading

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The work BBII has proceeded with at the 301 Mission driveway is in general conformance with the 6/8/12 TCCO, W/0, BBII, Millennium Mgmt. meeting. The direction however is from, to include

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

and drainage submittal through the limits of the 301 Mission drive way. It is also our understanding that we are directed to match the color of the existing black sidewalk in this area. Please confirm.

however limited to, base contract specification section: 00 08 13.1.8.E, 0115 40.1.4, and or General Excavation Permit #12E-0181. The TJPA is not anticipating added cost the result of this issue.

T-0296 **BSE - Clarification of Soil Segregation and Disposal per spec. section 01 13 50/SM Closed** **06/27/2012** **07/07/2012** **06/29/2012** **Potentially** ☐

From: Webcor Construction LP Kirk Nielsen **To:** Turner Construction Compan Gary Krutsch **Answered By:** Transbay PMPC Roger Rothenburger

Co-Author:

REQUEST:

On 6/26/12 BBII clarified their desired method / location of disposing of the Zone-3 concrete rubble was to deliver it to Brisbane.

Section 01 13 50 / 5.2.1 of the SMP states:

"TJPA shall be provided documentation from the excavation contractor that the accepting landfill for the soil from Transbay Terminal project has been provided with and has reviewed all analytical data collected from the Site."

Brisbane has refused to provide the aforementioned documentation.

In order to facilitate BBII's desired method / location of disposing of the Zone-3 concrete rubble W/O requests that the TJPA clarify, exclusively for the subject Zone-3 rubble, that the documentation required by the TJPA consists only of standard shipping tags and invoices.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Roger Rothenburger 6/28/2012 Section 01-13-50 Part 1.1.C (Hazardous Materials Procedures - Summary) references "Site Mitigation Plan, Transbay Transit Center, Treadwell & Rollo, March 24, 2010" report and states,

"Contractor's work shall include the management of existing soils in a manner consistent with the requirements of the Contract Document including the following reports, "Site Mitigation Plan, Transbay Transit Center, Treadwell & Rollo, March 24, 2010", appended to this Sectin as 01 13 50/APA, and Section 00 03 35 ..."

Section 5.2.1 (Soil Segregation and Disposal) of the Treadwell & Rollo Site Mitigation Plan, 01-13-50/APA states, "Before any excavation activities begin at the Site, TJPA shall be provided documentation from the excavation contractor that the accepting landfill facility for the soil from Transbay Terminal project has been provided with and has reviewedall analytical data collected from the Site. TJPA shall approve all off-site disposal facilities and soil transportation contractors, including, without limitation, available insurable coverge, and prior to the shipment of any soil or other waste materials (emphasis added)."

TJPA in the interest of facilitating disposal of material to Brisbane and other disposal sites removes from Site Mitigation Plan Section 5.2.1 by Treadwell & Rollo, the highlighted words, "with and has reviewed" .

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

The only requirement is that some documentation from BBI (the "excavation contractor" that the "analytical data collected from the Site" has been provided to the disposal site.

T-0296.1 **BSE - Clarification of Soil Segregation and Disposal per spec** **Closed** **07/02/2012** **07/12/2012** **07/02/2012** **Potentially** ☐

From: Webcor Construction LP Kirk Nielsen **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jack Adams

Co-Author:

REQUEST:

RFI response T-0296 was overly broad and failed to conform to previous conversations between TJPA, TCCO, & W/O.

RFI T-0296 Inquiry:

On 6/26/12 BBII clarified their desired method / location of disposing of the Zone-3 rubble was to deliver it to Brisbane.

Section 01 13 50 / 5.2.1 of the SMP states:

"TJPA shall be provided documentation from the excavation contractor that the accepting landfill for the soil from Transbay Terminal project has been provided with and has reviewed all analytical data collected from the Site."

Brisbane has refused to provide the aforementioned documentation.

In order to facilitate BBII's desired method / location of disposing the Zone-3 concrete rubble W/O requests that the TJPA clarify, exclusively for the subject Zone-3 rubble, that the documentation required by the TJPA consists only of standard shipping tabs and invoices.

RFI T-0296.1 Inquiry:

Please confirm, in order to facilitate BBII's desired method / location of disposing the Zone-3 concrete rubble W/O

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

7/2/2012 Confirmed - exclusively for the subject Zone-3 rubble, the documentation required by the TJPA consists only of standard shipping tabs and invoices.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

requests that the TJPA clarify, exclusively for the subject Zone-3 rubble, that the documentation required by the TJPA consists only of standard shipping tabs and invoices.

T-0297 **BSE - Phase 3 Utilities on Beale Street** **Closed** **06/28/2012** **07/08/2012** **07/10/2012** **Potentially** ☐

From: Webcor Construction LP Joanne Filipas **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Reference attached sketch.

The BSE subcontractor is proposing to relocate the Beale Street temporary bridge to the east; similar to the attached sketch. Please confirm if this will impact any future utilities, i.e. PG&E phase 3 on Beale Street.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Beale Street Phase I temporary utilities were relocated outside and east of the CDSM shoring wall. The RUP project design intent is that Phase II utilities will not be suspended from the temp bridge in Beale Street. In the future, permanent Phase II utilities on Beale Street will be constructed within a designated area above the Transit Center train box termed the "utility corridor". Please coordinate your work with CM/GC.

T-0297.2 **BGP - Injection Hose Testing Criteria** **Void** **02/18/2014** **02/28/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Per conference call with design team, please confirm that it is acceptable to test the waterstop injection hoses with water as recommended by manufacturer.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T-0298 **BSE -Timber Pile Extraction at grid line 19 to 20 and 24 to 25** **Closed** **06/29/2012** **06/29/2012** **07/02/2012** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

BBII completed the timber pile extraction test section in

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

6/29/2012 ARUP Response: This is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

zone 2 on 06/12/2012. Based on the data recorded by ARUP inclinometers, please advise if BBII can continue with the timber pile extraction at grid line 19 to 20 and grid line 24 to 25 using non ground deformation control methods ("free pull').

The attached drawings (D-21 02 and D-21 03) for reference.

Please advise.

T-0299 **Micropile Performance Testing** **Closed** **07/16/2012** **07/26/2012** **07/30/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Turner Construction Compan Gary Krutsch **Answered By:** Arup Kevin Clinch

Co-Author:

REQUEST:

Reference Part 3.2 "Performance And Proof Testing" of Specification Section 31 63 33

In order to expedite the Micropile Performance Testing review period, BBII is requesting to conduct the performance testing of micropiles prior to excavating Level 5, at approximately -32' Elevation, concurrent with the installation of Level "0" struts. See attached sketch for details.Please confirm that it is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Specification section 31 63 33 3.2 A states: The contractor shall conduct performance tests and proof tests consisting of tension load testing on micropiles. The tests are to be done on piles installed from the bottom of the excavation.

The Contractor's proposal is not acceptable as the testing methodology and the acceptance criteria in the Project Specifications have been developed assuming the piles used for the performance tests will be installed and tested in conditions matching those of the production piles. The performance of the piles installed and tested as proposed will differ due to the higher effective stresses in the soil.

T-0300 **Micropile Performance Test Pile Relocations** **Closed** **07/17/2012** **07/27/2012** **07/26/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Yuriy Stryzheus **To:** Turner Construction Compan Gary Krutsch **Answered By:** Arup Kevin Clinch

Co-Author:

REQUEST:

Please refer to BBII's micropile layout submittal and RFI T-262 that references IFB- Below Grade package for coordination of micropile layouts.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Arup takes no exception to the proposed locations

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Based on the information provided within BBII's Micropile layout drawing and Below Grade package drawings S1-2023 through S1-2027, the four micropiles subjected to performance testing are labeled as: W411, W396, E383, and E401.

BBII requests to conduct the performance test in Zone 1 at pile No. W604 instead of pile No. W411, which is located underneath Struts No. 6 & 7.

Similarly, BBII requests to test the piles numbered as W473, E477, & E599, instead of the piles numbered as W396, E383, & E401, which are located underneath the trestle.

Please confirm that it is acceptable.

T-0301 **Trestle Piles in Exclusion Zones (Zone 4)** **Closed** **07/23/2012** **08/02/2012** **07/30/2012** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Review comments on submittal package TG0300-284 directed BBII to shift two trestle piles (#69 &#72) out of pile exclusion zones (provided by Thornton Tomasetti in response to RFI T-0251.1). BBII worked to avoid these zones to the extent possible. However, in zone 4 the additional buttress shafts created further limitations on trestle pile locations and it was infeasible to completely avoid both the permanent structure and buttress. BBII is aware of the possibility ofeliminating some of these additional buttress shafts but this will not resolve these specific conflicts. Due to the congestion in Zone 4 with both the pile exclusion zones and added buttress shafts, BBII requests an exception for trestle piles #69 and #72.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Requested exceptions will be granted for locations of trestle piles #69 and #72 in submittal TG0300-284. Prior to proceeding the GC is to confirm this has no cost impact to the TJPA or impact on other trades.

T-0302 **ISI Low Compression Strength for CLSM** **Closed** **07/31/2012** **08/10/2012** **08/10/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jack Adams

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Please confirm the low compression strengths for the CLSM, in the ISI test results
(attached), are acceptable. The CLSM was used for pre-trench backfill on Gridline A, First
St. and Fremont St.

Please see attached ISI Test reports:
55606 Compression Test Report on A line between 18-19 lines, sampled 3/29/2012
55607 Compression Test Report on A line between 19-20 lines, sampled 3/30/2012
55608 Compressive Test Report on A line between 19-20 lines, sampled 4/4/2012
51399 Compression Test Report on A line between 19-20 lines, sampled 3/28/2012
56162 Compressive Test Report on A line between 25.2 - 25.5 lines, sampled 4/2/2012

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

There is no compressive strength requirement for the pre-trench backfill Slurry(CLSM) chosen by the Trade Subcontractor in lieu of compaction of soils. This was confirmed with ARUP and per RFI 283/RFI 283.1.

1. TJPA Spec. 31-00-00 Earthwork requires pre-trenching to be backfilled and compaction with satisfactory materials, i.e., sand / soil.

2. These Slurry(CLSM) materials were allowed for backfill as a ¿weak CLSM ¿ per RFI 283.

3. There is no project design/specification of ultimate compressive strength for these pre-trench backfill Slurry(CLSM).

4. The purpose of sampling the CLSM mix is to document the Slurry(CLSM) strength data only

A review of the ultimate strengths (attached and below) are consistent with the strength of compacted soils used for temporary backfill areas prior to completing the CDSM wall processes.

Lab ID No.: 51396

TG03/IR 917

Mix FOA100CX Central

35 Days 170psi

Lab ID No.: 51399

TG03/IR 933

MIX 400FLO Bode

90 Days avg. 180psi

Lab ID No.: 55600

TG03/IR 913

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Mix FOA100CX Central

39 Days avg. 130psi

Lab ID No.: 55606

TG03/IR 934

MIX 400FLO Bode

90 Days avg. >160psi

Lab ID No.: 55607

MIX 400FLO Bode

TG03/IR 935

90 Days avg. >160psi

Lab ID No.: 55608

TG03/IR 949

MIX 400FLO Bode

90 Days avg. >160psi

Lab ID No.: 56162

TG03/IR

MIX 400FLO Bode

120 Days 160psi

T-0303 **BSE - Verizon Duct Bank at the First St Bridge** **Closed** **08/07/2012** **08/17/2012** **08/08/2012** **Potentially** ☐

From: Webcor Construction LP Kirk Nielsen **To:** **Answered By:**

Number	*Subject*	*Status*	*Date Created*	*Date Required*	*Date Answered*	*Cost Impact*	*Proceed*

Turner Construction Compan Gary Krutsch — Turner Construction Comp Stacy Wilson

Co-Author:

REQUEST:

Reference:
Attached Photo

Despite providing Verizon surveying, staking, and cutsheets, the Verizon duct bank at the North side of the First St. bridge was installed by others at the incorrect elevation (too low). Please confirm if additional utility supports will be required of TG03 or if others will be proforming the additional utility supports required for the Verizon duct bank.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

8/8/2012 Per Steve Cunningham, TCCO -

Review attached drawing provided by BBIi:

1. PB&A; First, Fremont, and Beale Street Temporary Bridges, Detail 1/SK 3105. Horizontal layout is provided, but not vertical layout for the PGE duct banks.

2. BBIi letter number 4225-000-0316, dated 1/9/12, provided bottom elevation for Verizon duct bank at 12.57' and 13.40'.

Please provide as built elevations of all duct banks. Confirm PGE Phase 2 duct banks were installed with higher elevation at center of bridge.

T-0304 **BSE - Inquiries with Regard to Proposed Beale St Bridge Atop East CDSM Wall** **Closed** **08/23/2012** **09/02/2012** **08/27/2012** **Potentially** ☐

From: Webcor Construction LP Kirk Nielsen **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

On 8/22/12 Beale St. bridge submittal #TG0300-206 was returned to W/O marked not reviewed (Exhibit-A). Upon W/O's
review of BBII's Beale St. bridge design W/O encountered the following inquiries relative to the CDSM wall:

1. BBII's bridge design relies on ARUP's RFI response #T-0209.3 (Exhibit-B). Please confirm ARUP's RFI response #T-0209.3 (Exhibit-C) is applicable as the basis of the design for the Beale St. bridge, given unlike First and Fremont
Streets, the length of the Beale St. bridge is resting atop the East CDSM wall.

2. The decision to allow the North and South bridge abutments to be located atop the CDSM wall was predicated on
the CR #T-025 load testing reference RFI #T-0209.4 (Exhibit-D). Given the testing was performed on different

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Arup's response to RFI T-0209.3 may be used as one part of the Contractor's basis of design. Arup will review the design for conformance with these recommendations. Note that our review is only for conformance with the geotechnical recommendations; review for constructability, pedestrian impact, OCS pole locations, impact (or lack of) on extension of the trainbox, etc. are by others.

2. Our design recommendations were not informed solely by the load testing results.

3. Arup does not endorse any design decisions made by the Contractor. We will review the design for conformance with our recommendations

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

soldier
piles (by others) and differing soil conditions between Zone-1 and Zone-4, is the load capacity derived from the CR #T-
025 testing applicable given the different bridge location and configuration?

3. BBII's Beale St. bridge design relies on resting the length of the Beale St. bridge atop the East CDSM wall. As the
designer of the CDSM wall, does ARUP endorse further loading of the East CDSM wall with the forces imposed by the
Beale St. bridge?

T-0304.1 **BSE - Inquiries with Regard to Proposed Beale St Bridge Follow-Up** **Closed** **08/29/2012** **09/08/2012** **08/31/2012** **Potentially** ☐

From: Webcor Construction LP Kirk Nielsen **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

In follow-up to RFI T-0304:

- From the response to question #2 of RFI T-0304 it is understood that ARUP's design recommendations were not informed solely by the load testing results. However the original question remains, is the load capacity derived from the CR #T-025 testing applicable given the different bridge location and configuration?

- So the contractor can understand the parameters of what we are submitting, was the Shoring Wall Designed to withstand the loads imposed by the proposed Beale St. bridge?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Arup's recommendations in RFI T-0209.3 may be applied to the east CDSM shoring wall.

The CDSM wall was not designed to support vertical loads, but we have estimated its vertical load carrying capacity and outlined this in our response to RFI T-0209.3. If the bridge bears on the wall, we recommend that the Contractor monitor the wall for movements.

T-0305 **BSE - Inquiries Regarding Proposed Beale St Bridge Relative to Below Grade Stru** **Closed** **08/23/2012** **09/02/2012** **08/27/2012** **Potentially** ☐

From: Webcor Construction LP David Fields **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Reference: TG0300-206 Beale St. Bridge Structural Design

On 8/22/12 Beale St. Bridge submittal TG0300-206 was returned to W/O marked not reviewed. In lieu of piers the proposed bridge relies on the eastern shoring wall for structural support along the bridge. As a result, the design utilizes the additional capacity of the internal bracing to restrain lateral loads imposed by the bridge.

Upon W/O's review of BBII's Beale St. bridge design W/O encountered the following inquiries relative to below grade structure:

-Do the below grade foundation walls as designed have the additional capacity required to support the lateral loads imposed by the proposed Beale St. bridge?

-Will the below grade foundation walls be required to achieve additional strength prior to removal of re-bracing as a result of the additional laterals loads in which they are subjected by the proposed Beale Street bridge?

The Contractor shall demonstrate, through calculations and drawings, that the seismic load from the bridge has a complete load path from bridge to ground.

T-0306 **BSE - Pedestrian Connection Across the Construction Excavation at Beale St** **Closed** **08/23/2012** **09/02/2012** **08/29/2012** **Potentially** ☐

From: Webcor Construction LP David Fields **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jack Adams

Co-Author:

REQUEST:

Reference: TG0300-221 BBI - Temp Bridges - Civil and Drainage Plan - Beale St

Contrary to specification section 01 53 13.1.2.A BBII's proposed Beale St. bridge utilizes an on-grade sidewalk for pedestrian travel though the parcel "Lot-N". Please confirm this is acceptable and that no other pedestrian connection across the construction excavation at Beale St. will be required for the entire required life of the bridge.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is acceptable to install an on-grade sidewalk for pedestrian travel though the parcel "Lot-N"during the required life of the Beale Street Temporary Bridge.

Lot N is available for CM/GC use until the completion of Transit Center construction per Spec. 01-14-19.

T-0307 **Re - Bracing Drawings** **Closed** **08/23/2012** **09/02/2012** **08/24/2012** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Stacy Wilson

Co-Author:

REQUEST:

Reference:
Spec. Section 31 55 00
Drawing S1-1112

In order to design the re-bracing BBII requests drawings for the Below Grade Package. Please provide these drawings on a CD in AutoCAD and PDF format.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Reference Specification Section 01 10 40, 1.6 C

This RFI has been rejected.

T-0308 **BSE - Phase 2 Extension During the Service Life of the Beale St. Bridge** **Closed** **08/27/2012** **09/06/2012** **08/29/2012** **Potentially** ☐

From: Webcor Construction LP David Fields **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jack Adams

Co-Author:

REQUEST:

On 8/22/12 Beale St. Bridge submittal TG0300-206 was returned to W/O marked not reviewed.

In lieu of piers the proposed Beale St. Bridge relies on the eastern shoring wall for structural support. As a result of this configuration the eastern shoring wall located along grid line 35.25 will have to remain in place throughout the entire life of the bridge. Multiple contract documents including S1-2027 (Exhibit-A) elude to a "Phase 2" which extends the underground portion of the structure to the east of the existing shoring wall. Please confirm the verbal direction that the "Phase 2" package will not be constructed during the life of the Beale St. bridge.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The TJPA confirms that the phase two train box extension will not be constructed during the life of the Beale Street temporary traffic bridge.

T-0309 **BSE - Traffic Control During the Construction of the Beale St. Bridge** **Closed** **08/27/2012** **09/06/2012** **08/29/2012** **Potentially** ☐

From: Webcor Construction LP David Fields **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jack Adams

Co-Author:

REQUEST:

At the 8/27/12 TJPA Traffic Coordination meeting Balfour Beatty presented a construction plan for the proposed Beale St. bridge. In violation of Specification Section 01 15 70-2 the construction plan included reducing Beale St. down to two available traffic lanes for an approximately six week duration. Please confirm if this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractor can temporarily reduce traffic lanes (including up to a full street closure) if they comply with Spec and SFMTA Blue Book requirements. Per Spec 01-15-70 TRAFFIC ROUTING WORK the Contractor would have to:

1. Submit a traffic control and detour plan.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

2. Submit a STP Request - Special Traffic permit Request.

SPEC Section 01 15 70 TRAFFIC ROUTING WORK

Paragraph 3.5 SPECIAL TRAFFIC PERMIT

A. Contractor shall apply for a Special Traffic Permit from the SFMTA, if any deviation from the traffic lane requirements (time, width, etc.), as shown in these Specifications, is required. If SFMTA approves the issue of the Special Traffic Permit, the Contractor shall pay the required fee to SFMTA, as specified in the Blue Book, and obtain the necessary permit.

The STP request would need to be reviewed and may be approved by TJPA Reps and SFMTA/MUNI.

T-0310 **Clarification on Sump Pit Location** **Closed** **08/28/2012** **09/07/2012** **09/07/2012** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Transbay Joint Powers Au Edmond Sum

Co-Author:

REQUEST:

RFI Ref: T-0251.3
Spec. Ref: 31 00 00
Drawing/Detail Ref: GT 2101, 2102, 2103

The current coordination drawing for sump pit locations, received in RFI response T-0251.3 (12/13/2011) do not correspond with the BSE contract drawing GT 2101, 2102, 2103. Please confirm the correct sump pit location.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to ASI 97. Coordinate with the CMO for transfer of electronic files

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T-0311 **Subgrade French Drains Along CDSM Wall** **Closed** **08/31/2012** **09/10/2012** **09/07/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Spec. Reference: 31 00 00

In order to control surface water at final subgrade, Balfour Beatty would like the option of installing (a) trench drain(s) per the attached drawing as necessary around the perimeter of the excavation just prior to or once final subgrade is established. These trench drains will be filled with ¾" drain rock in accordance with specification section 31 00 00-3.16.A. These trench drains will be left in place during micro-pile installation and remain below the mud slab. Water will be pumped out of these trench drains using sump pumps and/or routed to dewatering wells in accordance with specification section 31 23 19. Please confirm that this is acceptable.

Installation of these drains is acceptable with regards to geotechnical engineering as long as it does not incur any additional costs to the owner.

Installation of these drains is not an appropriate mitigation for CDSM walls which are not watertight as specified in Section 31 56 13 Chapter 3.12 ACCEPTANCE CRITERIA, Item F. "Watertight" is defined in this same specification section as "no continuous running or seeping water from the shoring wall."

We have not reviewed this with regards to conflicts with non-geotechnical subgrade features.

T-0311.1 **Modified French Drains Zones 3 and 4** **Closed** **03/04/2014** **03/14/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Due to the varying dimensions between the edge of mud slab and the face of the CDSM wall, WOJV requests that the currently specified width (24 inches) of the French drain be maintained as a minimum at all locations for Zones 3 and 4. As a result, the width of the drain may be up to 30 inches at the widest locations.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T-0312 **Proximity Inquiry as to Beale St. Bridge Pile Location** **Closed** **09/19/2012** **09/29/2012** **09/20/2012** **Potentially** ☐

From: Webcor Construction LP Kirk Nielsen **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Stacy Wilson

Co-Author:

REQUEST:

BBII's sheet 1/SH-2105 (BBII submittal TZ1030-015313A31.1) calls for the 48" diameter CIDH column to be located 21'-6" off 35-line along E-line. As per sheet A1-

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

RFI will not be responded to per submittal response TG0300-206 Temp Bridges- Beale Street Structural Drawings and Calculations.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

2817 (TG06) the proposed location would obstruct, requiring redesign of the reinforcement, the construction of the structural wall separating the (2) deep pits depicted on 1/S1-3007 (TG06) in room B2761. The location of the pits and the wall separating the (2) pits were always depicted on S1-2027 (TG03). May the aforementioned CIDH column be located as proposed?

T-0313 **Micropile Layout** **Closed** **09/13/2012** **09/23/2012** **09/20/2012** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents
Specification Section: 31 63 33
Drawings: ASI #0097

Per 9/12/12 Turner BSE Progress Meeting, Adamsons Associates(AA) requested BBII to submit a RFI requesting distance tolerances for the proposed micropile layout relocations. Please see BBII's verbage below in response.

The response comments provided to submittal TA1020-316333A12.2 (TG0300-622.2) for micropile stated that the submitted micropile layout was unacceptable, but that the micropile locations shown in the TG0600 (ASI 0097) documents are acceptable. The attached marked up coordination drawings show the locations of the TG0600 documents micropile locations compared to various overhead horizontal and vertical obstructions. The obstructions considered in this comparison include trestle pile and bracing; internal bracing struts, supports, and pin piles; bridge piles; and the buttress walls. The submitted micropile locations are also shown.

The equipment that will be used to install the micropiles require 2.5 feet clearance from the center of the micropile hole to surrounding obstructions. The circles and arrows on the attached drawing indicate which micropiles do not have the required clearance and which direction of shift is preferred. The maximum shift is 4 feet, which occurs when a micropile is located directly below an internal bracing

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is acceptable to use the first contractor-proposed approach (number 1), that of using the TG0600 documents for micropile layout and shifting the micropiles up to 4 feet, however such shifts will be subject to design verification and SEOR approval following our receipt of final proposed locations. Note that the shifting of micropiles shall adhere to submittal notes 2 and 3 on sheet ML-1 of Submittal TG0300-622.2 (TA1020-316333A12.2). Micropiles shall not be installed in the buttress shafts.

The alternative contractor-proposed approach (number 2), that of using the submittal (TG0300-622.2) layout and applying submittal notes 2 & 3 is not acceptable as the approach does not consider submittal note 1 (which addresses the density of micropile layout).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

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Please confirm that the micropile locations shown on the TG0600 documents are to be used for the micropile layout, and that a shift of up to 4 feet in the directions shown on the attached drawings is acceptable.

As an alternative, BBII would prefer to use the submitted layout which has fewer conflicts. Micropiles would be eliminated or added per notes 2 and 3 respectively on sheet ML-1 of the returned submittal. The submitted micropile layout contains 1858 each micropiles. The TG0600 documents contain 1860 each micropiles. By eliminating piles per comments 2 and adding piles per comment 3, the total quantity would be approximately the quantity in the TG0600 documents.

Please confirm which of the two alternative approaches to micropiles layout is acceptable, or if both approaches are acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0314	Permit Clarification	Closed	09/14/2012	09/24/2012	09/19/2012	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jack Adams

Co-Author:

REQUEST:

Reference Specification:
01 14 10 - 2 1.2A

Pursuant to specification section 01 14 10 - 2 1.2A, the Contractor is directed to obtain permits from the San Francisco Department of Building Inspection(DBI) for work including, but not limited to: Excavation, Structural, Architectural, Mechanical, Plumbing, and Electrical.

To date TJPA has been acting as the permitting authority, and has distributed permits for work contracturally required to be authorized by the DBI.

Please confirm that W/O is to obtain these permits through the TJPA, not the DBI.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This RFI is based on an incorrect reading of the Specification by the Contractor. Paragraph 1.2 states ¿ Application for permits, regulatory permissions, approvals, and request for compliance inspections shall be performed as follows and in accordance with Appendix A of this section (01 14 10/APA) and as stipulated in Section 00 07 00, General Conditions.¿

- Refer to specification 01 14 10/APA regarding application for permits.

- Specification section 01 14 10 Paragraph 1.2A actually requires the Contractor to obtain approvals from the San Francisco Department of Building Inspection, not permits.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0315	Performance Test Micropile Layout	Closed	09/17/2012	09/27/2012	09/27/2012	Potentially	☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Specification: 31 63 33
Reference Drawing: S1-2022

Drawing S1-2022 shows the Zone 1 performance test micropile on gridline E near gridline 2. BBII proposes to locate the Zone 1 test piles per the attached sketch. More than 1 test pile will be installed at this location. The additional test piles are to be installed at BBII's option for verification of design assumptions. They will be installed at no additional cost and will not take the place of any other test piles in other zones. Please confirm that it is acceptable to install the performance test micropiles at the locations shown on the attached drawing.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is acceptable to locate Zone 1 test pile and additional (at no additional cost) Zone 1 test piles in test pit area defined in attached RFI sketch. These micropile performance tests will only satisfy one of the required micropile tests in the specification.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0316	Becho's Request for Modification of Shafts T3.5 and T4.5	Closed	09/20/2012	09/30/2012	09/21/2012	Potentially	☐

From: Balfour Beatty Infrastructure, Inc. Ernie Cortez **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Specification Reference: 31.63.29
Drawing Reference: GT-2201

Reference attached Becho Letter BI-0271.

Becho recognized that the shaft installed on 9/13/12 (believed to be T3.5) was poured in the location of Buttress shaft T2.5. Attached is Becho's proposal to rectify the installation of Buttress Shaft T2.5.

Please confirm that Becho's proposal is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is acceptable. However, the shafts shall be placed symmetrically as shown on the drawings. That is, the overlap of the primary and secondary shafts shall be the same at each side. The Contractor's proposal to shift shaft T3.5 to the north is not acceptable.

T-0317 **Demolition and Excavation Limit Associated with the Sub Grade** **Closed** **09/21/2012** **10/01/2012** **09/27/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Joe Chapman **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Specification: 31-00-00
Reference Drawings: GT-2101, D-5100, S1-2022, M1-2022

Drawings D-5100 shows the demolition depth of the Test Buttress Shaft to EL -41.5', and the demolition depth of the 80 Natoma Piles to EL -44.5'. Please confirm that these elevations are sufficient for future trades, and slab depressions.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Contractor shall coordinate the depth of cutting / removal with the depth of earthwork required for mat slab depressions and / or the geothermal loop piping. The top of the Test Buttress Shafts shall be that required to receive the geothermal piping; the top of the 80 Natoma Piles shall be at least 1'-0" below the bottom of the geothermal piping.

T-0317.1 **BSE -Demolition and Excavation Limit Associated with the Sub Grade Follow-Up** **Closed** **10/01/2012** **10/01/2012** **10/09/2012** **Potentially** ☐

From: Webcor Construction LP David Fields **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

BSE Drawing M-0006 states that GHEX piping loops will be installed 12" below the mud slab.

Below Grade Drawing M-0006 (Issued with FO T-00010 R2) states that GHEX piping loops shall be installed 24" below
the mud slab, drop in elevation with the contours of any

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Demolish the drilled shaft prototype and the 80 Natoma shoring wall to 3'-0" below the subgrade elevation / bottom of mat elevation shown on the below grade package drawings.

depressions while maintaining 24" of depth, and offset where
required around Micropiles and Trestle Piles.

BSE Drawing D-5100 dictates a specific demolition depth of - 41.5' for the Drilled Shaft Prototype and - 44.5' for the 80
Natoma shoring wall.

Given the disparity above and the revision to pit locations within FO-00010 R2 W/O has detected the following conflicts
to Geothermal Piping Loops:

- 80 Natoma Shoring wall with Pit location at Gridline H-2 (- 44' - 9' Final Subgrade Elevation)

- Drilled Shaft Prototype (- 41' - 5" Final Subgrade Elevation)

Please specify a specific grade to demolish the aforementioned obstructions in order to avoid the GHEX piping loops
and advise as to any additional conflicts.

T-0317.2 **BSE - Buttress Demolition Limits Relative to Sub Grade Elevations** **Closed** **10/15/2012** **10/25/2012** **10/19/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Joe Chapman **To:** Turner Construction Compan Gary Krutsch **Answered By:** Arup Kevin Clinch

Co-Author:

REQUEST:
Please confirm that the demolition elevation limits within the response to RFI T-0317.1 also apply to the Zone 4 buttress shafts.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
This is correct.

T-0317.3 **BSE - Demolition of 80 Natoma Wall and Prototype Buttress Shafts** **Closed** **12/19/2012** **12/26/2012** **01/03/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jack Adams

Co-Author:

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Specification Reference: 02 41 01
Drawing Reference: D-2210

Demolition of the prototype shafts and the 80 Natoma CDSM wall are required in order to allow clearance for the geothermal piping. BBII proposes to only demolish portions of these structures which would interfere with the geothermal piping. The prototype buttress shafts would be demolished to elevation -41.42 with depressions cut out where the piping crosses. The 80 Natoma CDSM wall would be demolished to allow the piping to be installed. The CDSM piles would be otherwise cut off 4" below mud slab subgrade. See attached sketches.

Please confirm this is acceptable.

No. The excavation limits for BSE contractor 80 Natoma/Buttress prototype and CDSM prototype are to be demolished to a depth of -44'.5 in their entirety.

The demolition limits for BSE contractor are to be per contract. REF: BSE Drawing D-2210 and RFI 317.3 response.

CSM Prototype shoring wall -44'.5 +/- See D-2210 Note 10 for the entire length
CDSM 80 Natoma shoring wall -44'.5 +/- See D-2210 Note 11 for the entire length
80 Natoma Piles -44'.5 +/- See D-2210 Note 11 for the entire length
Buttress prototype shafts -44'.5 +/- See D-2210 Note 9: This is CHANGED from -41.5' (CR forthcoming) and is now to be demolished to a depth of -44'.5 for the entire length per this RFI series.

Additional Costs associated with ASI No. 0099 Field Order 08-04-CMGC-000-T-00014 which updated pit depths and locations impacting the Mat Slab (Transmitted to WOJV on 12/12/12) are a separate issue than this RFI.

REFERENCES:

BSE Drawing D-2210 and RFI 317.3 response.
BSE RFI 317.3 response.
BSE Drawing set Detail 5/S1-3003.Tolerances of final subgrade is +/- 0.5" per BSE Spec. 31-00-00 Para 3.17
ASI No. 0099 was issued to WOJV on 12/12/12 as Field Order 08-04-CMGC-000-T-00014 with updated pit depths and locations impacting the Mat Slab.
BGP Contractor Submittal Geothermal Piping TG0601-009 and BGP Trenching Spec. 31-23-34

T-0317.4 **BSE - Zone 4 Demolition and Excavation Associated with Sub Grade** **Closed** **06/18/2013** **06/28/2013** **07/08/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference RFI: T-0317.1, T-0317.2

Please confirm that demolition and excavation in areas of buttress shafts in Zone 4 shall be at the final subgrade elevation of 41' - 5". The Geothermal Subcontractor shall provide demolition and excavation for their geothermal piping in accordance with specification section 31 23 34.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Confirmed that Zone 4 Buttress removal area final subgrade elevation of 41' - 5" per BSE Contract drawing GT-2103.

Which Subcontractor provides "demolition and excavation for geothermal piping" is a CM/GC coordination issue.

NOTE:

1. Subgrade elevation of pits is per BSE Contract drawing GT-2103 as modified by FO T-00010 R2.

2. Demolition and excavation depths for geothermal piping is not found in specification section 31 23 34.BGP Contract drawing 4/M1-5002 and notes on BGP Contract drawing M-0006 provide detail on geothermal piping depths.

T-0318 **Verification of Sump Pit and Elevator Pit Locations and Dimensions** **Closed** **09/24/2012** **10/04/2012** **09/25/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Jeff Molloy **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Stacy Wilson

Co-Author:

REQUEST:

Reference Specification 31 00 00

The Below Grade Package drawings identify the depression required in the sub grade for future construction of elevator pits and sump pits. The below grade package drawings do not correspond with the Buttress, Shoring and Excavation (BSE) contract drawings for the location depth and size of the elevator and sump pits.

Please confirm the TG06 drawings supersede the TG03 drawings and should be used for construction.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The intent of releasing TGO600 drawings to the CM/GC was solely for coordination purposes between the Below Grade and Buttress/Shoring/Excavation trade packages.

Please proceed accordingly

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0318.1	Verification of Sump Pit and Elevation Pit Locations and Dimensions	Closed	10/03/2012	10/13/2012	10/03/2012	Potentially	☐

From: Balfour Beatty Infrastructure, Inc. Jeff Molloy **To:** Webcor Construction LP Joanne Filipas **Answered By:** Webcor Construction LP Joanne Filipas

Co-Author:

REQUEST:

Previous response to RFI 309 does not provide the information required for BBII to proceed. It is BBII intent to commence excavating sump and elevator pits per the initial Buttress, Shoring and Excavation contract drawings, unless clearly directed otherwise.

Please provide most current drawings that indicate elevator and sump pit locations.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to Field Order 10R2.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0319	CDSM Connection to Waler Breaks	Closed	09/25/2012	10/05/2012	10/01/2012	Potentially	☐

From: Balfour Beatty Infrastructure, Inc. Dean Wallahan **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

Pursuant to 9/25/12 2:34pm W/O / TCCO telephone conversation, please find attached BBII's RFI-314 Project RFI T-0319 CDSM Connection to Waler Breaks.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Due to file size response is attached.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0319.1	Request for evaluation of necessity of Northwest corner channels levels C&D.	Closed	10/10/2012	10/20/2012	10/11/2012	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

During the 10/10/12 MRP meeting ARUP indicated channels, pursuant to RFI response #T-0319, were not required at the Northwest corner levels C&D. Please confirm.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is correct.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0320	BSE - Ground Level Structural Beams at Gridlines 34 and 34.8	Closed	09/25/2012	10/05/2012	10/02/2012	Potentially	☐

From: Webcor Construction LP David Fields **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 100% Superstructure Package Drawings S1-2307, 1/S1-3206

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

S1-2307 calls out beam elevations on 1/S1-3662 and 1/S1-3663. Beam sections with dimensions are included on these elevation sheets.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

To coordinate the location of the Beale St. Bridge with future work please provide the dimensions for the Ground Level structural beams located at Gridlines 34 and 34.8.

T-0321 **Additional Excavation and Bracing Constraints at A Line and 301 Mission** **Closed** **09/26/2012** **10/06/2012** **10/05/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Dean Wallahan **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Pursuant to discussions with ARUP at the Turner weekly meeting held on September 12, 2012, BBII is requesting the following information regarding the additional excavation and bracing requirements along the A line adjacent to the western and eastern edges of 301 Mission:

-Limits of the work

-Sequence of demolition, excavation and bracing (waler and struts). ie .. do we excavate for installation of one strut or waler at a time or can we expose more than one strut or waler location concurrently.

-Wall support details, for example there were discussions as to maintaining a soil berm between different stages of the work. Please provide the width, height and length of berm or other support needed.

-Length of exposed wall area and duration of exposure

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Due to file size please find the response attached.

T-0321.1 **Additional Excavation and Bracing Constraints at A Line and 301 Mission** **Closed** **10/10/2012** **10/20/2012** **10/19/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Dean Wallahan **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

BBII would like to confirm the following direction received at TCCO's weekly meeting on October 10, 2012 in regards to the limits of the berm and sequence of work referenced in the response to RFI T-0321.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The sequencing of activities proposed by the Contractor adequately addresses our concerns regarding the Contractor's means and methods which in the other portions of Zone 3 have caused over 1.5

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

The following work will take place between CDSM beams 251 and 276 along the A-Line and the southern edge of Zone 3's trestle.

Demolition: Upon completion of the demolition and removal of the basement walls and footings BBII is to place an earth berm to elevation +10.00, extending 25 feet from the face of the CDSM wall into the excavation and having a 3:1 slope at the southern hinge point of the berm.

Bracing: Walers 24 and 48 as well as Struts 49 and 50 will be installed within a 6 working day window to address ARUP's concern of overexposure from the Millennium's Building's foundation pressure on the CDSM wall. During the installation of these walers and struts the berm as described in the demolition section above will remain between CDSM beams 260 and 271 until completion of the bracing of walers 24 and 48 and struts 49-50. The sequence will be repeated for installation of walers 25 and 49 as well as struts 51 and 52 with the exception of the earth berm easterly limit will be CDSM beam 276 (centerline of buttress A line pile).

inches of lateral movement into the excavation at locations where excavation has not even progressed past the first level.

Additionally, as discussed in the Movement Review Panel Meeting the morning of October 17, 2012, Arup asked the Contractor to consider excavation under the Fremont Street bridge to progress from south to north. The Contractor agreed that this would be beneficial and possible.

T-0321.1R **Additional Excavation and Bracing Constraints at A Line and 301 Mission REVISIO** **Closed** **10/26/2012** **11/05/2012** **10/26/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Dean Wallahan **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

BBII would like to confirm the following direction received at TCCO's weekly meeting on October 10, 2012 in regards to
the limits of the berm and sequence of work referenced in the response to RFI T-0321.

The following work will take place between CDSM beams 251 and 276 along the A-Line and the southern edge of Zone 3's trestle.

Demolition: Upon completion of the demolition and removal of the basement walls and footings BBII is to

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

This direction is consistent with the base contract documents and is solely the result of the action trigger levels experienced in Zone 3 as a result of BBII's excavation methods. Additionally, as discussed in the 10/17/12 MRP meeting, BBII agreed the excavation beneath the Fremont Street bridge was to progress south to north.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

place an
earth berm to elevation +10.00, extending 25 feet from the face of the CDSM wall into the excavation and having a 3:1
slope at the southern hinge point of the berm.

Bracing: Walers 24 and 48 as well as Struts 49 and 50 will be installed within a 6 working day window to address ARUP's concern of overexposure from the Millennium's Building's foundation pressure on the CDSM wall. During the
installation of these walers and struts the berm as described in the demolition section above will remain between
CDSM beams 260 and 271 until completion of the bracing of walers 24 and 48 and struts 49-50. The sequence will be
repeated for installation of walers 25 and 49 as well as struts 51 and 52 with the exception of the earth berm easterly
limit will be CDSM beam 276 (centerline of buttress A line pile).

T-0322 **BSE - Dewatering Pipe Termination at System Removal** **Closed** **10/03/2012** **10/13/2012** **10/08/2012** **Potentially** ☐

From: Webcor Construction LP David Fields **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Upon system removal, specification 31 23 19 (BSE Documents) requires the contractor to fill dewatering pipes with grout, cut, and cap to an elevation 36" below subgrade. Sheet A1-8711 (Below Grade Documents) shows in detail the final configuration of the dewatering pipes and requires that they are capped at 8" below Top of Mat Slab elevation.

Will Cutting and Capping of the dewatering pipes be required at 36" below subgrade?

Assuming the dewatering pipes will be cut and capped at 8" below Top of Mat Slab elevation:
Is it acceptable to have a void space in the abandoned

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractor shall follow the details on sheet A1-8711 of the Below Grade Package.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

dewatering pipes between the grout terminating 36" below subgrade elevation to the Bentonite at 14" below top of mat slab?

T-0322.1 **BSE - Dewatering Pipe Termination at System Removal Follow-Up** **Closed** **10/08/2012** **10/18/2012** **10/10/2012** **Potentially** ☐

From: Webcor Construction LP David Fields **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

In follow up to RFI T-0322:

Upon dewatering system removal BSE Specification 31 23 19 3.9 requires that abandoned piping be filled with grout to an elevation of 36" below subgrade elevation consistent with the originally specified cut and cap elevation. Below Grade Drawing A-8711 does not specify a grout requirement for the dewatering pipes.

Is it acceptable to have a void space in the abandoned dewatering pipes between the grout terminating 36" below subgrade elevation to the Bentonite at 14" below top of mat slab consistent with the current contract documents?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

No, a void space is not acceptable. The abandoned dewatering pipes are to be grout filled per specification 31 23 19. Follow detail 6/A1-8711 for dewatering pipe steel sleeve, waterproofing and mat slab block out. When the dewatering system is removed, the dewatering pipes are cut off, fully grouted to bottom of the block out and bentonite installed for the last 4" to the top of the sleeve. The a steel cap assembly is welded to the top of the sleeve and the mat slab block out grouted.

T-0323 **Modification of E-line Due to Shortened Shaft E3** **Closed** **10/03/2012** **10/13/2012** **10/03/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ernie Cortez **To:** Turner Construction Compan Gary Krutsch **Answered By:** Arup Stephen McLandrich

Co-Author:

REQUEST:

Reference attached Becho Letter BI-0282.

An obstruction, believed to be the abandoned D3 casing was encountered during the excavation of Buttress Shaft E3. Please see attached proposal from Becho. We are requesting an expedited response, preferably by 3:00PM 10/3/12.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The plan outlined in Becho Letter BI-0282 is acceptable.

Webcor/Obayashi Joint Venture

PROJECT MANAGEMENT - REQUEST AND ANSWERS LOG

30100 - Transbay Transit Center Project

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0323.1	BSE - Modification of E-line Due to Shortened Shafts	Closed	10/22/2012	11/01/2012	10/24/2012	Potentially	☐

From: Webcor Construction LP David Fields **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Due to Buttress Shafts D1, E1, and E3 all being installed prior to Bedrock please confirm what if any further action is required.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Install "E4" with the 18" overlap on shaft E3. Place 6000 psi mix (#960PC3Z3).

Additional instruction regarding shaft D1 and possible augmentation of shaft E1 will be forthcoming pending analysis

---

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0323.2	Modification of E-Line Due to Shortened Shaft E3	Closed	10/25/2012	11/04/2012	10/26/2012	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Per discussion at 10/25/12 Daily Buttress Meeting, please verify as to whether or not rebar needs to be installed in shaft E4.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Rebar does not need to be installed in shaft E4.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0323.3	Modification of E-Line Due to Shortened Shafts	Closed	10/25/2012	11/04/2012	10/29/2012	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawing: GT-2201
Reference Specification: 31.63.29

Per RFI T-0323.1 Shaft E4 has been added with an 18" overlap on Shaft E3.

BBII considers drilling E4 tangent to E3 in order to avoid casing left in D3.

Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Install shaft as previously directed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0323.4	BSE - Confirmation of Buttress E-4 Installation	Closed	01/17/2013	01/27/2013	01/18/2013	Potentially	☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Kirk Nielsen **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

Reference Drawing: GT2201

Please confirm the verbal direction given after the 1/17/13 8:30 Buttress Meeting that shaft E-4 is to be tangential rather than secant as described in RFI response #T-0323.1.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed. Supplemental shaft E-4 shall be install tangential to shaft E-3, with full penetration into bedrock, and with 6 ksi concrete.

T-0324 **BSE - Field Order T-00010R2 - Clouded Revisions** **Closed** **10/04/2012** **10/14/2012** **10/15/2012** **Potentially** ☐

From: Webcor Construction LP Joanne Filipas **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Stacy Wilson

Co-Author:

REQUEST:

Reference: Field Order T-00010R2, TJPA CADD Standards Manual dated 15Nov10 and Sheet A1-8711 attached.

Field Order T-00010R2 included the TG06 Below Grade IFC drawings and specifications. It is unclear what revisions are to be incorporated by the TG03 contractor as the revised drawings do not included revision blocks and clouds consistent with the TJPA CADD Standards. For example, sheet A1-8711 (attached) was Issued For Construction with the TG03 BSE package. The revisions to this drawing through the design development and issuance with the TG06 bid/construction set are not clouded and the revision block does not include all previous revision descriptions. The revision block on the final Issued for Construction drawing should read as follows and all changes from the Rev 0 IFC issuance should be clouded in accordance with the TJPA CADD Standards:

No Date Description
Ä0 12/10/2010 Issued For Construction - Buttress/Shoring/Excavation
ÄA 4/18/2012 Issued for Bid - Below Grade Package
ÄB 8/17/2012 Issued for Bid - Below Grade Package - Addendum #2
Ä1 8/30/2012 Issued for Construction- Below Grade Package

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Issued For Construction drawings and specifications adhere to the TJPA CADD standards. Revision blocks and clouds are not used between Issued for Construction and Issued for Bid drawings. Furthermore, [For Reference Documents] may not require revision blocks and clouds; refer to Figure 6-1 of the TJPA CADD standards manual regarding SD and DD revision sets as an example. Contact the TJPA engineering staff regarding proper interpretation and use of the TJPA CADD standards. A workshop can be offered for project participants to provide clarity in drafting and CADD requirements.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please confirm any previously issued IFC drawings that have since been revised will be re-issued consistent with the TJPA CADD standards. Also, please confirm all packages going forward will be in accordance with the TJPA CADD standards revision provisions.

T-0324.1 **Field Order T-00010R2 - Clouded Revisions** **Closed** **10/17/2012** **10/27/2012** **10/23/2012** **Potentially** ☐

From: Webcor Construction LP Kirk Nielsen **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Stacy Wilson

Co-Author:

REQUEST:

In follow up to RFI response #T-0324 and the 10/17/12 BSE meeting it was clarified by AAI that what W/O was requesting in RFI #T-0324 was actually a "revision set for TG03". Please provide.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per Ed Sum, TJPA: "No"

T-0325 **BSE - Excavation Sequence Relative to Installation of Struts 10 & 11** **Closed** **10/05/2012** **10/15/2012** **10/11/2012** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

In an effort to expedite the installation of struts 10 & 11 at level D to help reduce eastward movement of the A-line wall, BBII proposes the following:

Excavate to level D for struts STD-10 and STD-11, and notch along the wall so that waler WD-05 may be installed, leaving the berm present beyond the notch. Excavate on the south side to the end of waler WD-67. Excavation to install strut STD-12 will proceed once enough struts have been installed at level C to advance the level D excavation to strut STD-12 per the specifications.

A sketch has been attached for reference. Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

We cannot respond to this RFI as the sketch shows an unsafe slope at the excavation.

T-0326 **Available Power Source for First Street Traffic Signal** **Closed** **10/15/2012** **10/25/2012** **10/19/2012** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jack Adams

Co-Author:

REQUEST:

First Street Bridge Temporary Traffic Signal is due to be activated on 10/24/2012. The traffic signal controller cabinet requires electrical power to activate the signal. Being that BBII will not be drawing power off site temporary power (Skids 3 and 4), please advise and provide direction for the use of an available power source.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Specification 01-53-13 for Temporary Bridge does not require Traffic Signals at Trestle/Bridge intersection.

Existing Traffic Control (Cristy Box) infrastructure available in the north sidewalks of both First and Fremont Street. These are the closest traffic control infrastructure from the Temporary Bridges with conduit/boxes that contained previous traffic control signal wiring. There is also existing Traffic Control (Cristy Box) infrastructure available at the intersection with Howard Street.

First Street Bridge: WOJV Contract (RUP Project) did remove and salvage traffic signaling equipment and protected the infrastructure (boxes, conduits under sidewalk). Refer to RUP Drawing U-3301. Therefore believe it is in Webcor/BBII's scope to determine the best available power source.

Fremont Street Bridge: WOJV Contract (RUP Project) did remove and salvage traffic signaling equipment and protected the infrastructure (boxes, conduits under sidewalk). Refer to RUP Drawing U-3302. Therefore believe it is in Webcor/BBII's scope to determine the best available power source.

All work performed shall meet Specifications particularly with regard to sidewalk and street restoration upon install of underground electrical (conduits etc.)

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0327	GRD - Ground Rod Placement	Closed	10/16/2012	10/26/2012	10/31/2012	Potentially	☐

From: BASS Electric Jerry Brys **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

There are no dimensions shown for placement of the ground rods. Should we scale off the drawings or will a drawing be produced reflecting dimensions?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The placement of the ground rods and the ground ring does not require exact dimensioning. The ground rods are regularly spaced around the building perimeter at the building column lines approximately forty five feet on center. The rods are shown approximately two feet

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

inside the foundation wall, but they can be closer to the foundation wall if the layout is coordinated with the geothermal system piping, micropiles and foundation wall supports.

Per Section 26 05 01, provide Contractor's Coordination drawings for review.

T-0328 **BSE - Re-Bracing Elevations** **Closed** **10/17/2012** **10/17/2012** **11/01/2012** **Potentially** ☐

From: Webcor Construction LP David Fields **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Drawing GT-1112 stage 13 shows a maximum of 16' or 17' between level B struts and the lower level of rebracing. For Case West, level B supports are at elevation -3 ', resulting in the lower level of rebracing supports at elevation -20'. Internal bracing drawing sheet SH-4000 shows W21 strut support members on the underside of level C bracing. In order to install the lower level rebracing and accommodate the existing level C bracing, the lower level bracing will need to be installed at elevation -22'.

Similarly, the top level of rebracing is called out in stage 15 to be 3' below level A bracing. Top level rebracing will need to be 5' below level A bracing in order for struts to be clear of the overhead strut supports.

Please confirm that the 17' and 16' maximum dimensions in stage 13 and 3' maximum dimension in stage 15 will not be required if the rebracing design calculations show that it is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Constructructability issues shall be reviewed by Webcor / Obayashi. This is acceptable pending review of submittal.

T-0329 **BGP - Proposed Construction Joint Layout** **Closed** **10/24/2012** **11/03/2012** **10/31/2012** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference sketches: SCCI #1, SCCI #2

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Proposed construction joint between gridlines G & K

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Reference Drawing: S-0007
Reference Specification: 03 30 20

Per note CJ-2 on sheet S-0007 No horizontal construction joints will be permitted unless specifically shown in the drawings or approved in writing. Please confirm that the longitudinal construction joint shown between gridlines G and K is acceptable as it follows the micropile construction sequence and it will help the schedule with re-bracing in the Southwest Corner.

(assumed to be along grid J) is acceptable for the mat and Lower Concourse slab, however, please note the following comments:

1. Proposed construction joint(s) is not a horizontal joint.

2. Mat Pour Layout:
a) Per spec 03 30 20 3.2.B.1, joints in slabs "...shall be located within the central third of the span."
b) Per spec 03 30 20 3.2.A.4 "Foundation wall, lower concourse floor slab, and ground floor construction joints shall align with the location of the mat slab joint below."

3. Lower Concourse Pour Layout:
a) Per spec 03 30 20 3.2.A.4, max spacing of construction joint in Lower Concourse slab is 60 ft.
b) See comment 2a.
c) See comment 2b.

4. These proposed construction joints shall be included in a submittal per specifications.

T-0330 **BSE - Mud Slab Vapor Retarder** **Closed** **10/30/2012** **11/09/2012** **11/09/2012** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawing : A1-8711 S1-3003
Reference Specification: 03 30 00

Specification 03 30 00.3 .I.E, Vapor Retarder Placement:: See Division 7, Thermal and Moisture Protection, describes installation of vapor retarder. Specification 03 30 00.3 .4.A.13 states "Place vapor retarder directly below slabs on grade as specified in contract documents."

Vapor retarder is not referenced on Detail 5, Mud Slab Detail, on sheet S1-3003, or on any of the slab penetration details on sheets A1-8711 and S1-3003 .

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Vapor Retarder is not required for the Mud Slab.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please verify whether or not vapor retarder is required.

T-0331 **BGP - Geothermal Maximum Horizontal Loop or Ground Loop Zone Length** **Closed** **10/31/2012** **11/10/2012** **11/05/2012** **Potentially** ☐

From: Webcor Construction LP David Fields **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Gary Krutsch

Co-Author:

REQUEST:

Reference: 23 57 34

Please confirm that there is no restriction on GHEX Horizonal Loop or Ground Loop Zone length.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

There is no maximum length for the headers. Most headers should be roughly the same length, the headers are set up in reverse return fashion to allow for self-balancing of the loops. All headers will ultimately be balanced at the entrance to building allowing for some variation in header length to accommodate building entrance locations.

All loops on a single header should be the same length. The number of loops attached to a single header has been limited to 10.

T-0332 **BSE - Micropile W203 Relocation** **Closed** **11/01/2012** **11/11/2012** **11/02/2012** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Micropile 203 as laid out is too close to a piezometer well. BBII proposes moving pile W203 East 4'-9.5" and South 1 '-.75". See attached sketch.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Thornton Tomasetti does not object to moving Micropile 203 as proposed.

T-0333 **BSE - Utilization of the Mat Slab for Re-Bracing Reactions** **Closed** **11/01/2012** **11/11/2012** **11/07/2012** **Potentially** ☐

From: Webcor Construction LP David Fields **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

SUGGESTION:

ANSWER:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Is utilizing the mat slab for re-bracing reactions (via rackers) acceptable provided it meets the provisions set forth within 31 55 00 1.5 Q in regards to connections, penetrations, imbeds, and restoration?

Accept Suggestion: ☐

Structurally, it is acceptable to utilize the mat slab for re-bracing provided provisions in specification article 1.5.Q are met as well as specification article 1.5.R, which shall also apply for the mat (i.e. reactions shall not exceed capacity of mat). Submit re-bracing for review per submittal process, including calculations that show reactions onto permanent structure do not exceed capacity of permanent structure.

Contractor shall outline to TJPA if there will be a cost and schedule reduction for this Proposed Alternate. Contractor shall outline any perminent impact on the finished building related to this proposal. See specification requirements regarding Proposed Alternates.

Contractor shall submit further information on this Proposed Alternate for review prior to full acceptance of this direction.

T-0333.1 **BSE - BSE - Utilization of the Mat Slab for Re-Bracing Reactions Follow-Up** **Closed** **11/07/2012** **11/17/2012** **11/13/2012** **Potentially** ☐

From: Webcor Construction LP David Fields **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

Response to RFI T-0333 stipulates that the contractor:

"..submit further information on this proposed alternative.."

This statement implies that the utilization of the mat slab for rebracing reactions is a deviation from what is required by contract. Please identify the primary method the rebracing design is to employ in order resist gravity, seismic, or other additional loading to be resisted and/or provide restraint against buckling, torsion, or other function as necessary per the design to provide required capacities of elements.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

VOID

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0333.2	BSE - Utilization of the Mat Slab for Re-Bracing Reactions Follow-Up	Closed	11/09/2012	11/19/2012	11/20/2012	Potentially	☐

From: Webcor Construction LP David Fields **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

RFI T-0333 inquired if utilizing the mat slab for re-bracing reactions was acceptable provided it meets the provisions set forth within 31 55 00 1.5 Q in regards to connections, penetrations, imbeds, and restoration.

The response stated that structurally it was acceptable provided the contractor outline if there will be a cost and schedule reduction pursuant to the specification requirements for "Proposed Alternatives". W/O is unable to locate a specification provision for "Proposed Alternatives" in the TG03 or TG06 contract documents.

Is utilizing the mat slab for rebracing reactions acceptable pursuant to the TG03 or TG06 contract documents?

If acceptable, please identify the specification section for "Proposed Alternatives" within the TG03 or TG06 documents so cost and schedule reduction proposals can be provided pursuant to the applicable requirements.

Additionally, please identify the TG03 and/or TG06 contract requirements for secondary bracing (31 55 00 1.3D) geometry.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

TT Response: As stated in the original RFI T-0333 response, "...specification article 1.5, which shall also apply for the mat (i.e. reactions shall not exceed capacity of mat). Submit re-bracing for review per submittal process, including calculations that show reactions onto permanent structure do not exceed capacity of permanent structure."

URS Response: If the load capacities to be provided by re-bracing elements are less than the design loading for bracing elements removed, then speficically identify this in the re-bracing submission. Any reduction of this loading requires specific explanation and specific review and approval.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0334	BGP - Catch Basin Elevation at Gridlines 14 and B.3.	Closed	11/01/2012	11/11/2012	11/02/2012	Potentially	☐

From: Webcor Construction LP David Fields **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: A1-2814

Please provide the elevation for the catch basin located along gridlines 14 and B.3.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

At gridline 14 and B.3, Catch Basin Elevation is TOC - 37'-8" and the adjacent Sump Pit Elevation is TOC - 39'-8".

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0335	BGP - Contract Bury Bar for Support	Closed	11/05/2012	11/15/2012	11/10/2012	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference Specification: 03 30 00

Please confirm it is acceptable to displace a top mat 4th layer contract reinforcing bar and a bottom mat 2nd layer contract reinforcing bar one bar diameter every 6' - 0" +/- oc to support the mat reinforcing. A sketch is attached for reference and to graphically represent the proposed bar configuration.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is not acceptable to displace/deviate mat rebar from contract layout.

NOTE: The RFI sketch does not graphically represent the orientation of mat reinforcement. See "Mat Bottom Rebar Notes" on S1-2022 and "Mat Top Rebar Notes" on S1-2052 as well as detail 3/S1-3005 for orientation of layers of mat reinforcement.

T-0336 **BGP - Wall Dowels Standard Hooks** **Closed** **11/05/2012** **11/15/2012** **11/10/2012** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Specification: 03 20 00
Reference Drawings: SI-3201

Contract drawing S1-3201, Section 1 depicts the #11 vertical wall dowels with a terminator, typ. embedded into the mat foundation rather than a standard hook. Shimmick is requesting the option to utilize a #11 standard hook (1' - 7") orientated inward or a terminator as shown at these locations. Please verify that either option is acceptable for use.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractor-proposed #11 standard hook for wall vertical bars is not acceptable as the inside wall bar would need to be hooked towards the outer bar and would result in congestion. Please provide vertical wall bars with terminators per contract drawing.

T-0337 **BGP - Bottom Mat Reinforcing Clear Cover to Edge** **Closed** **11/06/2012** **11/16/2012** **11/12/2012** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Specification: 03 30 00
Reference Drawings: S1-3201

Contract drawing S1-3201 depicts the clear cover to the mat reinforcing as 6" along the edge. Please verify it is acceptable to extend the bottom mat reinforcing closer to the edge such that the clear cover along the edge is 2", the same as it is for the vertical wall reinforcement.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractor - proposed modification to clear cover at mat edge is not acceptable as it would result in a congestion condition. Please provide contract drawing clear cover.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0338	BGP - Mat Reinforcing Clear Cover, Exterior Face Wall Vertical Clear Cover.	Closed	11/06/2012	11/16/2012	11/10/2012	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Specification: 03 20 00
Reference Drawing: S1-3001 / S1-3201

Please confirm the clear cover to the bottom mat reinforcing is 3" as called out on contract drawing sheet S1-3001, typical detail 5. Additionally please verify if the outside face vertical reinforcing bars can be lifted such that clear cover to this bar is 6" from the concrete below as it is for the inside face vertical bar as depicted on contract drawing S1-3201.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The 3" clear cover listed in detail 5/S1-3001 is for "concrete cast against and permanently exposed to earth", which does not apply to the mat. Bottom mat reinforcement clear cover is confirmed to be 3" per "Mat Bottom Rebar Notes" (note 7) on S1-2022.

The outside face vertical reinforcement bars may not be lifted. Provide contract drawing clear cover.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0339	BGP - Wall Reinforcing Clear Cover	Closed	11/06/2012	11/16/2012	11/15/2012	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Specification: 03 20 00
Reference Drawing: S1-3201

Contract drawing sheet S1-3201 depicts extent lines showing the 2" clear cover to the vertical wall reinforcing bars. Please confirm that the cross ties will infringe on the 2" clear cover and that the design intent is to maintain the clear cover to the main vertical reinforcing.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The 2" clear cover to the vertical wall reinforcement on S1-3201 is confirmed.

The cross ties do occupy space within the 2" clear cover as depicted in section 1 and 4 on S1-3201.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0340	BGP - IDEA Machine	Closed	11/06/2012	11/16/2012	11/15/2012	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Specification: 03 20 00
Reference Drawings: N/A

Shimmick would like to request the use of the Schnell IDEA Machine. The IDEA Machine pre-assembles grade beam, columns or other "boundary" type elements by a process of resistance welding three (3) 1/4" ASTM 82 wires to the ASTM A706 reinforcing ties. This process provides a more secure and accurate tie configuration with

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It will be acceptable to use contractor-proposed use of machine-welded holding wires to column ties and beam stirrups only provided the following conditions are met:

1. Column ties and beam stirrups must be ASTM A706.

2. Holding wire bars shall conform to ASTM A82 or

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

a more effective and timely installation. Attached is CRSI's engineering data report #53 which provides an in-depth explanation of the process as well as their acceptance of the same. Also attached is a reference list of recent projects where this process has been approved and utilized as well as a testing report from Christensen Materials Engineering. Please confirm if this is acceptable.

A496.

3. Holding wires are only allowed to be welded to column ties and beam stirrups #5 or smaller.

4. Holding wires are not to eliminate any longitudinal bars or interfere with flow and placement of concrete.

5. Verification tests: Contractor shall submit results of verification tests conducted during the month of tie/stirrup production from a Certified Testing Laboratory for review. Tests shall be performed on 3 samples of bar sizes to match project conditions. Samples shall have a gage length of 24 bar diameters with the holding wire weld located in the middle quarter of the length. Test the samples in tension and report elongation of the sample at fracture, the location of the fracture and the type of fracture. Test and production bars to be welded shall be ASTM A706.

6. Production tests: If verification tests are acceptable, production tests will be required only if there is deviation from the accepted process or if the inspector identifies potential defects.

7. Fabrication shall conform to the following:

a.) Holding wire welds shall be located a minimum of 2 tie/stirrup diameters away from bends and/or cold-worked regions of stirrups.

b.) Maintain a minimum clear cover from the face of the concrete to the ties/stirrups as noted on the drawings and maintain clear cover to holding wire as required by ACI 318.

c.) If field installation requires adjustment of tie/stirrup locations due to mis-coordination or mis-placement, adjustments/corrections shall be responsibility of Contractor.

d.) Holding wires shall be located a minimum of 2 inches clear from main longitudinal bars.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

e.) Longitudinal steel may NOT be welded to ties/stirrups.

8. Submit this weld procedure with applicable concrete reinforcement submittal.

T-0341 **BGP - One Piece Ties** **Closed** **11/06/2012** **11/16/2012** **11/10/2012** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Shimmick would like to request the use of the "one-piece" or "serpentine" ties at this project. These ties are made by an automatic bender that bends a column or boundary element tie from one continuous piece of rebar. The end result is the same perimeter and cross tie configuration as the design in the contract documents. Please confirm if this procedure is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The contractor-proposed approach to use "one-piece" / "serpentine" ties is acceptable as long as contract document rebar configuration is provided. Submit per reinforcement submittal process

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T-0341.1 **BGP - Type D8 Column Serpentine Ties** **Closed** **12/04/2013** **12/11/2013** **12/10/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please refer to drawing S1-3305 and RFI T-0341.

The response to RFI T-0341 accepted the use of one-piece/serpentine ties for the columns as proposed by Gerdau. Gerdau has found that the fabrication of a single piece serpentine tie for the type D8 column could pose safety risks. Therefore, Gerdau is proposing to fabricate the type D8 column ties with two pieces of serpentine ties. See the attached Gerdau sketch SK- T-0341.1 for details.

Please confirm the alternate serpentine ties as shown in the attached sketch is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
12/9/2013
RESPONSE:
Proposed serpentine tie configuration for Tie Type D8 will conflict with anchor bolts for the steel column above. Refer to Sheet S1-3305 for the design tie configuration for Column C7 (Tie Type D8). However, proposed Serpentine tie configuration can be used up to an elevation within the column where anchor bolts are not present. Where anchor bolts are present, loose ties that confirm with the design configuration shall be used to clear the anchor bolts. Note the following anchor bolt embedment lengths for different anchor bolt configurations:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

- For Column C7 with Type T anchor bolts, anchor bolts are embedded 3'-8" from the top of the Lower Concourse Moment Frame beam.
- For Column C7 with Type TT anchor bolts, anchor bolts are embedded 6'-8" from the top of the Lower Concourse Moment Frame beam.
- For Column C7 with Type TTT anchor bolts, anchor bolts are embedded 20' from the top of the Lower Concourse Moment Frame beam.

See Sheet S1-5051 for further information on anchor bolts.
Also, per RFI T-0924, it is acceptable to eliminate/lower column cross ties that interfere with the shear key block out. (Ties and hoops that do not interfere shall remain.) This information should also be considered in finalizing the detailing/fabrication of the column ties near the top of the concrete columns.

T-0342 **BGP - Mat Slab Reinforcing and Lap Ratio** **Closed** **11/06/2012** **11/16/2012** **11/20/2012** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

In follow up to the 10/31/12 Value Engineering prosal meeting, please confirm it is acceptable to change the grade 60 #11 bars to grade 75 #10 bars in the mat slab reinforcing.

Please provide the increased lap ratio required for the change in grade and bar size.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is structurally acceptable to change the grade 60 #11 bars to grade 75 #10 bars for the mat slab reinforcement.

Tension lap splice length for #10, grade 75, category 1*, top bars*, f'c 5 ksi = 115 in.
Tension lap splice length for #10, grade 75, category 1*, other bars*, f'c 5 ksi = 89 in.

(* = See 1/S1-3001 for notes/definitions)

Per discussion at 11/16/12 VE meeting, CR for VE items will be issued in the future.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0343	BSE - Micropile W072 Relocation	Closed	11/09/2012	11/19/2012	11/12/2012	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Micropile W072 as laid out is too close to overhead strut support BA-29. BBII Proposes moving pile W072 East 1' to provide adequate clearance See attached sketch.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Thornton Tomasetti does not object to moving Micropile 072 as proposed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0344	Micropile W073 and W074 Relocation	Closed	11/12/2012	11/22/2012	11/13/2012	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Micropiles W073 and W074 as laid out are too close to overhead strut support BA-28. BBII proposes moving pile W073 West 2' and North 0.5' and pile W074 East 2' and South 0.5' to provide adequate clearance. See attached sketch.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Thornton Tomasetti does not object to moving Micropile 073 and Micropile 074 as proposed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0345	BSE - CDSM Wall Parallel Stiffness for Bridge Design	Closed	11/13/2012	11/23/2012	11/15/2012	Potentially	☐

From: Balfour Beatty Infrastructure, Inc. Ural Yal **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Specification Reference: 01 53 13.1.3D

BBII has recently received information in a non bridge design related correspondence that could impact the already designed, permitted, and constructed First and Fremont St. Bridges. In an ARUP memo dated October 5th, 2012 bullet #2 states:

"The Contractor has verbally attested that they designed the diagonal corner braces using an interpretation of Note 11 on sheet GT-1111 which yielded a key assumption which is that the CDSM wall is infinitely strong and infinitely stiff. This assumption is an inaccurate and unreasonable interpretation of this note and in no way does the note infer this".

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to Note 5 on GT-1111 which requires the Contractor to analyze the soldier piles if the soldier piles are subjected to loads other than those shown on the drawings. Refer to the Contract Documents for the design strength of the CDSM material.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Although this comment is in reference to the internal bracing design, it also relates to the temporary bridge design. As noted on page 156 of the First and Fremont St Bridge structural calculations (attached), this same interpretation of note 11 on GT-1111 was used for the abutment shear key design. The Bridges have been designed, reviewed and approved by DPW under with the assumption that no additional deformation occurs at the base of the abutments. If in fact the CDSM wall is truly NOT infinitely strong or infinitely stiff parallel to the wall, BBII requests a value from the CDSM engineer of record that can used in our re-evaluation of the First and Fremont Bridges to ensure the existing design remains in compliance with the design criteria. Additionally this value would be used in the re-design of the Beale St. Bridge.

T-0346 **BGP - Mat Slab Maximum Aggregate Size** **Closed** **11/15/2012** **11/25/2012** **11/21/2012** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Specification Reference 30 30 20

Shimmick is requesting approval of 1 inch nominal maximum aggregate size in lieu of the 3/4 inch nominal maximum aggregate size for the Mat Slab concrete. Shimmick's backup data indicates that concrete made with larger aggregate size (1 inch instead of 3/4 inch) produces lower drying shrinkage values mainly due to a reduction in the water consumption of the mix and a reduction in paste content.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractor-proposed use of 1" nominal max aggregate size for the mat slab concrete is acceptable. Submit mix designs through submittal process.

Jeff Thiel Per discussion at 11/16/12 VE meeting, a CR for VE items will be issued in the future.

T-0347 **Trim Steel Requirements for the Mud Slab** **Closed** **11/19/2012** **11/29/2012** **11/29/2012** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Reference Specification: 03 20 01
Reference Drawing: S1-3003

Please confirm that trim steel will not be required. If trim steel is required, provide the details for trim in the 4" mudslab where the #4 bars @ 18" are interrupted. Please reference the attached sketch.

RFI question is not clear and is inconsistent with the referenced documents. Revise and resubmit the RFI with a clear question.

The mud slab is scope for Package TG03 in which the rebar shop drawing (TG0300-340.0, Item TZ1020-032001A06.0) has already been approved. The referenced specification does not apply to the mud slab.

T-0347.1 **BSE - Mud Slab Trim Rebar** **Closed** **12/12/2012** **12/22/2012** **12/18/2012** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Submittal: TG0300-340
Reference Sketch: 12B035_SK-1

Upon further review of contract requirements subsequent to the approval of the mud slab rebar shop drawings (TG0300-340) it does not appear that trim steel is required for penetrations in the mud slab.

Please confirm that trim steel at penetrations in the mud slab will not be required pending submission of a follow up "For Record Only" mud slab shop drawing submittal.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Trim steel at penetrations in the mud slab will not be required.

T-0348 **BSE - Micropile W235 Relocation** **Closed** **11/20/2012** **11/30/2012** **11/20/2012** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Micropile W235 as laid out cannot be effectively installed from the Trestle. BBII proposes moving pile W235 North 2' to provide adequate clearance. See attached sketch.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Thornton Tomasetti does not object to moving Micropile 235 as proposed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0349	BGP - Construction Joint Layout	Closed	11/20/2012	11/30/2012	11/21/2012	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

Reference Specification: 03 30 20.3.2.A.3

Per specification 033020.3.2.A.3 the maximum construction joint spacing in the mat slab is 120 feet (E/W direction), 3.2.A.4 maximum construction joint spacing in the foundation wall, lower concourse slab, ramp slab, interior walls,and the ground floor concrete slab is 60 feet. Foundation wall, lower concourse floor slab, and ground floor construction joints shall align with the location of the mat slab joint below and 3.2.B.1 construction joints in floor slab shall be located within the central third of the span. Due to the moment frames along grid lines V, W, and X being angled Shimmick see's the attached drawings as the only viable contruction joint layout to comply with all set forth specifications. Please advise if the mat slab, foundation wall, and lower concourse construction joint layout is acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

RFIs shall be used for interpretation or clarification of the Contract Documents. RFIs requesting acceptance of items required to be submitted through the submittal process are inappropriate for the RFI process and will be rejected.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0349.1	BGP - Construction Joint Layout	Closed	11/26/2012	12/06/2012	12/07/2012	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Per specification 03 30 20.3.2.A.3 the maximum construction joint spacing in the mat slab is 120 feet (E/W direction), 3.2.A.4 maximum construction joint spacing in the foundation wall, lower concourse slab, ramp slab, interior walls, and the ground floor concrete slab is 60 feet. Foundation wall, lower concourse floor slab, and ground floor construction joints shall align with the location of the mat slab joint below and 3.2.B.1 construction joints in floor slab shall be located within the central third of the span.

Due to the beam configurations at the South West radius of the train box the following deviations from the aforementioned requirements will be required:

1.) A construction joint will need to pass through a Moment Frame Beam along Grid Line X near Grid Line H in the attached sketch.

2.) Slab construction joints at two locations will not align

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Q1.) Contractor-proposed construction joint through the Lower Concourse MF beam is acceptable provided it is located in the middle third of beam span.

Q2.) Construction joints shall align with mat slab and wall construction joints.

Additional comments:

A.) The mat construction joint at GL 1-J shall align with a wall construction joint.

B.) Include overlay of trestle pier layout in formal joint layout submittal.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

with the mat slab or wall construction joints along the radius wall between Grid Line Wand Grid Line 5.

Please confirm these proposed deviations would be acceptable pending evaluation of a full contract joint location submittal.

T-0350 **BGP - Mat Slab Penetration Waterproofing** **Closed** **11/21/2012** **12/01/2012** **11/28/2012** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Specifiction Reference: 07 12 10
Drawing Reference: A1-8711

Please reference Drawing Sheet A1-8711, Laurenco E-Mail and Stamped Shop Drawing Details. Penetration details on drawing sheet Al-8711 call for 4 inch wide butyl tape to wrap around the mat slab penetrations prior to pouring of the mud slab. The specifications call for all shop drawings to bear the manufacturer's stamp of approval. Laurenco (manufacturer) has indicated that they require the butyl tape to extend 4 inches minimum past the top of the mud slab. Please review and advise as this does not match the as bid details.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

As recommended by the waterproofing manufacturer's (Laurenco) specifications and written recommendation for the waterproofing system as you outline in the RFI question, the TJPA representative does not object to extending the butyl tape 4 inches minimum past the top of the mud slab.

T-0350.1 **BGP - Mat Slab Penetration Waterproofing** **Closed** **12/06/2012** **12/16/2012** **12/13/2012** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Specification:07 12 10
Reference Documents: A1-8711

Futher to the engineers response to RFI T-0350, the extension of the butyl tape conflicts with the casings that are required around the dewatering wells, trestle piles, bridge piles, and pin piles. Please provide revised details at each of the aforementioned locations to accommodate

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For details 2, 3 and 5 on A1/8711 the butyl tape can extend 4" above the mud slab. However on details 4 and 6 on A1/8711 the butyl tape at the penetration does not 'tie off' on to the waterproofing membrane. For these details the waterproofing does not engage with the butyl tape at the mud slab penetration, the steel sleeve is in the same plane as the butyl tape, therefore the butyl tape cannot extend above the mud

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the extended butyl tape.

slab. The details will not be revised.

The Contractor's shop drawing submittal is to be revised to show the butyl tape's relationship to the waterproofing membrane and other elements of the assembly. Submit the revised shop drawing with manufacturer's recommended detail for the butyl tape for TJPA Representative review.

T-0350.2 **BGP - Mat Slab Penetration Waterproofing** **Closed** **12/20/2012** **12/30/2012** **12/21/2012** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawing: A1-8711

SCCI would like to confirm conversations concerning the Butyl tape and Mud Slab Penetrations. From the meeting held 12/19/2012, the design Engineer mentioned that the Butyl tape at the Mud Slab Penetrations does not serve as a waterproofing purpose, but rather a bond breaker between the concrete and the steel penetrating through the mud slab. Because of this, the Engineer stated the Butyl tape did not need to be extended above the Mud Slab and could stop at the penetration slab.

Please confirm.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

With the exception of the tie down WP detail 2/A1-8711, the Butyl tape at the Mud Slab Penetrations does not serve a waterproofing purpose, but rather a bond breaker between the concrete and element penetrating through the mud slab. On 2/A1-8711 the butyl tape does engage the waterproofing and must extend above the mud slab.

T-0351 **BGP - Grace Eclipse Floor 200** **Closed** **11/26/2012** **12/06/2012** **11/26/2012** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Stacy Wilson

Co-Author:

REQUEST:

Reference Specification: 03 30 20

Eclipse Floor and Eclipse Plus admixtures were replaced by a new generation of drying shrinkage reducing admixtures Eclipse Floor 200 and Eclipse 4500. This new

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It will be acceptable to use contractor-proposed Eclipse products pending acceptable strength test results.

Submit substitution request for products not listed in

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

family of admixtures is equivalent to BASF Tetraguard and based on our experience we should be able to achieve project specifications on drying shrinkage. CEMEX has been using the two new products for more than two years with excellent results. Attached, please find the communication from Grace Construction Products about the two new shrinkage reducing admixture products. Please verify these eclipse products are acceptable for use on this project.

specifications.

T-0352 **BGP - Commissioning of Ground Loop Heat Exchanger** **Closed** **11/26/2012** **11/26/2012** **11/30/2012** **Potentially** ☐

From: Webcor Construction LP David Fields **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 23 57 34 3.5
Please confirm that commissioning will not be required for the Ground Loop Heat Exchanger.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

With reference to 23 57 34 3.5, the ground loop heat exchanger and the Geothermal system as a whole shall be commissioned with Enovity witnessing and overseeing the completed work by the geothermal sub-contractors, including but not limited to submittal reviews, installation verifications including flush, clean and treatment procedures, controls pre-functionals, functional testing and on-going performance validations. Enovity specifications covering this scope of work are included under Division 1 specification 01 91 00 (General Commissioning Requirements) and 23 08 00 (HVAC systems Commissioning). Please review these specifications.

T-0352.1 **BGP - Commissioning of Ground Loop Heat Exchanger Follow-Up** **Closed** **11/30/2012** **12/10/2012** **12/07/2012** **Potentially** ☐

From: Webcor Construction LP David Fields **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

In reviewing the issued for construction documents W/O is unable to locate specification section "01 91 00 General Commisioning Requirements" or "23 08 00 HVAC Systems Commisioning". Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

To clarify, specification section 01 91 00 and 23 08 00 have not been issued and do not apply to this work. The answer to RFI T-0352 is superseded by this RFI reply. Specification section 23 57 34 shall be used by the Contractor to fully furnish, install and provide pre-

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functional testing and documentation to prove the design requirements prior to back-fill and post back-fill. A TJPA representative will review the results of the Contractor's commissioning efforts. All of the necessary pre-functional requirements for the below grade package are provided in specification section 23 57 34.

T-0353 **BSE - Micropile W107 Relocation** **Closed** **12/04/2012** **12/14/2012** **12/11/2012** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Micropile W107 as laid out is in conflict with Pin-pile #15.

BBII proposes moving Micropile W107 North 0.5' and West 3' to provide adequate clearance. See attached sketch.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Thornton Tomasetti does not object to moving Micropile W107 as proposed.

T-0354 **BSE - Sump Pit Location and Dimension** **Closed** **12/06/2012** **12/16/2012** **12/11/2012** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Specification Reference: 31-00-00
Reference Drawings:S1-2022, S1-3006

Drawing S1-2022 and S1-3006 do not have all necessary dimensions to properly excavate the Sump Pit on the North Side of Zone 1 between GL 4 and GL 5. Please provide the dimension to the eastern edge as indicated in blue on Drawing S1-2022.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The requested dimension is 4'-9".

T-0355 **BSE - Zone 4 Instrumentation Pad Demolition** **Closed** **12/11/2012** **12/11/2012** **12/18/2012** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Please reference section 10 on contract drawing GT-5102. The 1ft thick concrete instrumentation slab extending beyond the face of the A line CDSM wall into zone 4 will be demolishing with the tops of the buttress shafts during our excavation of the first level of zone 4. This will affect the sensors in the slab.

Please confirm that this is acceptable

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The instrumentation slab shall not be demolished. The slab shall remain in place as shown on the drawings.

T-0355.1 **BSE - Zone 4 Instrumentation Pad Demolition** **Closed** **01/30/2013** **02/09/2013** **02/07/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Per conversation in previous MRP meetings after RFI T-0355 was answered, BBII noted that the instrumentation protection slab which is to remain in place as seen on section 10 of contract drawing GT-5102 as directed by RFI T-0355 response prevents survey markers from being placed on the top of soldier piles. Concerns were raised from the owner's design team suggesting that this slab may have to be removed.
Please confirm that RFI T-0355 was answered correctly and the instrumentation protection slab is to remain in place.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

The portion of the instrumentation protection slab which is inside the face of the excavation shall be removed as part of the BSE contract documents. This is specifically covered in specification section 31 00 00, article 3.8 C as well as in details 3 and 7 on drawing GT-5101.

T-0356 **BGP - GEOTHERMAL - Loop Soil Compaction** **Closed** **12/11/2012** **12/21/2012** **12/17/2012** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Specifications: 31 23 34 3.3 F
23 57 34 3.1 D
23 57 34 1.2 A.3

Per Specification 31 23 34, page 6, paragraph 3.3, F., soil is to be compacted to 95% maximum dry density. Specification 23 57 34, page 4, paragraph 3.1, D., S3H is

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per spec section 23 57 34 loose soil shall be used by the geothermal contractor to backfill the trenches where the HDPE ground loops are located to avoid any damage to the pipes during the process. Once the trenches have been backfilled per section 23 57 34 and the piping is protected the soil can be compacted as required by section 31 23 34.

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to backfill per IGSHPA with loose soil.

Please confirm S3H is to backfill the geothermal loop per IGSHPA standard section 23 57 34, page 1, 1.2, A. 3.

T-0356.1 **BGP - GEOTHERMAL - Loop Soil Compaction Conflict in Specifications** **Closed** **01/22/2013** **02/01/2013** **01/29/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Please refer to attached excerpts from spec section 23 57 34, 31 23 34 and RFI response to T-0356.

The RFI response to T-0356 (SCI-017) requires the backfill of the trenches to meet specifications section 23 57 34 and 31 23 34. However, the two sections are in conflict with one another. Section 23 57 34-3.1, D, requires geothermal loop trenches to be filled with loose soil and then apply water to settle the loose soil. Section 31 23 34, notes that flooding or jetting with water is not allowed.

Therefore, the work sequence directed in RFI T-0356 to meet "...spec section 23 57 34 loose soil shall be used by the geothermal contractor to backfill the trenches where the HDPE ground loops are located to avoid any damage to the pipes during the process. Once the trenches have been backfilled per section 23 57 34 and the piping is protected the soil can be compacted as required by section 31 23 34..." are not feasible.

Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Wetting of backfill not required.

T-0357 **BGP - Geothermal Stainless Steel vs. Galvanized Pipe Sleeves** **Closed** **12/11/2012** **12/21/2012** **12/19/2012** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Specification: A1-8712

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Utility Penetration Sleeves through the

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Reference Drawing: 23 05 30 2.3B

Detail 2 on Architectural Plan Sheet A1-8712 shows a 1 /4" Stainless Steel pipe sleeve where as specification section 23 05 30, Page 2, 2.3B references Std Wt. galvanized steel pipe sleeves.

Please confirm which sleeves are to be used.

Foundation Wall are to be stainless steel as detailed on the architectural drawings.

T-0358 **BGP - Geothermal Ground Temperature Probe Sleeve** **Closed** **12/11/2012** **12/21/2012** **12/19/2012** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawings: M1-5002

Detail A on Ml-5002 shows the 2" ground temperature probe sleeve terminating at grade. Detail 5 on M1-5002 shows the same pipe terminating at the same elevation as GLS/GLR piping.

Please provide an elevation drawing for the temperature probe pipe sleeve.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Final elevation of 2" temperature probe sleeve is at same elevation as the GLS/R pipes in their final position as shown in detail #5 as shown on sheet M1-5002.

T-0358.1 **BGP - Geothermal Temperature Probe Elevations** **Closed** **02/25/2014** **03/07/2014** **03/04/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Per field conversations with the geothermal EOR(WSP) the elevation of the four(4) temperature probe stub outs has been revised. Please provide the revised elevations of these temperature probe stub outs.

Note that two(2) of the temperature probes have already been installed to an elevation consistent with the response to seer RFI 18(T-0358).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

RFI-0358 Response stated: "Final elevation of 2" temperature probe sleeve is at same elevation as the GLS/R pipes in their final position as shown in detail #5 as shown on sheet M1-5002." The header pipes were not installed tight to ground level the slab as shown on sheet M1-5002. Temperature probe piping shall be installed tight to the ground level slab as indicated on the design documents. Alternatively the probe piping may be installed at the elevation of the shut off valves in RFI-1167, RFI-1169 and RFI-1172.

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T-0359	BGP - Water Treatment for Geothermal	Closed	12/18/2012	12/18/2012	12/21/2012	Potentially	☐

From: Webcor Construction LP Joanne Filipas **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Specification 23 57 34 Sub Section 3.4

During the TG06 IFB process section 3.4 was added to the Ground Loop Heat Exchanger specifications. We believe this requirement is intended for a future bid package during the commissioning of the system. Please confirm.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Water Treatment and cleaning of the system is required as part of the TG06 Scope of work.

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T-0360	BSE - Mud Slab Welded Wire Reinforcement	Closed	12/21/2012	12/28/2012	01/03/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Joanne Filipas

Co-Author:

REQUEST:

Specification Section: 03 20 01

Regarding the concrete reinforcement within the mud slab, BBII would like the option of using Deformed Welded Wire Reinforcement (DWR) in lieu of rebar reinforcement. DWR strictly conforms to ACI 318 and offers multiple advantages to rebar reinforcement. Particularly, DWR will help reduce the risk of inclement weather damage to the subgrade, due to a quicker installation which will leave the subgrade exposed for a shorter period of time. Please see attached supporting documentation.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Albeit after the specified 10 days, W/O will consider this substitution request only subsequent to receipt of a completed Request for Substitution form found in specification section 00 04 40.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0361	BGP - Slab Penetration Sleeve Slipsheets	Closed	01/03/2013	01/13/2013	01/11/2013	Potentially	☐

From: Webcor Construction LP Joanne Filipas **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference S1-3003:

The existing piles are to be wrapped with a 10 Mil polyethylene (for 30" & 36" sleeves) or 112" compressible material (for 48") slipsheet between the sleeve and the piles. Because of the minimal distance between the sleeve weld and the existing pile, the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is acceptable to provide a 4" vertical break in the slipsheet at the sleeve joint to avoid burn damage.

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slipsheet at the weld locations will be damaged from the heat of the welding. Is this acceptable?

If the slipsheets cannot be damaged by the heat of the welding, can the slipsheets have a 3" or 4" vertical break in them at the locations of the vertical welds to avoid the bum damage? This would create two slipsheet breaks or gaps per pile penetration. Is this acceptable?

T-0362 **BGP - Wall Vertical Reinforcement at 3rd Level Bracing** **Closed** **01/07/2013** **01/17/2013** **01/11/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

Reference Drawing: S1-3201
Reference Specification: 03 30 01

Please reference attached sketch of the shoring wall section and CD S1-3201.

To allow required access and sequencing for installation of the wall waterproofing and reinforcing steel, an additional row of type 2 mechanical couplers will be required on the back face walls directly below 3rd level of bracing.

This will allow the following:
1. "Blocking out" the waterproofing at the waler beam packing locations will be avoided.
2. Provide required access for waterproofing installation.
3. Reduce the time installed waterproofing is exposed on wall before concrete pours.

Please provide your approval of this additional row of couplers.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger 1/10/2013 Contractor-proposed additional row of type 2 mechanical couplers is acceptable.

Jeff Thiel 1/10/2013 Changes outlined in this RFI response shall be done at no additional cost to the owner.

T-0363 **BGP - Slab Penetration Sleeve Thickness** **Closed** **01/09/2013** **01/19/2013** **01/18/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference Drawings: A1-8711 and S1-3003

Plan sheet A1-8711 details all of the slab penetration sleeves to be fabricated of 3/8" steel. Plan sheet S1-3003 details only the pin pile, trestle pile, and 48" bridge pier sleeves to be fabricated of 1/2" steel. Please confirm that it is acceptable to fabricate all penetration sleeves of 3/8" steel like that shown on A1-8711.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The steel plate thickness shown on the Structural Sheet S1-3003 was revised from 3/8" thick to 1/2" thick as a part of Addendum #1. In addition, galvanization was called for. This change was incorporated into the IFC set.

For the Mat Slab penetrations not covered on sheet S1-3003, the 3/8" thick sleeve (with galvanizing) as shown on A1-8711 is acceptable.

T-0364 **BGP - WPM-1 ASTM 6769 & Blindside Waterproofing Application** **Closed** **01/15/2013** **01/24/2013** **01/25/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Please refer to Specification 07 12 10 3.3 and Drawing 1/A1-8710.

Section 3.3 of the specifications require that all work be performed in accordance with ASTM D6769 (Application of Fully Adhered, Cold-Applied, Prefabricated Reinforced Modified Bituminous Membrane Waterproofing Systems). The WPM-1 vertical application (071210-1.1, A.2) is a blind-side WP application; however, the ASTM D6769 is written to address positive-side WP application.

1. Please confirm the blind -side WP application is covered under the ASTM D6769 requirement or provide the applicable ASTM requriement to perform the blind-side application.
2. Please confirm which section of the ASTM D6769 requirement is applicable to blind-side WP application.
3. The ASTM D6769 section 11.7 requirement to "backfill vertical waterproofing installation within 24 h of protective board installation..." isn't feasible due to the extensive work sequence to install concrete reinforcement, form and place the foundation wall. Please confirm this section of the ASTM requirement is not applicable to blind-side WP applications.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Paragraphs 11.4.1.1, 11.6 and 11.7 are not applicable to the blindside installation.

2. Paragraphs 11.4 1.1 through 11.4.1.4 relating to a one ply application are not applicable to the 2 ply vertical installation specified and indicated on this Project.

3. Paragraph 11.4.1.1, 11.7 is not applicable to blindside installation.

All other paragraphs apply where they do not conflict with the Project Specifications or the manufacturer's printed recommendations and specifications. In those cases, the Project and manufacturer's specifications are to be followed.

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T-0365	BSE - Micropile W127 Relocation	Closed	01/15/2013	01/25/2013	01/17/2013	Potentially	☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Ref: Specification 31 63 33

Micropile W127 (5'-5 3/4" West of G.L. 3 and 74'-0 3/4" South of G.L. J) is located in an area that is not accessible to drilling equipment. BBII proposes to eliminate this micropile. Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The micropile shall not be eliminated. An acceptable relocation of micropile W127 is 13' to the north and 16' to the east (or contractor to propose a different relocation).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0366	BGP - WPM-1 - Adhesive Between Bottom Ply Waterproofing Membrane and Mud S	Closed	01/22/2013	01/22/2013	01/24/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Please refer to attached Specification Section 07 12 10, Article 3.3.

Per Specification Section 07 12 10-3.3, B, the bottom ply of the waterproofing membrane is to be installed dry with the polyethylene protection sheet facing the mud slab. Per Specification Section 07 12 10, 3.3, D, each polyethylene protection sheet is to be installed embedded in adhesive (wet) such that each sheet will have enough adhesive uniformly placed on it that it won't come into contact with the other sheet.

Is the bottom sheet to be installed dry per 3.3, B. or is it to be installed embedded in adhesive (wet) per 3.3, D? Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The bottom sheet is to be installed dry per 3.3, B.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0366.1	BGP - WPM-1 - Adhesive Between Bottom Ply Waterproofing Membrane and mud S	Closed	02/01/2013	02/11/2013	02/05/2013	Potentially	☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

The response to RFI T-0366 directs Shimmick to install the bottom waterproofing membrane without adhesive to the mud slab. If the membrane is installed dry or without adhesive, nothing will prohibit water from entering between the membrane and mud slab. This would cause the membranes to float or bubble. Per the manufacturer's

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The specification is correct. The method of installation, installing the first ply with the polyethylene protection sheet facing the mud slab, without adhesive, was recommended by the manufacturer.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

recommendation, the waterproofing membrane is to be adhered to the mud slab with adhesive.

Please advise.

T-0367 **BGP - REBAR - Vertical Pit - Two Piece Bar** **Closed** **01/17/2013** **01/27/2013** **01/25/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please refer to Specification Section 03 20 00-3.1, E, attached drawing S1-3004, S1-3006 and Gerdau sketch SK-RFI014.

Concrete reinforcement details around the mat slab pit sections shown on drawing Sl-3004 and SI-3006 depict a continuous vertical "Z" bar around the pit slab edge. Please confirm the proposed lap splice detail and requirements as shown in the attached Gerdau sketch SK-RFI014 is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractor-proposed splice for vertical "Z" bars around pit edge in mat is acceptable.

T-0368 **BGP - Hub and Spigot Type Pipe Support Spacing** **Closed** **01/17/2013** **01/27/2013** **02/01/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference Specification: 22 13 01 , 3.2
Reference Drawings: P1-6001

In Section 3.2 C, Supports, the support spacing for all horizontal cast iron no-hub pipe is specified to be 10 feet maximum, and within 6 inches at each side of each joint; however, the support spacing for all horizontal cast iron hub and spigot type pipe is not provided.

Please provide the required support spacing for the horizontal cast iron hub and spigot type pipe.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The required support spacing for horizontal hub and spigot cast iron piping is the same as for the no-hub piping.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0369	BGP - REBAR - Headed Steel Bar Shear Conflict in Mat Slab	Closed	01/21/2013	01/31/2013	01/25/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please refer to attached drawing S1-3005 and S1-2022.

Detail 3 on sheet S1-3005 depicts the full size T-head bars as they interface with the mat reinforcement. The same detail includes additional reinforcement depicted at column locations. The reinforcement (open circles) is shown between the typical main mat reinforcement and others are aligned with above layers one and two of the main mat reinforcement as defined in note 4 and 6 on sheet S1-2002. As a result, the clearances created by the #10 main mat reinforcement being spaced at 8" O.C. and the 3" square heads at the ends of the #8 T-heads (refer 2/S1-3005) do not allow enough of a clearance to install the headed bars into position. Refer to the annotations in the attached drawings.

Please advise.

SUGGESTION:

Gerdau proposes to place the added reinforcement directly in line and above the main mat reinforcement in both directions as required. The suggested proposal may require several additional layers of steel to accommodate the total quantity of added bars at each column. Furthermore, it is unkown whether another conflict is created at the column dowel T-heads.

ANSWER: **Accept Suggestion:** ☐

Contractor-proposed placement of additional mat bottom rebar to an upper layer is not acceptable. Placement of the vertical headed bars is construction means and methods. However, it is acceptable to move the additional mat bottom rebar horizontally a maximum of 3/4", as required.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0370	BGP - WPM-1 - Mud Slab Finish for Waterproofing	Closed	01/22/2013	02/01/2013	01/25/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Specification Section 07 12 10, 3.2

The concrete surface profile (CSP) required by the waterproofing manufacturer Laurenco, ranges between a CSP level of 2 and 4 as defined by the International Concrete Repair Institute (ICRI) of technical guide "Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, and Polymer Overlays." The ICRI defines the levels of CSP as 1 (nearly flat) to CSP Level 9 (very rough). The Laurenco waterproofing system requires "a good wood screed or broom finish...often referred to as a 'sidewalk' finish..Do not use a steel trowel finish." See attached excerpt of the manufacturer specification.

1. Please confirm the ICRI CSP requirements as it relates to surface finish, flatness and levelness are to supersede the varying ASTM F-value requirements setforth in specification section 033000-3.6, B1 or provide a revised specification section 033000 incorporating the ICRI

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. ICRI CSP requirements are not appropriate for the mud slab. The mud slab in being poured, not repaired. The International Concrete Repair Institute CSP scale is used for existing concrete surfaces when they are being acid etched, ground or shotblasted. The appropriate finishing for the mud slab is described in the BGP Specification 03 30 00 Cast in Place Concrete 3.6 Concrete Finishes and calls for compliance with the American Concrete Institute concrete finish recommendations ACI 302.1R and ACI 304R, with dimensional tolerance limitations given by ACI 117.

2. Specification 03 30 00, 3.6 C stipulates: Finish for monolithic slab surfaces to be covered with membrane i.e. the entire mud slab is covered with membrane, is to be a Float Finish. Note that 3.6 C. 1.d for Float Finish has the same finish surface values as 3.6 D. 3., which is the finish for Pedestrian Sidewalks and

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

requirement.

2. Please confirm a wood screed or broom finish is accpetable for the mud slab.

Ramps and this criteria is compatible with the Waterproofing Manufacturer's requirement for a good wood screed finish (a good "sidewalk" finish).

No revisions to the specification are required.

T-0371 **BSE - Micropile W154 & W236 Bent After Install** **Closed** **01/22/2013** **02/01/2013** **01/29/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Specification: 31 63 33
Reference Drawings: Sheet ML-1 (Approved Micropile Layout submittal.)

The top 5ft of micropile W154 is out of plumb by approximately 8% and micropile W236 is out of plumb 2.5%. It appears that the piles have been hit by a piece of equipment and bent near subgrade. BBII recommends the piles should be left as-is. Please confirm this is acceptable.

BBII will take steps to ensure this does not happened again. The importance of taking special care to avoid damaging permanent work will be an emphasized topic in tool-box talks for crews running equipment near micropiles.

In the event that a micropile becomes bent in the future, please provide the design teams percentage of tolerance that the micropile can be out of plumb.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Any micropiles that have experienced an impact shall be rejected and re-drilled in new locations. Contractor to submit new locations.

T-0371.1 **BSE - Micropile W154 & W236 Bent After Install** **Closed** **02/04/2013** **02/14/2013** **02/06/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Ref: Specification Section 31 63 33 3.2.L

BBII is in receipt of reply to RFI T-0371, which suggests that piles which have experienced an impact be rejected and re-drilled. Acceptance of piles is based on specification 31 63 33 3.2.L. Per the recommendation of the Micropile Engineer (Drill Tech's Steve McCullough) and the anchor bar manufacturer (DSI), the piles were bent back to plumb and retested on 02/01/2013. Attached are the passing proof test results for the piles in question. Please confirm that these piles are accepted.

The piles are confirmed to be Rejected and shall be replaced with new piles. The concerns include, but not limited to, the following:
* de-bonding of bars and grout
* cracking of the grout that may compromise its ability to provide corrosion protection of the bar
* the ULTIMATE uplift capacity of the pile might have been compromised, which cannot be verified by the proof test

Unless the contractor can provide sufficient evidence that addresses the concerns listed above and approved by TJPA, the piles shall remain as Rejected. It should also be noted that the contract documents call for a coupler at the mud slab level to allow the projected portion of the bars be dissembled to avoid the exact problem. If BBI cannot prevent the micropile from being hit again, BBI shall install the coupler as shown and take down the portion of the bar above the coupler as soon as the pile is proof tested and re-install the bars above the coupler at a later time.

T-0371.2 **BSE - Micropile W154 & W236 Bent After Install** **Closed** **02/08/2013** **02/18/2013** **02/11/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

BBII is in receipt of reply to RFI T-0371.1, which confirms that piles W154 and W236 are rejected. Per response to RFI T-0371, BBII proposes piles W154R1 and W236R1 be drilled at the locations on the attached drawing. Piles W154 and W236 will be cut off at bottom of mud slab and the mud slab blackouts poured back.

Please confirm that these pile locations and method of pile abandonment are acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Thornton Tomasetti does not object to new locations of micropiles W154R1 & W236R1 as proposed, as well as the method of abandonment for piles W154 & W236 as proposed.

T-0372 **BGP - WPM-1 - Filter Fabric in Waterproofing System** **Closed** **01/23/2013** **02/02/2013** **01/31/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Specification Section: 07 12 10 2.5 D

Specification Section 07 12 10 2.5 D requires filter fabric as an accesory to the Modified Bitumen Waterproofing System. After reviewing Shimmick's waterproofing shop drawings, and speaking with a Laurenco representative, it has been confirmed that filter fabric is not used in this waterproofing system.

Please confirm that filter fabric as specified in section 07 12 10 2.5 D is not required.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Filter Fabric is not required.

T-0373 **BGP - Zone 1 Concrete Partition Wall Detail** **Closed** **01/24/2013** **02/03/2013** **01/29/2013** **Potentially** ☐

From: Webcor Construction LP Joanne Filipas **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference A1-2812, S1-022 & S1-2052

Drawing A1-2812 shows concrete partition walls between Gridlines 1 and 2.3 and Gridlines D.4 to E.6; however, these same walls do not appear on drawings Sl-2022 or S1-2052. Please confirm if the walls are required and which drawings are correct.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Walls are required. Layout per architectural drawings as noted on sheet note 7 on S1-2052. Note that walls are not intended to show on S1-2022 Mat Bottom Reinforcement Plan.

T-0374 **BGP - Mat Slab Shear Wall Detail Clarification** **Closed** **01/24/2013** **02/03/2013** **01/29/2013** **Potentially** ☐

From: Webcor Construction LP Joanne Filipas **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference A1-2820 and S1-2030

Contract drawing Al-2820 depicts a shear wall between GL 1.4 to 2 and K.5 to L that is discontinuous and contains a large opening; however, drawing S 1-2030 does not depict a discontinuous wall. Please confirm which drawing is correct and if the opening is required.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Structural drawings are correct. Opening in shearwall at mat level does not exist.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0375	BGP - Plumbing Drainage Invert Elevation	Closed	01/24/2013	02/03/2013	02/01/2013	Potentially	☐

From: Webcor Construction LP Joanne Filipas **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference P1-2026

Please reference attached contract drawing P 1-2026 and the drainage system at the SP B2-D-2. Referenced drawing shows 1% flow from the catch basin to the sump pit, however; the specified invert elevations call out the opposite. Please confirm that the invert elevations called out on P 1-2026 are correct, if not please specify new pipe invert elevations to be used for the drainage system specified herein.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The invert elevation for drainage piping from the catch basins to sumps is -36'-10".

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0376	BGP - Column Spiral Reinforcing in Lieu of Individual Ties	Closed	01/24/2013	02/03/2013	01/30/2013	Potentially	☐

From: Webcor Construction LP Joanne Filipas **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference S1-3300 & S1-3304

Gerdau is requesting the use of spiral reinforcing in lieu of the #6 individual stirrups/hoops that are shown on contract drawings Sl-3300 and Sl-3304 detail 1 for column types B1, B2 and B3. The spiral reinforcing would be #5 and maintain 3.5" pitch for the B1 column, 3" pitch for the B2 column and 4.5" pitch for the B3 column. Please confirm the use of spiral at the pitch indicated is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The size/spacing proposed by the contractor does not meet the volumetric ratio of spiral or hoop reinforcement requirement in ACI 318 therefore the request is declined in current form. For columns C10 and C11, if the contractor prefers to use #6 spirals with the spacing specified for column ties in Sheet S1-3300, that is acceptable to the SER. The tightest spacing specified in S1-3300 along the column height shall govern.

If spiral reinforcement is used for Column C12, the size and pitch of the spiral shall be #5 and 3", respectively, for the full column height.

In addition, if spiral reinforcement is used, detailing requirements in ACI 318 Section 7.4 shall be fully met.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0377	BGP - Two Piece Oval Hoop Columns A1, A2, & A3	Closed	01/24/2013	02/03/2013	01/29/2013	Potentially	☐

From: Webcor Construction LP Joanne Filipas **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:
Reference S1-3304

Please confirm it is acceptable to use a two-piece oval tie in lieu of the single-piece oval tie, as depicted on contract drawing S1-3304, for columns AI, A2 and A3. Gerdau proposes to use a lap splice along the flat sides of the oval to connect either side of the hoop.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
Contractor-proposed lap splices are not acceptable.

T-0378 **BGP - Drainage Catch Basin Clarification** **Closed** **01/24/2013** **02/03/2013** **02/01/2013** **Potentially** ☐

From: Webcor Construction LP Joanne Filipas **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:
Reference P1-2022

There are two (clouded) sump pits attached that are not connected to any of the drainage system called out on PI-2022. Please confirm that there are no drainage lines connected to these two sump pits.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
There is no drainage piping connected to these two sump pits.

T-0379 **BGP - Geothermal Pipe Fusion Butt Weld** **Closed** **01/24/2013** **01/24/2013** **01/29/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:
Reference Specification: 23 57 34

The response to Submittal TG0601-008 commented that only socket fittings and electrofusion fittings are allowed. This insinuates that Butt Fusion welds are not allowable. However, per Specification Section 23 57 34, Butt Fusion welding does not seem to be precluded. The butt fusion method is acceptable per the IGSHP A.

Please confirm that butt fusion welding is acceptable under this contract for the geothermal piping.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
Butt Fusion is an Acceptable method of heat fusing ground loop piping.

☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0379.1	BGP - Geothermal Pipe Fusion Butt Weld	Void	05/13/2014	05/23/2014		Potentially	

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

See attached RFI T-0379

Please confirm it is acceptable to repair the punctured geothermal piping in geofield 14R Area 16 by using a fusion butt weld. The butt fusion method of heat fusing ground loop piping is acceptable per the IGSHP A.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0380	BSE - K9 Buttress shaft CSL Tubes	Closed	01/28/2013	02/07/2013	02/14/2013	Potentially	☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Reference attached sketch and spreadsheet.

We were informed by Harris-Salinas that they are short of CSL tubes for the last rebar cage K9. Since K8/K9 interface will not be CSL tested, per the agreed upon list of shaft interfaces (generated by Arup and BBII), it is in BBII's opinion that it would be more beneficial to the shaft if it is installed without CSL tubes. The benefits include the following: There would be no need to grout the holes; no voids; and there would be more concrete in the shaft. If CSL tubes are required, we are proposing to install them per the attached drawing.

Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Contractor's proposal is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0381	BGP - PLUMBING Floor Cleanout Requirement	Closed	01/28/2013	02/07/2013	02/01/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference Specification: 22 13 01 2.3 A.3
Reference Drawing: P1-0051, P1-2022

Drawing P1-0051 specifies a Fig. Number of "MIFAB C-100-R/S" with remarks of "STAINLESS STEEL COVER AND PLUG, HEAVY DUTY, ANCHOR FLANGE". This item dffers from the floor cleanout required in Spec section

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The correct model no. is MIFAB C-1000-R/S (in the drains and cleanout schedule on drawing P1-0051).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

22 13 01-2.3.A.3 which calls for "Extra heavy duty cast iron cleanout with round adjustable galvanized cast iron top, vandal proof screws, plastic plug or bronze gasketed plug, spigot outlet; 'No. 4220-G Series' by J.R. Smith, 'No. ZI400-G-VP Series' by Zurn Industries, Inc., Mifab C1100-RI3-6 or equal."

Please confirm which type of floor cleanout is required.

T-0382 **BSE - Eliminate CSL Tubes from Shaft D1** **Closed** **01/31/2013** **02/10/2013** **02/07/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Lynn Kowallis

Co-Author: Balfour Beatty Infrastructure, Inc. Ernie Cortez

REQUEST:

Reference attached Arup email dated 1/29/2013.

Please confirm that Shaft D1 can be installed without the need for CSL tubes. At Arup's direction, and at no extra cost to the owner, BBII will provide a QC core hole that extends into native soil.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed. The added QC core shall be located in Shaft D1.

T-0383 **BGP - Drainage Flow Lines** **Closed** **01/31/2013** **02/10/2013** **02/07/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Reference Specification: 22 13 01
Reference Drawing: P1-2022 & P1-2030

Please reference contract drawings P1-2022 thru P1-2030. There is a discrepancy between the called out elevations of the pipe inverts and the flow grades between the sump pits and catch basins. All pipe inverts at the catch basins are to be set to El. -36.83' and pipe inverts at the sump pits are at either El. -37.50' or -37'-25'.

At the long pipe runs the flow grade matches to 1% as

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The pipe invert elevations at sumps were established as uniformly as possible.

An 18% slope is acceptable for short runs (approx. 4 ft.).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

called out on the plans. However, on the short pipe runs, this grade is up to 18%.

Please clarify which details governs, and whether the 18% slope is acceptable.

T-0384 **BSE - Dry Excavation of Buttress Shaft D1** **Closed** **02/01/2013** **02/11/2013** **02/12/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Ernie Cortez

REQUEST:

Reference attached Arup email dated 1/30/2013.

Becho will proceed on excavating Shaft D1 dry as per Arup's email.

Please confirm this is still acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:
This shaft was placed on the day that this RFI was received. No further response from Arup is necessary.

T-0385 **BSE - Micriopile Moves in NW Corner W013, W031, W047, W198.** **Closed** **02/05/2013** **02/15/2013** **02/06/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Ref: Submittal Pakage TG0601-009.1 - 235734-003.1

Upon staking layout of micropiles in Northwest corner of Zone 1, BBII discovered two micropiles that require relocation.

1. Pile W013 is too close to installed dewatering well. BBII proposes moving this pile 4' Southwest. This does not appear to conflict with Ghex shop drawings revision date 02/04/13.
2. Pipe W198 is too close to overhead struts and strut supports. BBII proposes moving this pile 2' Northwest. This appears to eliminate the need for a "jog" in the Ghex piping as shown on Ghex shop drawings revision date 02/04/13.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Thornton Tomasetti does not object to moving micropiles (W013, W198, W031, W047) as proposed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Upon drilling two piles in the NW corner of Zone 1, Drill Tech discovered unforeseen obstructions below grade (reference COM1741 sent 02/04/2013). Relocation of these micropiles is required.

1. Pile W031 encountered an obstruction below grade which did not allow installation of the anchor bar in the drilled hole. After discovery of the obstruction, the pile was relocated 2' Northwest of its
planned location. Installation of the micropile was completed on 02/01/2013. This does not appear to conflict with Ghex shop drawings revision date 02/04/13.
2. Pile W047 encountered an obstruction below grade which did not allow the micropile hole to be drilled past approximately 12'. BBII proposes to relocate this pile 2.8' Southwest. This appears to conflict with Ghex piping shown in Ghex shop drawings revision date 02/04/13 and may require the addition of a "jog".

Please confirm these changes are acceptable.

T-0386 **BSE - Elevator Pit Dimensions** **Closed** **02/05/2013** **02/15/2013** **02/07/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Ref: SI-2024 and Detail 3/S1-3008

The slab depression between Gridlines 15 &16 Between Gridlines B & C does not contain enough dimensions to construct. Detail 3/S1-3008 Note 2 states "For extent of thickened mat see plan." Plan sheet S1-2024 revision 2 dated 11/27/2012 provides width of the pit in the North-South direction, but does not provide the length of the pit in the East-West direction.
Please provide these dimensions.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The west edge of the thickened mat as dimensioned in the RFI sketch is 7'-0" from gridline 15.

The east edge of the thickened mat as dimensioned in the RFI sketch is 23'-1" from gridline 15.

T-0387 **BGP - Geothermal Loop Compaction Requirements** **Closed** **02/07/2013** **02/17/2013** **02/15/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Reference Specification: 31 23 34 3.3 F

Per Specification Section 31 23 34, Section 3.3, Part F, the trench is required to be compacted to 95% . To acheive 95% compaction, the surrounding soil must have an equal or greater compaction.
Please confirm.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Achieving 95% compaction in the trenches is possible.

T-0388 **BGP - Temperature Probe Sleeve Penetration** **Closed** **02/08/2013** **02/18/2013** **02/14/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Ref: TG06.1 Bid Package - 5/M1-5002 and TG06.0 - 5/M1-5002

The TG06.1 bid package, M1-5002 drawing does not show a temperature probe sleeve in Detail 5. Is the temperature probe sleeve to penetrate through the wall like it is shown in the TG06.0 M1-5002, Detail 5 or is it not to penetrate through the wall like the TG06.1 documents?
Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Temperature probe piping should be installed as described in Note 6, of both packages, on sheet M-0006 within Below Grade package (TGO6) Mechanical Notes . Temperature probe piping was added to detail 5 in issue for construction set for clarification.

T-0389 **BGP - Cast-in-place Concrete Shrinkage** **Closed** **02/11/2013** **02/21/2013** **02/22/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Ref: Specification Section 03 30 20 1.7.F.3.i

Please reference attached ACTM C 157, pages from SEONC San Francisco Bay Area Concrete Aggregate Report 2008, and Specification Section 03 30 20- 1.7.F.3.i. ASTM 157 section 4.3 states that if the condition of mixing, curing sampling and storage other than specified in the test method are required, they shall be reported but are not to be considered as standard conditions of this test method. In section 6. Sampling, it requires samples from

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The project specification specified that the shrinkage tests shall be in accordance with ASTM C157 with modified SEONC Recommendations.

It is recognized that the field sampled tests will not necessarily correlate closely with the trial batch test results, which should be anticipated before bidding.

In accordance with SEONC, field sampled test will be used for the evaluation of the specified limits as

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

batches made in the laboratory and the Note 2 states that field cast specimens can show up to twice as much drying shrinkage as laboratory cast specimens from the same materials and proportions. Furthermore, SEONC 2008 states that "actual shrinkage of the concrete in service and in field-cured tests will not necessarily correlate closely with the trial batch test results." For these reasons SCCI believes that shrinkage tests from samples at the job site can not verify the
specified shrinkage limit and can not be compared with the laboratory tests.

Please confirm that shrinkage results from the samples taken in the field will not be directly compared to laboratory tests, and consequently used as basis for rejection of material.

specified. However, rejection of a concrete pour will not be based on shrinkage test of field samples alone.

T-0390 **BGP - Floor Drain FD-1 Clarification** **Closed** **02/12/2013** **02/22/2013** **02/20/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Ref: P1-0051

The "Drains and Cleanout Schedule" on drawing P1-0051 calls Floor Drain FD-1 to be Mifab F-1000-S with a grate size of 6" in diameter. Per the manufacturer, F-1000-S has a square grate.

1. Is the floor drain grate to be round with a 6" diameter or square?
2. If it is square, then what are the dimensions of the square grate?
3. The remarks for FD-1 specifies a "Clamping Device." Is the "Clamping Device" referring to a membrane clamp?

Please advise

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. The floor drain grate is square.
2. The square grate dimensions are 6"x6".
3. Yes. This floor drain will be used extensively throughout the project. The membrane clamp will be used where there is a membrane.

T-0391 **BGP - Zone 2 Sump Pit Depth** **Closed** **02/13/2013** **02/23/2013** **02/19/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:
Ref: A1-9215 and S1-3006

Please confirm in drawing Al-9215, the call outs "SP TOC -42'-4"" and "SP TOC -46'-4"" for the sump pits between grid lines C-D and 4-5 are referring to the elevation for the bottom of sump pits, as illustrated in the attached markup of Sl-3006.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
We confirm that callouts SP TOC -42'-4" and SP TOC 46'4", shown on A1-9215 at the Sewage Ejector Room (B2230), are referring to elevations of bottom of sump pits illustrated on S1-3006 details 1 & 2.

T-0392 **BGP - CMU Partition Walls** **Closed** **02/15/2013** **02/25/2013** **02/20/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:
Reference A-2224 and A-0022

Sheet A-2224 shows future CMU partition walls as type .6. Per the masonry partition schedule there is no .6 type.

Please confirm these walls are partition type 6.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
We confirm these walls are partition type 6. Note for all CMU wall type tags on the drawings showing a dot prefix e.g. .6, the dot is to be ignored.

T-0393 **BGP - Reinforcement anchoring stagger and clearance for "addl bottom bars"** **Closed** **02/15/2013** **02/25/2013** **02/27/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:
Reference 3/S1-3006

1. Confirm there is no stagger for the reinforcement anchoring.
2. Provide the minimum clearance for the reinforcement anchoring to the "addl bottom bars".

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
1. Confirmed, no stagger for bottom of column vertical bars.

2. The column bars extend down to (sit on top of) the mat bottom bars (and "addl bottom bars").

T-0394 **BSE - Micropile Relocations at Beale Street** **Closed** **02/19/2013** **03/01/2013** **02/22/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Balfour Beatty Infrastructure, Inc. Brandon Miller

REQUEST:

Reference Specification: 31 63 33

Eight micropiles will be in conflict with the Beale Street Bridge Piles; BBII proposes relocating these micropiles to provide adequate clearance. See attached chart and drawings for proposed relocation information.

Please confirm these relocations are acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

We assume the direction of each micropile move is per graphic sketch with arrows vs the table since the direction of move per table is not consistent with the graphics. Thornton Tomasetti does not object to moving micropiles E845, E874, E842, E885, E834, E877, E831, E860 as proposed.

T-0395 **BGP - Floor Sink FSK-2 Clarification** **Closed** **02/19/2013** **03/01/2013** **03/05/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Ref: P 1-0051

The "Drains and Cleanout Schedule" on drawing P 1-0051 calls for Floor Sink FSK-2 to be Mifab FS 1700-1 -FLC-5. This model is not available per discussions between SCCI and the manufacturer.

Please confirm required floor sink model.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to the attached cut sheet.

T-0396 **BGP - Curb Frame Steel and Anchor Clip Requirements** **Closed** **02/19/2013** **03/01/2013** **02/28/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Ref: 8/P1-6001

Detail 8 on drawing PI-6001calls out a "Heavy duty galvanized steel custom made curb frame embedded in concrete." Please provide the following information:

1. Thickness of steel for curb frame.
2. Anchor clip details (size, spacing, connection to curb frame).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. The curb frame thickness is 5/8".

2. The anchor clips are 2"x 6"-2", they are welded to the frame. There will be two anchor clips on each side of catch basin/pit.

This are minimum requirements for the custom made curb frame. Contractor to submit shop drawing for review.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0396.1	BGP - Drainage Pits Embedded Frame Details and Curb Frame Steel and Anchor C	Closed	03/04/2013	03/14/2013	03/08/2013	Potentially	☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Ref: 8/P1-6001, DS-0001, RFI # 396

Detail 8 on P1-6001 does not specify the thickness of the frame material, nor any of the Specs and Addendums. Based on RFI 396, Designer specified for the frames to be 5/8" thick. However SCCI believes that ¼" thick frame is adequate to satisfy "heavy duty requirement". SCCI's has estimated the Work to fabricate the embedded grate frame out of the stock angles (2x2x¼" and 3x2x¼"), per attached SCCI's drawing DS-0001. Further to RFI 396, please answer the following:

1. Can stock angle sizes noted above be used for construction of the embedded frames?
2. Could Nelson studs be used in lieu of the anchor clips, as noted on the attached drawing?

Please note that increase of the material size consequently increases the cost of furnished material, and therefore will constitute a compensable change.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. The required thickness of the frame material is 3/8" and not 5/8" as previously provided in response to RFI T-0396. The construction of the frame is very clearly shown in detail 8/P1-6001. Welded stock angle iron is not acceptable.

2. Nelson studs can be used in lieu of anchor clips.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0396.2	BGP - Drainage Pits Embedded Frame Grates	Closed	03/22/2013	04/01/2013	04/01/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

Reference Specification: 23 13 01
Reference Drawings: P1-6001
Reference RFIs: T-0396, T-0396.1

Detail 8 on CD P1-6001 does not provide enough details for assembly and fabrication of the embedded frames. SCCI's drawing attachment in the RFI 396 series provides such details.

As per our discussion with the SER(Structural Engineer of Record) on 3/21/2013, see attached revised SCCI's drawings of the embedded grate assemblies. As discussed SCCI has revised the weld detail between the two angles to be used to fabricate the embedded frames. Weld is changed to T-joint, PJP double bevel groove weld per AWS D1.1 (references 8-56, table 8-2 from AISC Steel

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The construction of the embedded frame is clearly shown in detail 8/P1-6001 as a formed frame. The proposed assembly including two angles with double bevel groove weld is acceptable. Contractor to provide submittal for frames and grates.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Manual 13th ED.)

Is it acceptable to construct the embedded grate frames per attached detail?

T-0397 **BGP - RCW Dimension Clarification** **Closed** **02/21/2013** **03/03/2013** **02/28/2013** **Potentially** ☐

From: Webcor Construction LP Joanne Filipas **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference A1-2123 and attached.

Between gridelines 12-13 and G-H there appears to be two conflicting dimensions. Please confirm the 7'3" dimension is from gridline H to the work the point.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

On A1-2123, between gridlines 12-13 and G-H, we confirm the 7'-3" dimension from gridline H to the work point is correct. The dimensions are not conflicting. The 7'-1 3/8" dimension from gridline H is to the South West corner of the train platform knee wall. The platform is curved, which accounts for the slight difference in dimension between the corner and the work point.

T-0398 **BGP - Vehicle Ramp Concrete Corbel Dimension** **Closed** **02/21/2013** **03/03/2013** **02/28/2013** **Potentially** ☐

From: Webcor Construction LP Joanne Filipas **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference A1-2310 and S1-2251

Please provide dimension for the continuous concrete corbel at the vehicle/bike ramp.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to detail 7/S1-3205 which is referenced from plan S1-2251 for continuous corbel dimensions at vehicle/bike ramp on the exterior of the foundation wall. Top of corbel is 12" min from top of foundation wall.

T-0399 **BGP - Polystyrene Void Fill Material** **Closed** **02/21/2013** **03/03/2013** **03/05/2013** **Potentially** ☐

From: Webcor Construction LP Joanne Filipas **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference A1-7404 and 03 30 20

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The void fill below the ramp is only required to the

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please provide the PSI and specification for the Polystyrene void fill called out in detail D on A1-7404.

extent where regular formwork cannot be removed and is "Structural Polystyrene used as Typical Fill". For description of type refer to Superstructure Specification for Cast In-Place Concrete 03 30 02 2.9.B.

T-0400 **BGP - Seismic Joint Detail** **Closed** **02/21/2013** **03/03/2013** **03/06/2013** **Potentially** ☐

From: Webcor Construction LP Joanne Filipas **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

Reference S1-3010, A1-8881, & A1-8882

The detail 4/S1-3010 does not appear to be coordinated with the details shown on A1-8881 and A1-8882. Please revise accordingly.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

We have reviewed the structural and architectural details for the Seismic Joint on GL 35. Attached SKA-2594 and SKA-2595 show the coordination modifications made to drawings A1-8881 and A1-8882, which will be issued with the next Below Grade Package ASI.

S1-3010 compared to A1-8881:

1. 4/S1-3010 does not include/detail part of the seismic joint below the 5' Mat Slab (these parts was shown on Architectural details).

2. 4/S1-3010 shows deformed bar anchors welded to the joint where as A1-8881 details shows different embeds. Embed anchors have been removed from the architectural drawings as anchoring / attachment is per the structural drawings.

3. 4/S1-3010 shows plate with hole to fully cover top of curb of gutter where as architectural details shows the plate with equal length same as other side of seismic joint, this has been adjusted.

4. Note that the water stop injection hose locations have been adjusted.

S1-3010 compared to A1-8882:

1. Dimension on A1-8882 should be 3'-0" instead of

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

2'-11 5/8". I will adjust dimension on sheet.

T-0401 **BGP - Dimension Clarification between Column and Slab at Ramp** **Closed** **02/21/2013** **03/03/2013** **02/28/2013** **Potentially** ☐

From: Webcor Construction LP Joanne Filipas **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference 5/S1-3502 and attached.

Please provide the dimension between the vehicle ramp and column.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Dimension between vehicle ramp and column is 1/2".

T-0402 **BGP - Dimension at slab and parapet wall footing detail** **Closed** **02/21/2013** **03/03/2013** **02/28/2013** **Potentially** ☐

From: Webcor Construction LP Joanne Filipas **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference 4/S1-3210 and attached.

Please provide dimension between the ground level slab and parapet wall footing.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The gap width dimension is specified on plan S1-2310.

T-0403 **BSE - Mud Slab Flatness and Levelness Testing** **Closed** **02/21/2013** **03/03/2013** **02/27/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: 03 30 00 3.6.C.1.d

In follow up to the Turner's request, please confirm this specification section does not apply to the mud slab and no flatness or level testing is required.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Though flatness or levelness of all concrete pours is expected, FF and FL testing of the mud and protection slabs using special inspectors is not required.

The mud slab is to have falls to drain, as suggested by Webcor, for water management during construction. Also, it is important that the mud slab does not have step-offs or alignment issues between pours that

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

would create voids or cause the waterproofing membrane to tent.

T-0404 **BGP - Replacement of Lap Splice with Mechanical Couplers** **Closed** **02/22/2013** **03/04/2013** **03/06/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Ref: S1/3201

Please verify that it is acceptable to replace a lap splice with an approved mechanical coupler (500 series coupler) as needed to support the means and methods of construction. The current location being considered is the outside face wall vertical lap splice between the dowel extending from the mat slab and the typical wall vertical reinforcing at the bottom of the wall. See attached plan sheet S1-3201 to reference the proposed location. Should this be acceptable please verify:

1. The mechanical coupler can infringe upon the 2" clearance as the diameter of the coupler is greater then that of the actual reinforcing.
2. Also verify that the couplers can be installed at one typical elevation similar to that of the other couplers depicted on the inside face wall curtain.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is acceptable to replace the lap splice with an approved Type 2 mechanical coupler, however, the clear cover to the coupler shall not be less than 1.25" with a tolerance of minus 0".

T-0404.1 **BGP - Replacement of Lap Splice with Mechanical Couplers** **Closed** **02/22/2013** **03/04/2013** **03/27/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Ref: S1/3201

Number 2 of the RFI T-0404 was not answered.

Please verify that it is acceptable to replace a lap splice with an approved mechanical coupler (500 series coupler)

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Answer in RFI T-0404 confirmed.

2. Inquired couplers can be installed at one typical elevation similar to the interior face couplers.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

as needed to support the means and methods of construction. The current location being considered is the outside face wall vertical lap splice between the dowel extending from the mat slab and the typical wall vertical reinforcing at the bottom of the wall. See attached plan sheet S1-3201 to reference the proposed location. Should this be acceptable.
please verify.

1. Answered in RFI T-0404

2. Verify that the couplers can be installed at one typical elevation similar to that of the other couplers depicted on the inside face wall curtain.

T-0405 **BSE - Required Percent of Maximum Dry Density Required at Areas of Over Excav** **Closed** **02/22/2013** **03/04/2013** **03/01/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Ref: Specification Section 31 00 00.3.15.C.1

Specification Section 31 00 00.3.15.C.1 states.
C.Percentage of Maximum Dry Density Requirements: Compact soil to not less than the following percentages of maximum dry density according to ASTM D1557:
1.Under structures, building slabs, foundations and steps, fill deeper than five feet, shall be placed in lifts as defined above and compacted to at least 95 percent dry density.

Does the 95 percent dry density requirement apply only when fill is deeper than five feet and/or under structures, building slabs, foundations and steps?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

The subgrade beneath the mat slab is required to be native undisturbed soil or compacted to 95% of maximum dry density.

T-0406 **BSE - Micropile W434 Relocation** **Closed** **02/22/2013** **02/22/2013** **02/27/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Ref: Submital TG0300-622.4

Micropile W434 as laid out is in conflict with a dewatering well. BBII proposes moving Micropile W434 North 5' to provide adequate clearance. See attached sketch.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Thornton Tomasetti does not object to moving micropile (W434) as proposed.

T-0407 **BSE - Micropile W327 Installed 2' South** **Closed** **02/22/2013** **03/04/2013** **02/27/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Ref: Submittal TG0300-622.4

Micropile W327 was installed 2' South of original location. BBII proposes leaving the installed pile as is. See attached sketch.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Thornton Tomasetti does not object to the as-installed micropile (W327) location.

T-0408 **BGP - Open Stirrup with a Cap for Frame Beam Sections** **Closed** **02/25/2013** **03/07/2013** **03/01/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Ref: 5/S1-3600

Detail 5 on sheet S1-3600 depicts beam configurations Type SI through S5 all of which graphically depict a closed stirrup. Please confirm that it is acceptable to utilize an open stirrup with a cap. The cap would maintain a 135 degree hook on one side and 90 degree hook on the other and placed in an alternating fashion.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The inquired stirrups are for beams that are not in the TG06 package. There is a note on the detail that states "This Detail For Reference

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T-0409 **BSE - Micropile W226 Relocation (Due to Overhead Obstruction)** **Closed** **02/27/2013** **03/09/2013** **03/04/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Balfour Beatty Infrastructure, Inc. Brandon Miller

REQUEST:

Reference Specification: 31 63 33
Reference Dwg: Attached sketch

Micropile W226 as laid out does not have adequate overhead clearance to be installed. BBII proposes moving Micropile W226 North 12' to provide adequate clearance. An alternate relocation position for Micropile W226 could be 4' East and 4' North.

W/O recommends relocating the micropile North in order to avoid conflict with geothermal.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Shifting W226 north 12' as proposed is acceptable provided W227 will also be shifted 2' north (otherwise W226 and W227 are too close together).

Shifting 4' East and 4' North (5.66' Northeast) is not acceptable as this proposed location would conflict with the mat shear reinforcement.

T-0409.1 **BSE - Micropile W226 Relocation (Due to Overhead Obstruction)** **Closed** **03/04/2013** **03/14/2013** **03/05/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Specification Reference: 31 63 33
Specification Drawings: Attached BBII sketch

Micropile W226 as laid out does not have adequate overhead clearance to be installed. BBII previously asked to move the pile 12' North. BBII understands that this location would be too close to pile W227 which is already installed. BBII now proposes to move the pile 10' North and 1' West. This does not appear to conflict with geothermal piping.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Thornton Tomasetti does not object to relocating micropile W226 as proposed (10' North and 1' West).

T-0410 **BGP - Lower Concourse Top of Slab between Gridlines 3-9** **Closed** **02/27/2013** **03/09/2013** **03/05/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawings: S1-3201 (BSE Drawings)
S1-2202 (BGP Drawings)

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The lower concourse top of slab is per BGP Drawings. Note that the depressed slab extent is

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

S1-2203 (BGP Drawings)

12/10/10 Issued for construction BSE drawing S1-3201 shows lower concourse top of slab to be 8'-8" between gridlines 3-9. 11/27/12 Issued for construction per ASI 100 BGP Drawings S1-2202 and S1-2203 shows lower concourse top of slab to be 5'-5" between gridlines 3-5 & 8-9. Gridlines 5-8 shows top of slab at 5'-10".

Please verify the elevation of the lower concourse top of slab between gridlines 3-9.

between gridline 6-8 and not 5-8 as the RFI states.

T-0411 **BGP - Welding for Pentration Sleeves** **Closed** **02/28/2013** **03/10/2013** **03/08/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Robert Kjome

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Reference Specification: 05 50 10
Reference Submittal No: TG0600-036

Per the Submittal TG0600-036 comments, the intermediate ring, 3" horizontal weld must have a removable backer bar. Is it acceptable to have a double beveled groove weld replace the single bevel groove with a back bar? Eliminating the backer bar in this weld and having a double beveled groove instead is more efficient.

Secondly, the Submittal TG0600-036 comments address the field welding of the penetration sleeve collars to be conducted after the trestle pile is to be removed. Is it acceptable to weld a full collar with cap in the shop? The assembly would arrive onsite to be welded in place as originally intended by the designer.

Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. At intermediate ring, for 3" horizontal weld, contractor may substitute double beveled groove weld to replace single bevel groove with back bar, as proposed.

2. However, the contractor's proposal to pre-assemble the collar ring and the cap plate in the shop is not acceptable. The contract documents indicate that the collar ring and cap plate are two separate pieces to be sequentially field-welded into place. The collar ring is first field welded to the sleeve, and then secondly the cap plate is field welded to the collar ring. The contractor's proposal to pre-assemble the collar and cap into one unit makes it impossible to field weld the collar/cap assembly onto the sleeve because there will be insufficient clearance for welding (mat rebar will already be placed and the mat concrete poured with only a small blockout surrounding each sleeve, making it impossible to weld any pre-assembled collar/cap onto the sleeve from the outside). While this construction sequence is ultimately a construction sequence and means and methods issue that should be commented by W/O, it is the opinion of the design team that contractor's proposal is not feasible.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0412	BGP - Dewatering Well & Piezometer Penetration Sleeve Anchors	Closed	02/28/2013	03/10/2013	03/05/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Specification Section: 05 50 10
Specification Submittal: TG0600-036

Per the Metal Fabrication Submittal for the pipe/pile peentration sleeves, TG0600-36, the number of anchor holes per ring were arbitrary for the submittal. Is it acceptable to have 4 equally spaced 1/2" holes to fit 3/8" wedge anchors for the anchorage of the dewatering well & piezometer penetration sleeves?

Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Yes. It is acceptable to have 4 equally spaced 1/2" holes to fit 3/8" wedge anchors for anchorage of the dewatering well and piezometer penetration sleeves.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0413	BGP - Bulkhead Formwork Material	Closed	02/28/2013	03/10/2013	03/13/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Specification: 031000
Reference Drawings: Sketches attached

SCCI is planning to use Stayform for the construction of various bulkheads and blockouts in concrete structure. Reference attached sketches of the Mat slab bulkhead forms as an example. Stayform material shall be kept within 1.5" of all exposed concrete surfaces. Is it acceptable to use Stayform?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Upon cursory review, the proposed Stayform product appears to be acceptable to use. Please confirm that it is compatible with the installation and performance of adjacent waterstop materials. Please submit formal substitution request and adhere to submittal requirements.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0414	BGP - Cast Iron Supports	Closed	02/28/2013	03/10/2013	03/11/2013	Potentially	☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Ref: 7/P1-6001

Please reference attached drawing and Detail 7 on Contract Drawing P1-600I. Detail 7 does not specify any imensions of the pipe support assembly. SCCI interprets that detail 7 is purely conceptual and proposes that the pipe support assemblies ("goal posts") to be constructed

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The attached detail is acceptable with the following comments:

Penetrating through the protection slab is not acceptable. Contractor shall submit information to TJPA Representative describing how the installation will occur to ensure the attachment system and work

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

per the attached drawings.

Is this acceptable?

Please note that the RFS (request for substitution) for attached product is forthcoming.

method will not penetrate the protection slab and impact the waterproofing system.

Provide plates for the vertical supports and additional support as needed.

T-0414.1 **BGP - Cast Iron Support** **Closed** **04/09/2013** **04/19/2013** **04/13/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Ref: RFI T-0414
7/P1-6001

Per the response to RFI T-0414 (SCCI RFI #55), the EOR states the following:
"Penetrating through the protection slab is not acceptable. Contractor shall submit information to TJPA Representative describing how the installation will occur to ensure the attachment system and work method will not penetrate the protection slab and impact the waterproofing system."

SCCI proposes the following:
The pipe support assembly will be anchored to the Protection Slab with the use of 2 ea- 1/2" diameter Hilti KWIK Bolt TZ or Hilti KWIK Bolt 3 expansion anchors. Holes will be drilled to the manufacturer specified minimum required hole-depths of 2-5/8". In order to prevent over-drilling through the 4" Protection Slab and damaging the waterproofing membrane, SCCI will use roto-hammers equipped with depth-gauges (see attached information for Hilti TE-50 manual). The depth-gauges will be set prior to drilling and checked periodically during drilling operations.

Please confirm if this is acceptable. If this is not acceptable, then please provide complete design details for Detail 7 on P1-6001

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is acceptable for 4" thick protection slab. However the protection slab slopes and from 4" max. the thickness becomes much less at lower points. In this case, the drilled hole is getting too close to the membrane and a pipe support with a grouted plate at the bottom will have to be used.

Contractor to develop a protocol to verify the depth of the drilled holes at all locations and submit for review.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0414.2	BGP - Cast Iron Pipe Support	Closed	05/02/2013	05/15/2013	05/13/2013	Potentially	☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Andy Khuu

REQUEST:

Reference: RFI T-0414 and T-0414.1

Per the response to RFI T-0414.1, the Designer states that the protection slab will be sloped with a 4" maximum slab thickness. SCCI does not plan to pour the protection slab with a slope. SCCI plans to pour the protection slab level and keep the protection slab consistently 4" thick.

The Designer suggests using a pipe support with a grouted plate for scenarios where the drilled holes may get too close to the membrane. It would appear that grouted plate would still require some type of embedded anchor. By adding the grout, the manufacturer's embedment depth for the anchor is shortened and the tensile (pull-out) strength will be reduced.

An alternative method to anchoring the pipe supports would be the use of 1/2" short drop-in anchors (see attached Red Head Multi-Set II information) which requires 1" of embedment into concrete. The holes would be drilled using a Depth Charge drill bit which is a 1" long bit with a shoulder to prevent over drilling.

Confirm if this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The proposed attachment method is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0415	BGP - Wall and Coupler Modifications in Zone 1 Train Box	Closed	02/28/2013	03/10/2013	03/13/2013	Potentially	☐

From: Webcor Construction LP Joanne Filipas **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: Field Order T-00011 and SKA-2438 R2 attached

SKA-2438 includes proposed relocations and additions of rooms at the train platform level, specifically between gridelines 1 and 3.

1. Please confirm these proposed locations are final.
2. Please provide dimensions for these rooms.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. The proposed general arrangements for the Fire Pump Room, Emergency Electrical Room and Fuel Storage Room shown on SKA-2438 R2 are substantially correct.

2. Please find attached SKAs- 2604, 2605, 2606 and 2607, showing the plan dimensions for the new and revised wall layouts of this area.

Note that we are continuing to coordinate Structural and MEP aspects for these revisions.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0416	BGP - Geothermal Loop Pneumatic Testing Pressure	Closed	03/01/2013	03/11/2013	03/06/2013	Potentially	☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Per specification 23 57 34, 3.2, C

Per specification 23 57 34, 3.2, C, all individual loops shall be pressure tested at 100 PSI for 30 minutes before installation. The moisture content from the Hydrostatic test of the loop can compromise the fusion weld. As discussed in the DFOW meeting, S3H is recommending pneumatic testing of the pipe at 80 PSI. Upon complete installation of the loops and header piping, the complete sub group will be hydrostatically tested as specified. Please see attached documentation from Manufacturer regarding Pneumatic Testing and confirm pneumatic testing is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Pneumatic Testing to 80psi is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0417	BSE - Micropile W434.5 Addition per Contract Drawings	Closed	03/04/2013	03/14/2013	03/12/2013	Potentially	☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Ref: S1-2031 and Submittal TG0300-622.4

Micropile W434.5 was installed on 2/28/2013 per contract drawing S1-2031. However, W434.5 was not included in approved submittal TG0300-622.4.

Please confirm Micropile W434.5 is required.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Micropile W434.5 is required per the contract documents (S1-2031).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0418	BGP - Revit CAD Files Confirmation	Closed	03/05/2013	03/15/2013	03/06/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

Reference Document: Email attached.

Pursuant to the direction received from the TJPA, please confirm the CAD files which are to be extracted from the Revit model are consistent with the Contract Documents.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per Ed Sum, this RFI is being voided with the recommendation that the Contractor review Contract Specification Section 00 08 07.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0419	BGP - Foundation Walls Formwork Ties	Closed	03/07/2013	03/17/2013	03/12/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Reference Specification: 03 10 00 2.2.B.7.E
Reference Drawings: See attached sketchs.

Please reference attachments and Specifications Section 03 10 00 2.2 B.7.e: "when removed, ties shall not leave holes larger than one inch diameter in concrete surface".

For the foundation walls formwork SCCI would like to utilize concrete inserts that will be used in subsequent concrete lifts. See attached sketches for conceptual/preliminary formwork design. Concrete inserts need to be rated for up to approximately 35 kips SWL (safe working load). As a result of this, the concrete ties need to have 1.5" to 2" outside diameter.

For the formwork involved with the 3ft thick foundation walls SCCI requests variance from the specifications referenced above and be able to use these bigger form ties. For all other interior walls including the shear walls, SCCI will comply with the Specification referenced above.

Is this acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The use of any type of form tie/insert for the foundation wall is prohibited per specification 03 10 00 B.5 and B.7.a.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0419.1	BGP - Foundation Walls Formwork Anchors	Closed	03/14/2013	03/28/2013	03/26/2013	Potentially	☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference RFI: T-0419
Reference Specification: 03 10 00-2.2 B.8.A, ACI Formwork Manual

There has been a misinterpretation of the specifications that were used to classify the referenced RFI No. 419.

Concrete inserts intended for use with wall formwork design depict Specification Section 03 1 0 00 2.2 B.8.A "Anchorages".

Per ACI Formwork Manual: "A concrete form tie is a tensile unit adapted to holding concrete form secure

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It will be acceptable to use these contractor-proposed concrete formwork anchors.

Form anchors are not to penetrate full depth of the concrete wall.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

against the lateral pressure of unhardened concrete, with or without provisions for spacing the forms to a definite distance apart, and with or without provision for removal of metal to a specified distance back from the concrete surface." (ACI Formwork Manual 4-35)

"Form anchors are devices used to secure formwork to previously placed concrete of adequate strength; they are normally embedded in concrete during placement." (ACI Formwork Manual 4-36)

To reiterate, SCCI intends to utilize concrete inserts/anchors per attachments to secure and anchor the wall forms in place. Use of concrete inserts/anchors will leave 2" hole that will be patched once the form system is removed.

Is this acceptable?

T-0420 **BGP -Geothermal Loop Air Pockets** **Closed** **03/06/2013** **03/17/2013** **03/11/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Ref: M-0006

Per contract, the geothermal lines are to run below the elevator and sump pits. This will cause a difference in elevation across the a geothermal pipe loop. This will create high points in the loop for bodies of air to gather or get traped. These air bodies or pockets can coalesce in stagnant water and potentially compromise the hydraulic stability. Typically air elimination systems are implimented at high points to remove these bodies of air after the initial flush/blowout.

Please advise how to handles these bodies/pockets of air.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

WSPFK Response: Air elimination devices are not feasible in a ground loop. Manual air vents will be provided inside the building in a future package.

T-0421 **BGP- Geothermal CDSM Grout** **Closed** **03/06/2013** **03/17/2013** **03/13/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Ref: Submittal pkg TG0601-010

Due to potential procurement issues with the submitted grout, S3H would like to confirm that the attached grout is acceptable as a backfill material for the CDSM wall excavation. This Supergrout is a high thermal conductivity grout designed for geothermal systems.

Please confirm it is acceptable as an alternate to the grout submitted.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is acceptable.

T-0422 **BSE - Micropiles W328, W344, W383 Relocation (Due to Overhead Obstruction)** **Closed** **03/06/2013** **03/17/2013** **03/11/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Ref: Submittal TG0300-622.4

Micropiles W328, W344, and W383 as laid out do not have adequate overhead clearance to be installed. BBII proposes moving Micropile W328 North 7.7' & East 3.7', Micropile W344 North 3', and Micropile W383 North 5' to provide adequate clearance. All three of these Micropiles are located south of J-Line and the Geothermal piping area. See attached sketch.

Please confirm these relocations are acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Thornton Tomasetti does not object to moving micropiles W328, W344, and W383 as proposed.

T-0423 **BSE -Subgrade pit dimensions per comments to TG0300-340.1** **Closed** **03/07/2013** **03/17/2013** **03/20/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawings: S1-2024,S1-2027, 7/S1-3010, A1-2817
Reference Specificaiton: 31 00 00
Reference Submittal: TG0300-340.1

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed that BBII shall use the revised 20'-3 3/4" dimension, enlarging the pit equally to the north and south as stated on the submittal.

2) The dimensions noted for the GL35/C pit in returned submittal TG0300-340.1 are not new

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

The response to Mud Slab Rebar Shop Drawings Submittal TG0300-340.1/TA1020-32001A06.1 provided new dimensions for depressions in the trainbox subgrade. Per 00 07 00 Part 6.02.A, BBII would like to clarify which dimensions are to be used for construction.

1. Sheet MS-4 of submittal shows subgrade depression between Grid lines 18 & 19 between Gridlines B & C having dimension of 20 '-0' x 40'-4". This is consistent with the dimensions provided on sheet S1-2024 Revision 2 dated 11/27/2013. The review comment by TT revises the 20'-0" dimension to 20'-3". Please confirm which dimension is to be used.

2. Sheet MS-7 of submittal shows subgrade depression at Gridline 35 between Gridlines B & C as having dimensions of 22'-1 3/4" x 18'-6 3/4". This geometry is base on the size of the pit shown on A1-2817 Revision 1 dated 11/27/2012 and 7/S1-3010 Revision 0 dated 08/30/2012. The Submittal response comments provided show a new overall dimension of 19' -9" and a specific offset to Gridline 35. Please confirm which dimensions are to be used.

3. Sheet MS-7 of submittal shows subgrade depression between Gridlines 34 & 35 at Gridline E. TT comment calls out 3'-0" from eastern limit of depression to Gridline 35. This dimension was not provided on sheet S1-2027 Revision 2 dated 11/27/2012. Please confirm this dimension is to be used.

4. BBII understands that dimensions provided on this submittal are to bottom of Mat Slab concrete, and that each dimension should be increased to account for thickness of protection slab and waterproofing. Please confirm that an additional 0'-7" is the correct dimension for this adjustment.

dimensions. Rather, they are the same dimensions as communicated on A1-2817 Revision 1 dated 11/27/2012 and 7/S1-3010 Revision 0 dated 08/30/2012. The sloping regions of the bottom surface of the thickened mat shall slope at a 1 to 1 slope, and remain 5'-0" MIN from the interior pit boundary as noted on 7/S1-3010. Thus, with these constraints the bottom of mat thickening dimension will be as marked up in the returned submittal (16'-9" from GL 35 to the western limit of the GL35/C depression). The 3'-0" dimension is the dimension from GL 35 to where the 1 to 1 slope turns vertical at the expansion joint/edge of mat. Returned submittal and contract documents do not conflict.

3) Confirmed that BBII shall use the 3'-0" dimension to GL 35 as noted in returned submittal TG0300-340.1 for the eastern limit of the GL 34-35/E depression.

4) The perpendicular dimension from the underside of the mat slab to the top of the mud slab is 4 1/2". This is 4" for the protection slab thickness, plus a 1/2" for the waterproofing zone.

T-0424 **BGP - Dewatering Wells / Monitoring Instrument** **Closed** **03/08/2013** **03/18/2013** **03/11/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST: **SUGGESTION:** **ANSWER:** **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Reference Drawings: A1-8711
Reference Photo: Attached

Per plan sheet A1-8711 , Detail 3 & 6, the dewatering well and monitoring instrument pipes are plumb coming out of the mud slab. Additionally, these details do not show couplers or varying diameters on
the dewatering wells or monitoring instruments. Currently almost all of dewatering wells have varying diameters with couplers and are almost all out of plumb. The monitoring instruments also seem to be
out of plumb. To avoid the plumbness and varying dewatering well pipe diameter issues, is it acceptable to cut the dewatering well pvc pipe at or close to the mud slab elevation to avoid conflict
with the dewatering sleeves? How should SCCI handle the sleeves for the monitoring instruments that are out of plumb? Please advise.

No. It is not acceptable to cut the dewatering pvc pipe at or close to the mud slab elevation. The cut off must be well above the elevation of the waterproofing spiral wrap and ring plate.

The varying diameters and plumbness of each of the penetrating devices / pipes will require field measurement and shop drawings prepared showing adaptation of the sleeve detail to each unique situation.

T-0425 **BGP -Geothermal Trench Methods** **Closed** **03/08/2013** **03/18/2013** **03/19/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Specification: 31 23 34 3.3 F

Per Coordination Meeting March 6, 2013, S3H Inc. is looking to install the geothermal loop at a depth of 2' below the Mat slab. After the loop installation, the trenches will be back filled with 8" of loose native soil to protect the pipe. This 8" lift will be watered to settle the loose soil around the pipe. Upon watering and settling of the loose 8" lift, the remainder of the trench will be backfilled with native soil and compacted to the relative density of the surrounding soil per specification.

Please confirm.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Item 1. F+K response: Depth of trench for geothermal piping shall be per mechanical drawings and specifications.

Item 2. Arup response: 8" of loose satisfactory soil material is per specification 23 57 34 paragraph 3.1.D.

Item 3. Arup response: The remaining backfill shall be compacted to 95% as required in the specifications.

T-0426 **BGP - Welded Wire Mesh in Sump and Elevator Pits** **Closed** **03/11/2013** **03/21/2013** **03/26/2013** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Robert Kjome

To: Turner Construction Compan Gary Krutsch

Answered By: Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Reference Drawing: S1-3004

SCCI is requesting to use welded wire mesh (specification attached) at the sloped surfaces of the sump and elevator pits. The welded wire mesh will inhibit concrete settlement towards the bottom of the pits during placement. Please advise if this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Adding reinforcing into the protection slab is a means and methods proposal that falls under the Contractor's responsibility to work out issues related to this. If the Contractor elects to use reinforcing in the protection slab, he should bear responsibility for ensuing damage to the membrane should it occur. This includes use of inappropriate chairs as well as unrolling mesh with the wire ends facing down, traffic over the membrane during the installation, use of hooks to pull up the mesh and similar activities that could promote damage to the membrane assembly and subsequent leaking.

The membrane manufacturer should be apprised of the Contractor's intention to use the reinforcing insofar as it may affect the warranty. For record purposes, submit details and shop drawing for the protection slab reinforcing to the TJPA Representative (Architect). The proposal for this should be outlined in the waterproofing pre-construction meeting on March 27, 2013.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0427	BSE - Back of CDSM wall allowable friction value.	Closed	03/12/2013	03/22/2013	03/27/2013	Potentially	☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

WOJV is preparing details to connect and reinforce the Zone-4 walers. Please provide the value of back of CDSM wall allowable friction.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

The available friction can be calculated using the following coefficients times the effective horizontal stress. Fill = 0.36; Bay Mud = 0.29; Marine Sands = 0.43; Lower Bay Mud = 0.29; Lower Marine Sands = 0.40; Old Bay Clay = 0.29. Guidance on the stratigraphy of the soil units is given in the Geotechnical Data Report.

Please note that differential movement between the soil and the back of the CDSM wall is required to mobalize this strength.

T-0428	BGP - Geothermal Manifold Valves	Closed	03/11/2013	03/25/2013	03/22/2013	Potentially	☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Reference Specification: 23 57 34 2.1.B

In addition to the keystone valves submitted for the geothermal manifold, S3H is requesting to also install Nibco valves (specification attached) as allowed under specification 23 57 34 2.1.B. There are currently procurement issues with the submitted Keystone valves. All manifolds will be installed with similar valves. Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Nibco is an acceptable manufacturer. Submit proposed valves for review per specifications for product data submittals.

T-0429	BGP - Contract Limit Lines	Closed	03/11/2013	03/25/2013	03/22/2013	Potentially	☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference Drawing: S1-3206, S1-3201

Contract Drawing Sheet S1-3206 Section 4 depicts an elevation of the knockout walls along the West end of the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The bold scope delineation line on Section 4/S1-3206 shall be at the top of +7.0' slab and the associated CJ. The only exception to this delineation would be at the southwest corner where the delineated ramp slab

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

structure. Within this elevation the bold limit line for the contract TG0600 is shown well above the top wall CJ which does not align with Note 1 and the typical wall section on sheet S1-3201. Please clarify the proper location of the contract package TG0600 limit line on sheet S1-3206 Section 4.

meets and overhangs the foundation wall above the +7.0" elevation. Refer to 1/S1-2251 for this area

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T-0430 **BGP - Trainbox Shear Wall STD Hook** **Closed** **03/11/2013** **03/22/2013** **03/20/2013** **Potentially** ☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Andy Khuu

REQUEST:

Reference Drawings: S1-3260

Detail 2 of S1-3260 depicts standard hook reinforcement between the horizontal ties in the shearwall above the lower concourse; however, it is not clear if the standard hooks are required in the shearwall below the lower concourse. Please confirm if standard hook reinforcement is required in between the center shear wall ties. If standard hooks are required, please provide detail for the layout of the standard hooks in between the center shear wall ties.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The standard hook reinforcement is required only at the edge of wall condition, and therefore, not required below the lower concourse at the center shearwall ties. For the center location, the horizontal bars are continuous when you are below the lower concourse level.

T-0431 **BGP - Knockout Wall, Top of Wall T-Head** **Closed** **03/12/2013** **03/26/2013** **03/22/2013** **Potentially** ☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference Drawing: S1-3206
Reference Specification: 03 20 00

Dwg. Sheet S1-3206 Section 4 depicts the vertical reinforcing at the top of wall without a T-headed bar. Please confirm that a T-headed bar is not required at the top of the vertical bars throughout the knockout wall area.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed that the T-head is not required at the top of the vertical bars throughout the knock-out wall area.

☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0432	BGP - Shear Wall Layout	Closed	03/12/2013	03/26/2013	03/19/2013	Potentially	

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference Drawings: S1-2250, S1-2030

The Northern-most shear wall when laid out based on the details (angle = 38.4 degrees from GL H) and dimensions (30'-5 7 /8") per contract drawing sheet S1-2030 do not conform with the dimensions provided on contract sheet S1-2250 Section 1. Please confirm which layout is correct and directions how to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The northernmost shearwall length is as defined by the edge of slab dimension on S1-2250. This wall does deviate from the typical length, however, note that a shearwall length is defined starting from the centerline of wall intersecting with the face of foundation wall and not as the RFI sketch has interpreted.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0433	BGP - Columns Within the Shear Wall	Closed	03/12/2013	03/22/2013	03/21/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference Specification: 03 20 00
Reference Drawing: S1-2250, S1-3306

The two columns C19 and column C38 depicted on contract drawings Sl-2250, Section 1 all appear to be located adjacent to the opening and per the plan view are graphically represented as diamond shaped. When referencing contract drawing sheet S1-3306 these columns are graphically and dimensionally represented as square and not diamond shaped. Please confirm the geometry of these columns matches that as shown on S1-3306.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The inquired C19 & C38 columns are diamond shape in plan where the 3 sides match the shear wall geometry at the edge of opening below and the 4th side is 24" away from and parallel to the end of wall at opening below. Reinforcement & detailing of S1-3306 shall apply to this shape.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0434	BSE - Micropile W603 Installed 1' South (Below ground obstruction)	Closed	03/13/2013	03/23/2013	03/15/2013	Potentially	☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Ref:Submittal TG0300-622.4

Micropile W603 was relocated 1' South of original location after encountering grout from the adjacent pin pile. See attached sketch.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Thornton Tomasetti does not object to the relocation of Micropile W603 a distance 1' to the south as shown in this RFI.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0435	BGP - Flame Cutting of Reinforcement	Closed	03/11/2013	03/25/2013	03/22/2013	Potentially	☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Andy Khuu

REQUEST:

Reference Specification: 03 20 00-3.1.6.A

Project specification section 03 20 00-3 .1.6 states "Do not heat or flame cut bars;" however, this statement is a subpart to section 03 20 00-3.1.6. "Bend bars cold." It is unclear if the statement regarding to heating and flame-cutting of bars exclusively applies to bending of bars. Please confirm that heating and flame-cutting for purposes other than that of bending of bars is permitted.

Also, please refer to the attached section from CRSI which states that flame-cutting of bars have no adverse effects on
reinforcement.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Heating and flame-cutting of bars is prohibited unless approved by EOR

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0435.1	BGP - Flame Cutting Follow-Up to RFI 435	Closed	05/02/2013	05/10/2013	05/14/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Andy Khuu

REQUEST:

Reference: RFI T-0435, 03 20 00-3.1.6.A

The response to RFI T-0435 indicated that heating and flame cutting of reinforcing is prohibited unless approved by the EOR and per further discussion about this matter with the engineer it was requested that specific applications be submitted for further review. The following is a list of those applications:

1. Penetrations in Slabs, Walls or Decks. Torch used to cut opening into reinforcing based on final asbuilt layout of penetration.

2. Support Bar. Torch used to trim or remove support/give-away bar due to conflict or other project need.

3. Column Rack/Crush Bar Removal. Torch used to remove rack and crush bars from columns to allow for tremie insertion and additional open space through center of column after column erected into place.

4.Unforeseen Conflicts. Project conflicts that are identified

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. From the 05/09/2013 W/OJV Assist Meeting, it was discussed the intention for the need to flame-cut at penetration openings was for trimming straight bars around mat openings or pit edges to achieve proper clear cover that will be spliced with an "L" bar as detailed in contract documents & reflected in the rebar shop drawings and that the use of cutters or saws are not applicable/practicable. It will be acceptable to trim the ends of the Mat and Lower Concourse slab straight bars at openings and pit edges via flame-cutting to achieve detail intent.

2 & 3. Handling of construction aids is means and methods and we do not have any comments.

4. See response to item 1 regarding what will be allowed. For the CDSM shoring wall pile conflict application, it was discussed at the 05/09/2013 W/OJV Assist Meeting that flame-cutting would not be required for necessary adjustments at the mat and that the edge mat bars could be slid inward as required. While we are in support of facilitating

during the course of work and require trimming or removal of reinforcing steel to correct condition. Example CDSM pile conflict.

Please confirm the use of a torch/flame is allowable for the applications listed above.

construction efforts, the term "unforeseen conflicts" is too vague to allow a blanket approval. If there are other repetitive and already known conditions that the contractor finds flame-cutting necessary, please submit for review with detailed description.

General comments:

A. Flame-cutting shall not damage the work of other trades, such as but not limited to: Waterproofing, formwork, etc.

B. Flame-cutting shall not compromise design intent of reinforcement detailing.

T-0436 **BGP - Elevator Rail Support Width** **Closed** **03/13/2013** **03/23/2013** **03/21/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawing: Section A of 4/S1-7630

Please confirm that the dimension from the left end of the 1/2" embedded plate to the center of the welded headed stud is 3".

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Note that detail 4A/S1-7630 specifies the dimension of 1/2" from top of HSS12x6 to 5/8" plate and that the 5/8" plate is shaped with a top edge at a 1:1 slope. This slope starts at the side of the HSS. With the welded studs centered on the HSS and spaced at 1'-0" on center, that leave 3 1/2" from center of welded stud to edge of 1/2" embedded plate.

T-0437 **BGP - Geothermal Riser Conflict with Soldier Pile** **Closed** **03/13/2013** **03/23/2013** **03/25/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Specification:23 57 34

As laid out per the approved shop drawings, the GLS/GLR Riser for the geothermal loops is in conflict with the soldier pile in the field. Please confirm that the riser can be

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Geothermal riser shall be located to the East of Soldier Pile 36 (between 36 and 37).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

relocated to the next CDSM wall panel to the West.

T-0438 **BGP - Knockout Wall CJ** **Closed** **03/12/2013** **03/26/2013** **03/21/2013** **Potentially** ☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference Drawing: 4/S1-3206

Reference Dwg. S1-3206 Section 4 - knockout wall section details. Since knockout walls are to be constructed independent of the rest of the structure, SCCI intention is to construct the knockout walls in two lifts. SCCI suggests eliminating bottom horizontal CJ of the knockout walls, as shown on the attached marked up drawing.

Is this acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractor-proposed elimination of bottom CJ in knock-out walls is acceptable.

T-0439 **BGP - Mat Slab Elevator Opening Embeds** **Closed** **03/13/2013** **03/23/2013** **03/27/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Ref: Drawings S1-2052 through S1-2061, 1/S1-7004, 12/S1-7602, 3/S1-3006, S1-3004, S1 -3008.

Please reference attached drawings of Mat Slab openings and Embeds. Drawings S1-2052 through S1-2061 show the locations of openings in the Mat Slab. At gridlines 1.8-E on drawing S1-2052 there is an elevator opening. Detail 1 on Drawing S1-7004 is the elevator opening from S1-2052 and shows the opening having two L8x4xl/2 full length embeds at the Mat Slab. See Detail 12 on attached drawing S1-7602 for embed. S1-2052 and detail 1 on S1-7004 both have cut lines referencing Detail 3 on S1-3006 showing the Mat Slab Pit details at this location. There are additional elevator openings on drawings S1-2054, Sl-2055 and S1-2057. These" openings reference drawings S1-3004 and S1 -3008. Detail I on S1-7004 does not

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed, the only elevator pit that gets embedded angles is the one located at gridlines 1.8-E, and as shown on 1/S1-7004.

See the attached sketch SKS-0184, where the reference for the lengths of these embeds have been modified.

The other elevator pits referenced in this RFI are not fully constructed as part of the Below Grade Package, and the tops of these elevator pits and additional embedded angles will be installed in a future package that includes the train platforms.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

correspond to the openings on S1-2054, S1-2055 and S1-2057. Therefore, the only elevator opening that has L8x4xl/2 full length embeds on the Mat Slab is located at gridline 1.8-E.

Please advise if this is correct.

T-0439.1 **BGP - Mat Slab Elevator Opening Embeds** **Closed** **03/29/2013** **04/08/2013** **04/09/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Jesse Dillon

REQUEST:

Ref: RFI T-0439, SKS-0184

Please reference attached drawing. The response to WOJV RFI T -0439 modifies the continuous embedded assemblies to be four L8" x 4" x W' x 1 '-2" elevator post bases as depicted on Contract Drawing S 1-7600 Detail 11. The RFI response does not show the location and spacing of the embedded assemblies.
Please provide locations and spacing.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The embedded angles are centered under each elevator post. Final elevator post locations shall be coordinated with elevator manufacturer.

If an elevator provider is not awarded a contract in time for construction, the following alternate may be used. In lieu of the L8x4x1/2 x1'-2" embedded angles, a continuous L8x4x1/2 angle with welded studs at 12" may be used. The HSS guiderail post will be welded to the embedded angle in the field after an elevator provider has been selected.

T-0439.2 **BGP - Mat Slab Elevator Opening Embed Dimensions** **Closed** **05/10/2013** **05/24/2013** **05/15/2013** **Potentially** ☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author: Shimmick Construction Company, Inc Jesse Dillon

REQUEST:

Ref. RFI T-0439.1

TJPA's response to RFI T-0439.1 stated "Final elevator post locations shall be coordinated with elevator manufacturer." The response has a second option to use a continuous L8x4x1/2 in lieu of the 1'-2" base. Please provide the elevator post locations if an elevator manufacturer has been selected? If not, SCCI is

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Can't find answer in Constructware

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

requesting to use continuous embeds. Please advise if this is acceptable.

T-0440 **BGP - Glass Guardrail Embeds** **Closed** **03/12/2013** **03/26/2013** **03/20/2013** **Potentially** ☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Jesse Dillon

REQUEST:

Reference Drawings: 7/S1-3410, S1-2202-2207, S1-2210, S1-2211

Please reference attached drawings of Concourse Level glass guardrail embeds and openings. Detail 7 on drawing S1-3410 is the typical PL 3/8x7 glass guardrail embeds for escalator and stair openings. The detail states that the guardrail embeds are continuous. It is unclear what the boundaries of the guardrail embeds are. SCCI has determined that no guardrail embeds are necessary at the opening locations where future CMU or concrete walls shall be constructed flush with the opening. Also, the guardrail embeds can be terminated at the escalator openings where the opening is reduced. Attached drawings Sl-2202 through Sl-2207, Sl -2210 and S1 -2211 show the limits SCCI has determined the glass guardrail embeds shall be installed. Please advise if these locations are accurate and the only locations the guardrail embeds shall be installed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The markups on the RFI sketches have interpreted the locations of glass guardrail embeds at openings correctly with the exception of GL 34 south opening where the west side of the opening does not have a future wall and will require a guardrail embed.

T-0440.1 **BGP - Glass Gaurdrail Embeds** **Closed** **08/05/2013** **08/15/2013** **08/16/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Attached Drawings, RFI T-0440

Please reference attached drawings (Sl-2204 through Sl-2207, Sl-3410), and RFI T-0440 response. Per ASJ 104, future walls addressed in RFI T -0440, have been revised.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please refer to the attached SKA's-2794, 2795, 2796, 2797 & 2798 for the locations of the glass guardrail embeds at the Lower Concourse Level.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Per ASI 104, the attached drawings show the limits SCCI has determined the glass guard rails shall be installed. Please confirm these locations are correct and are the only locations the guardrail embeds shall be installed.

T-0441 **BSE - Micropile W638 Relocation (Dewatering Well Conflict)** **Closed** **03/14/2013** **03/24/2013** **03/19/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Ref: Submittal TG0300 - 622.4

Micropile W638 as laid out is in conflict with a dewatering well. BBII proposes moving Micropile W638 East 2' to provide adequate clearance. This Micropile is located south of J-Line and the Geothermal piping area. See attached sketch.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Thornton Tomasetti does not object to shifting Micropile W638 as proposed.

T-0442 **BGP - Geothermal Riser Bracket Details** **Closed** **03/14/2013** **03/24/2013** **03/18/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Arup Kevin Clinch

Co-Author:

REQUEST:

As requested in the Geothermal Meeting with the TJP A and Turner, please confirm that the attached details for the geothermal pipe riser brackets are acceptable. These details clarify the offset from the face of the CDSM wall required to avoid conflict with the water proofing membranes.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is acceptable.

T-0442.1 **BGP - Geothermal Riser Bracket Details** **Closed** **03/21/2013** **03/31/2013** **03/29/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

SUGGESTION:

ANSWER:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Accept Suggestion: ☐

As requested in the Geothermal Meeting with the TJPA and Turner, please confirm that the attached details for the geothermal pipe riser brackets are acceptable. These details clarify the offset from the face of the CDSM wall required to avoid conflict with the water proofing membranes.

The detail shown on the RFI sketch is acceptable.

T-0443 **BGP - C Channel Confilct with Geothermal Pipe Riser** **Closed** **03/12/2013** **03/26/2013** **03/21/2013** **Potentially** ☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Reference Specification: 23 57 34
Reference Photo: Attached

Shimmick plans to excavate the geothermal pipe risers in one lift up the CDSM wall. There is currenlty no clearence behind the C-Channels for Shimmick to excavate the geothermal pipe risers. Please confirm that the C-Channels will be removed from the shoring system prior to the geothermal riser installation or provide an alternative location for the risers.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

These channels are part of the BSE TG03 Contractor's Internal Bracing System. Coordinate removal of these steel channels with the CM/GC.

T-0443.1 **C-Channel Removal prior to Mat Slab and Re-bracing installation.** **Closed** **03/20/2013** **03/30/2013** **03/25/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

The Geothermal Risers are to be installed up the CDSM wall to ground level in one sequence. Please confirm it is acceptable to remove the C-Channels prior to Mat slab and Re-bracing installation.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to response issued for RFI T-0443. This is a CM/GC coordination issue.

T-0445 **BGP - Mat Slab Pour Length** **Closed** **03/14/2013** **03/28/2013** **03/21/2013** **Potentially** ☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference Specification: 03 30 20 3.2
Reference Sketch: CJ-03 (Mat Slab pour S112)

SCCI has revised the construction joint layout to address CJ submittal comments, and has modified locations of the CJ's to have all concourse CJ's line up with the wall CJ's, be under 60' long, and fall within center third of the span (as specified). As a result of trying to maintain the wall and concourse CJ's within the specified parameters one of the Mat slab pours (S112) will need to extend to 121', which is 1' over the specified length.

Is it acceptable to have pour S112 (that falls between grid lines 22 and 26) 121' long (East-West direction)?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Yes this is acceptable for pour S112.

Provide updated Construction Joint Layout submittal reflecting these changes.

T-0446 **BSE - Micropiles W390 & W393 Relocation (Overhead Obstruction)** **Closed** **03/18/2013** **03/28/2013** **03/19/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Brandon Miller

REQUEST:

Ref: Submittal TG0300-622.4 and TG0601-009.1

Micropiles W390 and W393 cannot be installed as laid out due an overhead obstruction. BBII proposes moving W390 West 16" to provide adequate clearance. BBII proposes moving W393 West either 10" or 2'-10" to provide adequate clearance. The proposed location for Micropile W390 will be South of the geothermal area. The proposed locations for Micropile W393 will be within the geothermal area; however, the proposed
locations do not appear to impact geothermal piping and the 12" minimum clearance between pipe and piling will be maintained (Note 4 on Geothermal Submittal sheet GT-Zone-02).
See attached sketch.
Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Thornton Tomasetti does not object to shifting Micropiles W390 and W393 as proposed.

T-0447 **80 Natoma Shoring Beam in Sump Pit** **Closed** **03/18/2013** **03/28/2013** **03/20/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jack Adams

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Balfour Beatty Infrastructure, Inc. Kelly Phariss

REQUEST:

Reference RFI: T-0317.3
Reference Photo: attached

BBII has confirmed that the 80 Natoma H pile (shown in attached photo) has been demolished to the -44.5 ft required per Sheet D-2210 and RFI T-0317.3. Please provide depth that BBII must demolish the attached 80 Natoma H pile so not to conflict with geothermal piping.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

BBII IFC drawing D-2210 shows 80 Natoma Shoring wall to be removed to elevation -44'-6" also GT-2101 shows the Subgrade elevation of Pits to be -44'- 9" .

Deeper removal of the 80 Natoma wall beams are not required in order to allow clearance for the geothermal piping. The TG06 Contractor has taken these into account (Refer to Geothermal Loop Piping Submittals)

T-0448 **CDSM Soldier Pile Encroachment** **Closed** **03/19/2013** **03/29/2013** **03/27/2013** **Potentially** ☐

From: Webcor Construction LP Kirk Nielsen **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: Exhibits A-H

In follow up to the 3/13/13 meeting with AAI and TT regarding the CDSM soldier pile (SP) encroachment WOJV's proposal for mat slab area #1 (Exhibit-A) is as follows:

Marked up sheets SH-2000 (Exhibit-B) and SH-2001 (Exhibit-C) depict the location of the encroaching SPs and the degree in which they are encroaching.

Predicated on SE stamped detail A/SLC.1 (Exhibit-D):

A. At (4) SPs 753, 761, 765, & 787, WOJV is proposing to decrease the wall thickness to 34-1/2" with #11 rebar spacing to 6" o.c. between the centerline of the (2) adjacent piles. For example, as depicted in SK-T-0448.1 (Exhibit-E) SP #753 encroaches 1-1/4". WOJV would reduce the wall thickness while reducing the rebar spacing to compensate for the reduced wall thickness to clear the encroaching SP as depicted in SK-T-0448.2 (Exhibit-F).

B. At SP 819 WOJV is proposing to decrease the wall thickness to 33 3/16" with #11 rebar spacing to 6" o.c. between the centerline of the (2) adjacent piles. Similar to above, as depicted in SK-T-0448.3 (Exhibit-G) SP #753 encroaches 2-3/16". WOJV would reduce the wall

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is acceptable to reduce the foundation wall thickness with reinforcement spacing reduction as proposed for the 5 inquired locations.

Note that this is not a pre-approval for future conditions that may arise. W/O shall coordinate these approved modifications with shop drawing preparation.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

thickness while reducing the rebar spacing to compensate for the reduced wall thickness to clear the encroaching SP as depicted in SK-T-0448.4 (Exhibit-H).

WOJV did review the possibility of cutting the W21x201 flanges to accommodate the encroachment however, this high risk remedy was ruled out as it could jeopardize the project shoring system.

Please advise.

T-0448.1 **BGP - CDSM Soldier Pile Encroachment, mat areas 1&2 all levels (Exhibit-A).** **Closed** **04/26/2013** **05/06/2013** **04/26/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Marina Rosso

Co-Author: Webcor Construction LP Kirk Nielsen

REQUEST:

Ref: T-0448, SH-2001, SH-2000

Previous RFI response #T-0448 (Exhibit-A) only addressed the impact of the encroaching CDSM soldier piles (SPs) on the first or bottom wall segments. This RFI address the encroaching SPs in mat slab areas 1&2 (Exhibit-B) at all levels of wall. This RFI shall supersede previous RFI response #T-0448.

Marked up sheet SH-2001 (Exhibit-C) depicts the location of the encroaching SPs and the degree in which they are encroaching.

1. SP #753 in mat area #2 encroaches 1-1/4" at elevation -34.12.
WOJV is proposing to decrease the specified 36" wall thickness to 34-3/4" to clear the encroaching SP. WOJV would reduce the wall thickness while compensating by supplementing the base contract #11 bars @ 8" o.c. with intermediate #7 bars (Option #3 Exhibit-D) exclusively at the level of encroachment.

2. SP #761 in mat area #1 encroaches 7/8" at elevation -34.12.
WOJV is proposing to decrease the specified 36" wall

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

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Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

thickness to 35-1/8" to clear the encroaching SP. WOJV would reduce the wall thickness while compensating by supplementing the base contract #11 bars @ 8" o.c. with intermediate #7 bars (Option #3 Exhibit-D) exclusively at the level of encroachment.

3. SPs #765-770, vary in the degree of encroachment the worst of which is SP #765 in mat area #1 which encroaches 1-7/8" at elevation 25.10.
WOJV is proposing to decrease the specified 36" wall thickness to 34-1/8" to clear the encroaching SPs. WOJV would reduce the wall thickness while compensating by supplementing the base contract #11 bars @ 8" o.c. with intermediate #7 bars (Option #3 Exhibit-D) exclusively at the level of encroachment.

4. SP #787 in mat area #1 encroaches 7/8" at elevation -34.42.
WOJV is proposing to decrease the specified 36" wall thickness to 35-1/8" to clear the encroaching SP. WOJV would reduce the wall thickness while compensating by supplementing the base contract #11 bars @ 8" o.c. with intermediate #7 bars (Option #3 Exhibit-D) exclusively at the level of encroachment.

Marked up sheet SH-2000 (Exhibit-E) depicts the location of the encroaching SPs and the degree in which they are encroaching.

1. SP #819 in mat area #1 encroaches 2-3/16" at elevation -34.24.
WOJV is proposing to decrease the specified 36" wall thickness to 33-13/16" to clear the encroaching SP. WOJV would reduce the wall thickness while compensating by supplementing the base contract #11 bars @ 8" o.c. with intermediate #7 bars (Option #3 Exhibit-D) exclusively at the level of encroachment.

T-0448.2 **BSE - CDSM Soldier Pile Enchroachment** **Closed** **04/29/2013** **05/09/2013** **04/26/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Marina Rosso

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Ref: T-0448, SH-2001, SH-2000

Previous RFI response #T-0448 (Exhibit-A) only addressed the impact of the encroaching CDSM soldier piles (SPs) on the first or bottom wall segments. This RFI address the encroaching SPs in mat slab areas 1&2 (Exhibit-B) at all levels of wall. This RFI shall supersede previous RFI response #T-0448.

Marked up sheet SH-2001 (Exhibit-C) depicts the location of the encroaching SPs and the degree in which they are encroaching.

1. SP #753 in mat area #2 encroaches 1-1/4" at elevation -34.12.
WOJV is proposing to decrease the specified 36" wall thickness to 34-3/4" to clear the encroaching SP. WOJV would reduce the wall thickness while compensating by supplementing the base contract #11 bars @ 8" o.c. with intermediate #7 bars (Option #3 Exhibit-D) exclusively at the level of encroachment.

2. SP #761 in mat area #1 encroaches 7/8" at elevation -34.12.
WOJV is proposing to decrease the specified 36" wall thickness to 35-1/8" to clear the encroaching SP. WOJV would reduce the wall thickness while compensating by supplementing the base contract #11 bars @ 8" o.c. with intermediate #7 bars (Option #3 Exhibit-D) exclusively at the level of encroachment.

3. SPs #765-770, vary in the degree of encroachment the worst of which is SP #765 in mat area #1 which encroaches 1-7/8" at elevation 25.10.
WOJV is proposing to decrease the specified 36" wall thickness to 34-1/8" to clear the encroaching SPs. WOJV would reduce the wall thickness while compensating by supplementing the base contract #11 bars @ 8" o.c. with intermediate #7 bars (Option #3 Exhibit-D) exclusively at the level of encroachment.

4. SP #787 in mat area #1 encroaches 7/8" at elevation -34.42.
WOJV is proposing to decrease the specified 36" wall thickness to 35-1/8" to clear the encroaching SP. WOJV

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Can't find answer in Constructware

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

would reduce the wall thickness while compensating by supplementing the base contract #11 bars @ 8" o.c. with intermediate #7 bars (Option #3 Exhibit-D) exclusively at the level of encroachment.

Marked up sheet SH-2000 (Exhibit-E) depicts the location of the encroaching SPs and the degree in which they are encroaching.

1. SP #819 in mat area #1 encroaches 2-3/16" at elevation -34.24.
WOJV is proposing to decrease the specified 36" wall thickness to 33-13/16" to clear the encroaching SP. WOJV would reduce the wall thickness while compensating by supplementing the base contract #11 bars @ 8" o.c. with intermediate #7 bars (Option #3 Exhibit-D) exclusively at the level of encroachment.

Please confirm that WOJV's proposed solutions are acceptable.

T-0448.3 **BGP - CDSM Soldier Pile Encroachment, mat areas 1&2 all levels.** **Closed** **05/03/2013** **05/17/2013** **04/26/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Marina Rosso

Co-Author: Webcor Construction LP Kirk Nielsen

REQUEST:

Reference: Previous RFI #T-0448, Related RFI #T-0530.

Previous RFI response #T-0448 only addressed the impact of the encroaching CDSM soldier piles (SPs) on the first or bottom wall segments. This RFI addresses the encroaching SPs in mat slab areas 1&2 at all levels of wall. This RFI shall supersede previous RFI response #T-0448.

Please see attachment SK-1 for RFI T-0448.3 questions.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Can't find answer in Constructware

T-0448.4 **CDSM Soldier Pile Enchroachment** **Closed** **05/09/2013** **05/19/2013** **05/24/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Reference: Previous RFI #T-0448, Related RFI #T-0530.

Previous RFI response #T-0448 only addressed the impact of the encroaching CDSM soldier piles (SPs) on the first or bottom wall segments. This RFI addresses the encroaching SPs in mat slab areas 1&2 at all levels of wall. This RFI shall supersede previous RFI response #T-0448.

Please see attachment SK-1 for RFI T-0448.4 questions.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Foundation wall modification proposals 1-10 are not acceptable. Comments are as follows:

A.) This RFI supersedes RFI #T-0448. The proposed rebar scheme in this RFI differs from previously suggested solution without providing calculations that show proposed additional rebar compensates for reduction in moment and shear capacity of the foundation wall cross-section due to shoring encroachment.

B.) Reinforcement for knock-out walls (west of mat slab area #1) differ from those in typical foundation walls (e.g., see S1-2060 for section call out). Provide solutions for knock-out walls.

C.) Provide an elevation sketch that shows the proposed vertical extent and detail of added rebar.

D.) Lap splices are not allowed in additional rebar. Use Type 2 mechanical couplers.

E.) Provided generic cross-section detail is insufficient to show the actual location of the added rebar in plan. The extent of the applied options should be shown on plan for clarity.

F.) Reference SK1 is not included in this RFI.

G.) Maximum encroachment dimension provided for SP(s) #737-739 does not match maximum dimension provided in SK-2 and SK-3, please reconcile.

H.) Do not refer to a superseded RFI (in SK-3 comments column for pile 819).

I.) Coordinate all modifications with future shop drawings for TG06.

T-0448.5	**CDSM Soldier Pile Encroachment**		**Closed**	**06/04/2013**	**06/14/2013**	**06/13/2013**	**Potentially**	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Reference Documents: Exhibits A - G

This RFI addresses the impact of the encroaching CDSM soldier piles (SP) on the South wall in slab area 1 & 2 as well as all levels of the encroachment into the foundation wall between CDSM piles 733 and 772. (Exhibit A)

Exhibit B & Exhibit C depict the location and degree in which the SPs are encroaching.

WOJV proposal: Between SPs 733 and 772 (which is the intersection of the South and West wall) WOJV is proposing to decrease the specified 36" wall thickness to 33 1/8" to clear all the encroaching SPs. WOJV would reduce the thickness while reducing the rebar spacing to compensating for the reduced wall thickness predicated on SE stamped Detail A/SLC.1 (Exhibit D) this modification would clear all the encroaching SP/steel plate issues between 733 & 772, See Exhibit E, F, & G.

This modification, if approved, would be incorporated into the TG06 shop drawings.

Please confirm if this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The proposed modification to foundation wall reinforcement is acceptable. W/O to coordinate these changes with TG06 contractor, including previously-approved mat rebar shop drawings for this zone.

T-0449 **BGP - Pre-Installation Conference Meeting Minutes-Waterproofing** **Closed** **03/19/2013** **03/29/2013** **03/21/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Ref: Specification Section -01 12 00 1.5.D, 07 12 10 1.3.B.2 and 00 07 00 1.05

There appears to be a conflict in responsibility and duration between Specification Section 01 12 00 - 1.5.D, Project Meetings and 07 12 10-1.3.B.2, Modified Bitumen Waterproofing- see the attached PDF.

"Project Meetings" states the TJP A is responsible for preparing the meeting minutes and then distribute them with 2 days after the conference while the "Modified

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

There is no conflict. The meeting minutes will be prepared and submitted by the Contractor within 3 days after the meeting per Spec. 07-12-10 Modified Bitumen Waterproofing. Preinstallation meeting minutes are the responsibility of the Contractor per Spec. 07-12-10 Para 1.3 Administrative Requirements which states; "The following requirements are in addition to the provisions of Spec. 01-12-00 and 01-14-00." "The minutes of the conference shall be submitted by the Contractor to all attendees and interested parties no less than 3 days after the

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Bitumen Waterproofing" section seems to indicate the Contractor/Trade Subcontractor is to prepare the minutes and distribute them no less than 3 days after the conference.

Based on General Conditions 00 07 00-1.05, entitled Precedence of Contract Documents, confirm the TJPA will prepare and distribute the Modified Bitumen Waterproofing Pre-Installation Conference Meeting minutes per Section 01 12 00-1.5.D.

conference."

T-0450 **BSE - Dewatering Casing Tolerances** **Closed** **03/19/2013** **03/29/2013** **03/26/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Specification Section: 31 23 19

Please confirm the TG03 contract documents tolerance for the plumbness of the dewatering well casings.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Plumbness of the dewatering well is not explicitly mentioned in the specifications. However Dewatering Specification section 31 23 19 1.11 C states "Coordinate work to avoid clashes with....and other items to be installed as part of the permanent structure" and detail 6 / A1-8711 shows the Dewatering Pipe drawn plumb and fitting snug within the steel sleeve.

T-0451 **BGP - Mat Slab Construction Joint Dimensions** **Closed** **03/19/2013** **03/29/2013** **03/25/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

Reference Specification:031000
Reference Drawings:S1-3001

Please reference attached sketches of mat slab construction joint (CJ), and detail 2 on S1-3001. Detail No. 2 on CD S1-3001 shows CJ for the mat slab 5 thick section, however, the contract drawings do not provide

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is acceptable to maintain the 1'-8" wide by 10" deep key for the mat slab construction joint at thickened mat and chamfer areas as shown on the RFI sketch. Although not inquired about, note the foundation wall key h/6 dimension on section c-c should be 6" and not 5" as detailed on sketch.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

details/dimensions for the thickened portion of the mat slab at the pits (sump pits, elevator pits, etc.), and the 3 ft chamfer. SCCI suggests maintaining mat slab keyway at 1'-8" wide and 10" deep (as shown on detail 2 on S1-3001) for all mat slab CJ's, and as shown on attached sketch.

T-0452 **BGP - Concrete Beam Under Slab** **Closed** **03/19/2013** **03/29/2013** **03/25/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference Specification: 033020
Refererence Drawing: S1-2251, S1-3205, S1-3400

Please reference the Vehicle/Bike ramp framing plans on S1-2251. Detail 1 calls for a 36" x 48"concrete beam below the ramp slab. However, this concrete beam is not indicated in section detail 7 on S1-3205. The beam size and specifications as described on S1-2251 does not match a beam listed in the beam schedule on sheet Sl-3400. The plan on Sl-2251 does not clearly show where this beam begins and ends.

Please provide additional information and clarification regarding this 36" x 48" concrete beam.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Detail 7/S1-3205 is not intended for the beam but for the ramp slab over foundation wall with corbel condition. The inquired concrete beam is cantilevered from the face of the foundation wall. Although this beam is not marked as a scheduled beam, the info required for detailing is provided. Longitudinal bars and stirrup info is called out. Typical detail 2/S1-3401 shall apply for a cantilever condition and the longitudinal top bars shall extend minimum LTE into the foundation wall.

T-0453 **BGP - Angle Steel Beam Connections** **Closed** **03/19/2013** **03/29/2013** **03/29/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference Specification:032000
Reference Drawings:S1-3411, S1-2251

Please reference the Vehicle/Bike beam end support detail 1 on S1-3411. The L8x8 connections appear to be shown to be fabricated at a 90 deg angle between the foundation wall and the Vehicle/Bike beams. Per Detail 1

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For inquired non-90 degree angle conditions, L8x8 can be bent to angle required.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

on sheet S1-2251, the beams are shown to be intersecting the foundation wall at varying angles. SCCI requests further clarification/details at the beam locations for the fabrication of the L8x8 connections.

T-0453.1 **BGP - Vehicle/Bike Beam End Supports** **Closed** **04/11/2013** **04/21/2013** **04/22/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Jesse Dillon

REQUEST:

Ref: RFI T-0453, AI-7401, SK-115

Please reference attached drawings. RFI T-0453 stated that the L8x8x1 1/8" shall be bent to match the angle at which the Vehicle/Bike ramp beams meet the wall. At the western most beam the acute angle at which the beam meets the wall is 56 degrees and the obtuse angle is 124 degrees. See attached marked up Contract Drawing AI-7401 for angle measurements. Bending the 1 1/8" thick legs of the L8x8 is not feasible and would structually stress the member. SCCI proposes to weld two 1 1/8" plates together to fabricate the angles. See attached drawing SK-115 for details. The additional two beam members shall be fabricated per the measured angles.

Please advise if this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is acceptable to weld two 1 1/8" plates together to create the (2) angles for the western most beam, provided a complete-joint-penetration (CJP) weld is used.

T-0453.2 **BGP - Clarification of Vehicle/Bike Beam End Support** **Closed** **10/02/2013** **10/12/2013** **10/16/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please refer to attached drawing S1-2251, S1-3411. A1-7401 and SCCI sketch SK-115.

Per RFI response T-0453.1, it is acceptable to weld two 1 1/8" plates together to create the (2) angles for the western most beam indicated on drawing A1-7401.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/14/2013
RESPONSE:
Confirmed

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please confirm the Vehicle/Bike Ramp end support acute angle is 56-degrees and obtuse angle is 124-degrees as shown in the attached SCCI sketch SK-115.

T-0454 **BGP - Steel Cap Collar Weld Location** **Closed** **03/19/2013** **03/29/2013** **03/22/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference Specification: 055010
Reference Drawings: S1-3003, A1-8711, Submittal No. TG0600-036

Please reference attached Contract Drawing Sl-3003 and Al-8711 along with approved as noted dewatering pipe sleeve shop drawing. The 3 dewatering sleeve drawings depict conflicting weld locations for the 5/16" fillet weld of the steel cap collar to sleeve connection (see highlighted drawings).

Please clarify/confirm the location of this weld.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Provided the sleeve and collar are welded together (in the shop) before the mat is poured, the location of weld in the shop drawing is acceptable. If instead the collar must be installed onto the sleeve in the field after the mat is poured, then weld access will be a limiting factor that will require the weld to occur as shown on S1-3003.

T-0455 **BGP - Out of Plumb Dewatering Casing** **Closed** **03/19/2013** **03/29/2013** **03/27/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Reference Specification:055010-3.2.C
Reference Drawings: S1-3003
Reference Photo: attached

Please reference Sheet S1-3003 of the Contract Drawings and Spec Section 055010-3.2.C SCCI spot checked two of the existing dewatering wells for plumbness and found them both to be approximately 3/4" over 48" out of plumb (see attached photos). With this existing condition, SCCI can not adhere to the plumbness tolerance (1/16") for installation and maintain the required 1/2" maximum gap between sleeve and casing per Section 2 of Sheet S1-

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For the existing dewatering wells, we will not object if the maximum gap between sleeve and dewatering well casing exceeds 1/2" for those dewatering wells found to be out of plumb.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

3003. SCCI suggests increasing the diameter of the sleeve and granting a variance on the 1/2" gap tolerance per Sheet S1-3003. SCCI will maintain adherence to the installation tolerances in Spec Section 05 50 10.

T-0455.1 **BGP - Dewatering Well Above Grade PVC Pipe** **Closed** **03/29/2013** **04/08/2013** **04/02/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Reference Drawings: A1-8711

Per discussion in the pre-installation and preparatory DFOW meetings for the metal fabrication penetration sleeves, the PVC dewatering casing above the mud slab can be cut just above or at top of mud slab elevation to avoid varying diameter issues. Without the dewatering casing present above mud slab grade, the varying casing diameter issues and plumbness issues are solved. The to avoid debris entering the dewatering casing, the casing would not be cut until the penetration sleeve is to be installed. Please confirm per the discussions in the meeting that cutting the casing is acceptable. Please note that the grouting back of the dewatering casing shortly after the decommissioning of the dewatering pump will be uniform (without segregation) for both below mudslab elevation and above.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The description contained in RFI T-0455.1 is acceptable. Note that dewatering casings that require to be cut, should be cut above the top of mud slab (not at the top of mud slab).

T-0456 **BGP - Mass Concrete Temperature Monitoring Equipment Installation in MAT Slab** **Closed** **03/25/2013** **03/25/2013** **04/03/2013** **Potentially** ☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference Specification: 03 30 20 (3.11.A & 1.3.A.8)

Per Specifications 03 30 20 (3.11.A & 1.3.A.8), SCCI will install temperature monitoring devices at specified locations and depths. These instruments use RFID Tag technology for communitcation with the data logger. The

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Thornton Tomasetti does not object to proposed method presented in RFI.

GC to coordinate waterproofing requirements with waterproofing subcontractor and submit proposed waterproofing details in the shop drawings.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

RFID transmiter, which is wired to the temperature monitoring device, will be elevated out of the concrete. SCCI will tie a 1/4" diameter fiberglass, or similar non-corrosive, rod to the reinforcing mat. The temperature monitoring RFID transmitter will then be elevated clear of the Mat Slab. Once Thermal Monitoring activities are complete, this non-corrosive rod and cable will be cut flush with slab. Reference attached brochure and SCCI sketch.

Is this method acceptable?

T-0457 **BGP - Mat slab changes per Field Order 11 (Future ASI 102)** **Closed** **03/25/2013** **04/04/2013** **04/03/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

Reference RFI: T-0415
Reference Field Order No. 11 (Future ASI 102)

Field Order No.11 (Future ASI 102) is still in the design stage, and without the Contract Drawings incorporating the field orders SCCI cannot plan the work. More specifically, are there any changes to the foundation (Mat slab) resulting from Field Order 11 (Future ASI 102)?

For example:
If there are changed/added drainage pits in the SCCI's Area 3 (Mat slab pour # S103; GL A thru J, and 1 thru 3.5), geothermal work cannot begin until such changes are incorporated.

Please confirm that Field Order No.11 (Future ASI 102), or any other forthcoming Field Order has no changes in the Mat slab drainage system (drainage pits, thickened sections, etc.), that would impact the subgrade work.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Regarding ASI 102
For the Mat slab GL A thru J and 1 thru 3.5 drainage pits are not expected change, with the exception of the small sump pit in the elevator pit GL 1.4 to 2, E.6 which was shown on the attachments responding to RFI T-0415 BGP. Within the mat slab (not affecting slab thickenings) floor drains and floor sinks have been relocated at the Fire Pump and Domestic Booster and Irrigation Pump Rooms and a floor drain will be added at the electrical room located GL 1.4 to 2, B to C.

T-0458 **BGP - Concourse Slab CJ Layout** **Closed** **03/26/2013** **04/05/2013** **04/04/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Andy Khuu

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference Specification: 03 30 20
Reference Drawings: CJ-05 and CJ-22

In order to meet the Joints in Concrete specifications (03 30 20-3.2), SCCI's revision of Construction Joint (CJ) Layout Submittal requires the CJ between concourse slabs D116 and D117 (see atttached reference drawing CJ-22) to be 2'-10" outside of the required center third of the span (reference 03 30 20- 3.2.B.1). Please advise if this is acceptable.

If the above is not acceptable, then SCCI proposes to move the CJ line (between D116 and D117) 2'-10" to the East. Since mat slab S108 (see attached reference drawing CJ-05) is currently 120'-0" wide, it will be increased to 122 '-1 0" wide. This would be wider than the maximum width of 120' -0" as specified in 03 30 20-3.2.A.3. Please advise if this alternative is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The second option (that will result in a larger mat pour) is acceptable.

T-0459 **BGP - Waterproofing and CJ Concourse Slab Layout Conflict** **Closed** **03/27/2013** **04/06/2013** **04/01/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference Specification: 07 12 10
Reference Drawings: A1-2203 and S1-3201

Please reference Al-2203 and Sl-3201 of the Contract Plans and the attached drawings. The current elevation at the bottom of the 2nd level bracing lookouts is at approximately -5.13, WEST of Grid 9 (see concourse slab drawing). The proposed top of concourse slab elevation is to be -5.42, WEST of Grid 9. Per the WPM-1 waterproofing system, the minimum overall tie-in dimension needed for the succeeding lift is approximately 1 '-11" (see attached waterproofing drawing).

The current elevation at the bottom of the 2nd level bracing lookouts is at approximately -6.15, EAST of Grid 9 (see concourse slab drawing). The proposed top of concourse slab elevation CJ is to be -7.67, EAST of Grid 9. Per the WPM-1 waterproofing system, the minimum

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is a contractor coordination issue. CM/GC to coordinate this work between their sub-contractors and show the proposed solution in the coordinated shop drawings.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

overall tie-in dimension needed for the succeeding lift is approximately 1 '-11" (see attached waterproofing drawing).

In both locations, the minimum required dimension (1 '-11") to tie-in to the next lift of waterproofing can not be reached with the current location of the 2nd level bracing lookouts and the proposed concourse slab elevations. SCCI is restricted in location for the CJ due to the absolute concourse slab location and elevation.

Furthermore, a similar conflict exists in the 1st foundation wall lift and the 3rd level of bracing lookouts (see 1st wall lift drawing). With SCCI's current location of the CJ, there is virtually no room to allow for the waterproofing overlap to occur. SCCI fully understands its freedom to manipulate the location of the CJ's by lowering it approximately 2'. This will potentially change BBII's rebracing plans.

Please advise.

T-0460 **BGP - Waterproofing and CJ at Mat Slab Conflict** **Closed** **03/27/2013** **04/06/2013** **04/01/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Ref: S1-3201

Please reference S1-3201 of the Contract Plans, RFI #T-0459, and the attached drawings. The current elevation at the bottom of the 4th level bracing lookouts is at approximately -31.56 (see mat slab drawing). The proposed top of mat slab elevation CJ is to be -32.37. Per the WPM-1 waterproofing system, the minimum overall tie-in overlap dimension needed for the succeeding lift is approximately 1'-11" (see attached waterproofing drawing).

The minimum required dimension (1'-11") to tie-in to the next lift of waterproofing can not be reached with the current location of the 4th level bracing lookouts and the proposed mat slab chamfer elevations. SCCI is restricted

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is a contractor coordination issue. CM/GC to coordinate this work between their sub-contractors and show the proposed solution in the coordinated shop drawings.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

in location for the CJ due to the absolute mat slab with chamfer location and elevation.

Please advise.

T-0461 **BSE - Cross - Lot Rebracing** **Closed** **03/27/2013** **04/06/2013** **04/03/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Webcor Construction LP Lynn Kowallis

REQUEST:

Ref: S1-3201 and Field Order 10R2 -S1-3201

Base contract detail A/S1-3201 gave the contractor the option to utilize an internal concrete waler or an external steel waler for rebracing. The FO #10R2 version of detail 1/S1-3201 appears to have eliminated one of the two original rebracing options, leaving only the external steel waler option. Please confirm it was the designer's intent not to use an internal concrete waler for rebracing.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The contractor may use either a steel waler or internal concrete waler as in base contract detail A/S1-3201 (It was the design team's understanding from previous communications with the contractor that a steel waler would be used, thus the FO #10R2 version of detail 1/S1-3201 only graphically shows the steel waler option). FO #10R2 shall not be used to prohibit the contractor from designing and installing all necessary aspects of a rebracing system utilizing the permanent structural concrete, as indicated in base contract detail A/S1-3201.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0462	BGP - Grounding Wire Penetrations in Mud & Protection Slab	Closed	03/28/2013	04/07/2013	04/10/2013	Potentially	☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Ref: 5/A1-8710 and Submittal Package TG0600-023.1 sheet 5.07, Specification Section 26 05 27

The contract plans and specifications call for the grounding wire to be bare copper. At the locations in which this grounding wire penetrates the mud & protection slab, the waterproofing supplier (Laurenco) requires the ground wire penetration to be solid metal or a rod. Laurenco has stated that if the electrical grounding penetration through the slab is wire as shown in the plans and specifications, the waterproofing system will leak.
Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For each of the grounding electrode conductors that penetrate the waterproof membrane, in order to provide a smooth impenetrable surface, splice a solid copper 4/0 grounding conductor per the attached detail sketch ESK-20 using Erico Cadweld mold #PTC-2P2L or equal. Refer to the attached revised waterproofing detail 5/A1-8710 for waterproofing of these spliced conductors.

Jeff Thiel 4/10/2013 Pending TJPA approval, a CR for this work is forthcoming.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0463	BSE - Micropiles W400 & 417 Relocation	Closed	03/28/2013	03/29/2013	04/01/2013	Potentially	☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Brandon Miller

REQUEST:

Reference Specification: 31 63 33

Micropiles W400 and W417 cannot be installed as laid out due to an overhead obstruction (Geotechnical Instrumentation Pipes).

BBII proposes moving W400 South 5' and W417 South 3' to provide adequate clearance. The proposed locations for Micropile W400 and W417 will be within the geothermal area; however, the proposed locations do not appear to impact geothermal piping.

See attached sketch.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Thornton Tomasetti does not object to moving micropiles W400 and W417 as proposed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0464	BGP - Clarification of Curing and Thermal Protection Methods	Closed	03/28/2013	04/07/2013	04/09/2013	Potentially	☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Ref: Specification Section 033020.2.11.D, and 033020.3.7.A.c
Ref: Submittal TG0600-201.1

Reference Mass Concrete Plan prepared by CTL Group, Submittal Package TG0600-201.1, item 033000-011.1, page 10 - Curing. This paragraph state " ... slab placement will be cured in a method that
does not artificially excessively decrease the surface temperature of the concrete placement. This means that continuous wetting of the concrete should he avoided."

Reference specification section 033020.3.11.D. This paragraph states "Thermal Blankets are required to insure minimal thermal cracking."

Reference specification section 033020.3.7.A.C. This paragraph calls for "Moist curing of the Mat Slab by means of continuously covering the slab with water."

Reference attached letter " Wet Curing Mat Slab", author Bob Foley, CEMEX QC Manager Bay Area.

SCCI intends to cure the Mat slab per recommendations of CLT Group Mass Concrete Plan. Due to the high risk of thermal cracking, SCCI intends to utilize impermeable insulated curing blankets and not cover the slab with water.

Is this acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The proposed method of curing is not acceptable as it does not meet the specifications for moist curing. The intent is to keep the surface continuously wet to ensure minimal cracking and with the use of thermal blankets to minimize temperature differential.

T-0464.1 **BGP - Mat Slab Curing Techniques** **Closed** **04/26/2013** **05/06/2013** **05/08/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome
To: Turner Construction Compan Gary Krutsch
Answered By: Webcor Construction LP Robert Kjome
Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference Specification: 03 30 20

Please reference TG06.0 Contract Specifications 03 30 20.3.7.5.b.3 and Project Meeting with Thornton Tomasetti (SER), held Thursday, April 25.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The proposed method of moist curing for the mat slab is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

SCCI intends to Moist cure the Mat Foundation Slab using the above referenced method found in the contract specifications and discussed in the above mentioned Project meeting.

Please confirm this method is acceptable.

T-0465 **BGP - Relocation of Geothermal Risers Due to Leaking CDSM Wall** **Closed** **03/28/2013** **04/07/2013** **04/04/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Reference photo: Attached

As seen in the picture attached, water is leaking through the surface of not only the CDSM panel that the geothermal riser is laid out on, but the various adjacent CDSM panels as well.

Please confirm that SCCI can move the Field 1 risers location between Piles 35 & 36 and the Field 2 risers location between Piles 38 & 39. Both of these new locations appear to be leaking less than the original riser locations.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Field 1 Risers should be located between east of soldier Pile 36 (between 36 and 37) as indicated in RFI T-0437 BGP. It is acceptable to locate Field 2 risers between 38 and 39.

T-0466 **BGP - Ground Rod for SFPUC** **Closed** **03/29/2013** **04/08/2013** **04/10/2013** **Potentially** ☐

From: Webcor Construction LP Joanne Filipas **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Webcor Construction LP Joanne Filipas

REQUEST:

In follow up to the 3/28/2013 OAC, PCP informed us that the SF PUC requires a ground rod to be installed. Please provide all necessary information including but not limited to rod type, length, and location.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Add new ground rods and grounding electrode conductors for SFPUC utility requirements per the attached drawings. This grounding system shall not connect to the other building grounding systems except for the soldier pile connections. All other related details shall apply. Coordinate grounding conductors to rise in the foundation wall for extension into the Lower Concourse slab.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Jeff Thiel 4/10/2013 Pending TJPA approval, a CR for this work is forthcoming.

T-0466.1 **BGP - Ground Rod for SFPUC** **Closed** **04/11/2013** **04/21/2013** **04/23/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Ref: RFI T-0466, RFI T-0442

SCCI is in receipt of the response to RFI T -0466 concerning the addition of SFPUC grounding rods/grids. In order to price this change SCCI and its electrical subcontractor need the following information:

On Drawing SKE-021, Note 8, please provide a location on where to terminate each of the four 4/0 cables at the lower concourse slab. A revised SKE-024 drawing showing the exact stub up locations and dimensions is needed to accurately price and construct this change.

On Drawing SKE-022, Note 3, please again advise where to terminate the four 4/0 cables at the lower concourse slab. A revised SKE-024 drawing showing the exact stub up locations and dimensions is needed to accurately price and construct this change.

Please confirm that the details from the RFI T -442 response will apply to these penetrations.

Please confirm that there only two areas (detailed on SKE-021 & SKE-022) that will require the additional SFPUC grounding.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Please find the attached drawings to clarify the ground rod locations. The ground rods are noted to be approximately ten feet on center. Coordinate the specific placement of the rods and GEC to avoid the geothermal piping. We have included Lower Concourse drawings to indicate the grounding electrode conductors that will route into the Lower Concourse slab. Exact dimensioning of these conductors in the foundation wall and slab are not required, Contractor to coordinate exact locations with underground piping in this area. The GEC will be extended to bond to a ground grid at the four corners of the new Electrical Rooms B1289 and B1441. Additional slab details for the mesh and GEC bonding will be provided in an upcoming drawing issue.

2. Yes, the details from RFI T-442 will apply to these and all grounding conductor penetrations of the waterproof membrane. See SKE-025 for the connection detail referenced on sheet E1-6006, detail 2.

3. Yes, the two locations are the only known new SFPUC grounding locations. Please note that the ten foot ground rod separation shown on SKE-021R1 at the transformer vaults has been increased.

T-0466.2 **BGP - Requesting Detail 2 on drawing E1-6006** **Closed** **04/19/2013** **04/29/2013** **04/23/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Ref: RFI T-0466, Drawing E1-6006

Reference is made to RFI T -0466 and the attached sketches. Note I on SKE-022, Note A on SKE-023 and the first note below (Top of Slab -35'-8") references a detail on Contract Drawing E1-6006 for the added SFPUC Ground Rods. The current drawing E1-6006 does not have the noted detail. SCCI requests an updated E1-6006 drawing with the new detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SKE-025 issued with the RFI response indicates the specific referenced detail 2 on Sheet E1-6006. See attached for a duplicate copy.

T-0467 **BGP - Lower Concourse Conflicts** **Closed** **03/28/2013** **03/28/2013** **04/01/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

Reference Drawings: SH-5002, SH-2007, SH-2008, SH-3001

SCCI is in discovery that the W21x101 and W14x30 support beams and lookouts at the shoring level B are encroaching into the lower concourse slab between GL 1 and 9.5. TOC for the concourse slab is at EL. -5.42' (GL 1 thru 9.5); Bottom of W21x101 support beams and W14x30 lookouts are at EL. -6.25' and -5.67' respectively.

Please confirm that these will be removed prior to construction of the lower concourse level. If these struts supports are to remain throughout construction of the lower concourse please provide detailed drawings showing incorporation (or blockout) of these W21x101 support beams and W14x30 lookouts into the lower concourse slab.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is a contractor coordination issue. CM/GC to coordinate this work between their sub-contractors and show the proposed solution in the coordinated shop drawings.

T-0468 **BGP - Geothermal Pipe Riser in CDSM Wall Excavation Specification** **Closed** **03/29/2013** **04/08/2013** **04/08/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Reference Specification: 23 57 34, 31 23 34

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is acceptable west of gridline 7.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Per discussions with the designer (ARUP), the CDSM wall will continue to move until the mat slab has been placed. With the geothermal pipe riser being installed much ahead of the mat slab, there is a good chance that the riser chase pour back will be jeopordized by the wall movement. Per specification 31 23 34, 3.2, B, the geothermal riser pipe chase cannot remain open for longer than 10 calendar days. Is it acceptable to extend this duration to account for the wall movement until the mat slab is poured?

Please advise.

T-0469 **BGP - Embed Nail Holes** **Closed** **04/01/2013** **04/11/2013** **04/11/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Ref: Detail 3/S1-3010, Detail 2,3,6/S1-3205, Detail 1/S1-3411, Detail 9,11/S1-7600, Detail 8,12/S1-7602

Please reference attached drawings of typical steel embeds, not all embed drawings are attached. SCCI requests to drill 1/4" nail holes in the embedded steel angles, plates, pit frames and bearing assemblies. The holes shall provide a means to secure embeds to the formwork and prevent movement during placement of concrete. Nail holes shall be drilled prior to galvanization and shown on shop drawings.
Please advise if this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Proposed nail holes are acceptable provided that holes avoid studs by minimum of AISC bolt hole clear spacing requirements.

Submit holes in shop drawings for review.

T-0470 **BGP - Concourse Slab Trestle Pile Block Out** **Closed** **04/02/2013** **04/12/2013** **04/11/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Ref: Detail 4, 7/S1-3009, S1-3500, S1-3501, S1-3502

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Since a block-out for a trestle pile is a temporary condition, it is the contractor's responsibility for this

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please reference attached Contract Drawings S1-3009, S1-3500, S1-3501 and S1-3502. Details 4 and 7 on S1-3009 depict the typical mat foundation reinforcement and trestle pile block outs. SCCI is unable to locate a typical concourse slab reinforcement and trestle pile block out detail. The slab detail drawings, S1-3500 to S1-3502, do not contain details for the trestle pile block outs. Please provide trestle pile reinforcement and block detail for the concourse slab.

means and methods issue.

Note that General Note GR-9 on S-0005 offers some additional information on this topic.

T-0470.1 **BGP - Concourse Penetrations Discrepancies** **Closed** **07/16/2013** **07/16/2013** **07/29/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference attached sketch and RFI T-0470.

Note GR-9 on S-0005 raises a non constructability issue with the concourse slab penetration blockout. If the GR-9 is followed the minimal clear cover over couplers on the lower concourse slab will not conform to the specifications. Please provide rebar details for the concourse slab penetrations that conform to the specifications.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached SKS-0280 for a block-out detail for the typical Lower Concourse slab. Contractor to verify top and bottom bars with slab schedule as the RFI sketch reflects incorrect labels. Slab will shall be supported during temporary condition until block-out is filled in.

T-0471 **BGP - Galvanizing Testing** **Closed** **04/02/2013** **04/12/2013** **04/05/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Ref: Specification Section 05 05 15 3.6 A

Section 3.6 A of 05 05 15 -Hot Dip Galvanizing calls for "the contractor's testing laboratory shall perform inspection and testing of zinc coatings under the guidelines outlined in the American Galvanizer's Association (AGA)." Per the hot dip galvanizing pre-installation meeting, SCCI plans to use AZZ Galvanizing Services and their independent testing agency for shop testing and inspection and to fulfill all requirements described in 05 05 15-3.6 -Testing.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Contractor shall determine if the galvanizing service company and contractor's testing agency are appropriate. It is not required in the specification to obtain approval by a TJPA Representative of the galvanizing service company and contractor's testing agency.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Personnel qualifications are available upon request.

Please confirm this is acceptable.

T-0472 **BGP - Future Train Platform Wall Conflict with Trestle Pile Opening** **Closed** **04/02/2013** **04/16/2013** **04/15/2013** **Potentially** ☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Ref. Dwg: S1-2054, S1-2055, 1/S1-3205

Dwg sheets S1-2054 and S1-2055 depict the future walls for the train platform which per detail 1/S1-3205 receive #7 dowels E.F. at 8" O.C. with a formsaver coupler positioned at the top of the mat slab. When referencing S1-2054 and S1-2055 it is noted that in 14 locations the openings for the trestle pile are shown directly on top of this future wall thus conflicting with the required dowels. Please provide a coupler detail at these blockouts.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The train platform dowels that coincide with trestle piles identified in the RFI shall be eliminated.

T-0473 **BGP - Modifications to Geothermal Layout** **Closed** **04/02/2013** **04/12/2013** **04/09/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Webcor Construction LP Robert Kjome

REQUEST:

Reference: M-0006

Per sheet Note 3 on M-0006, the center to center distance of loops can be adjusted where conflicts occur. In an effort to relocate geothermal piping as needed to avoid structural conflicts without multiple submissions of RFI's, please provide minimum distance allowed between loops.

As built of the installed geothermal piping will be provided upon completion of the system.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The minimum distance between geothermal pipe loops is 4'-0".

☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0474	BGP - Micropile Penetration Detail at Sump Pits	Closed	04/02/2013	04/02/2013	04/04/2013	Potentially	

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Webcor Construction LP Robert Kjome

REQUEST:

Refrence Specification: 31 63 33
Reference Drawing: A1-8711
Reference Photos: Attached

See attached photos of micropiles W028, W026, and W043 located in sump pits on an angle. Sheet 2/A1-8711 shows a micropile penetration detail on a horizontal surface. Please provide a micropile penetration detail for micropiles located in a sump pit on an angle.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Submit a shop drawing based on the waterproofing manufacturer's recommendations for this condition.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0475	BGP - Mat Slab Drainage Sloping	Closed	04/03/2013	04/17/2013	04/04/2013	Potentially	☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Ref. Spec: 03 30 20.3.6.B.1.b

Contract specification section 03 30 20.3.6.B.1.b, states "Slope surfaces uniformly to drains where required."

However, the contract plans for the below grade package (TG06.0), does not show drainage slope for the Mat Slab. SCCI intends to uniformly place top of Mat Slab at -35' - 8" as shown on contract drawings. If sloping of the Mat Slab is required, please provide drainage plan for top of Mat Slab.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

We confirm that there are no slopes to drain on the Mat Slab. The top of slab is uniformly -35'-8".

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0476	BSE - Zone 4 Waler Connection Criteria	Closed	04/03/2013	04/13/2013	04/05/2013	Potentially	☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Danny Walsh

REQUEST:

BBII has received COM1902 directing BBII to re-design the east end shoring utilizing similar waler connections provided in the attached sketches.

Prior to commencing re-design, BBII requests the following information from the Shoring wall EOR so our Bracing EOR can properly evaluate the interaction

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Regarding permissibility, see Note 11 on Sheet GT-1111.

Regarding the CDSM wall stiffness, see the response to RFI T-0345.

Regarding the CDSM wall allowable friction, see the

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

between the Bracing system and wall.

Will it be permissible to shed the bracing loads from the transverse end wall (line 35) into the longitudinal CDSM wall (A&J Lines)? If this is acceptable please indicate if there are any limitations, restrictions, or design assumptions regarding the amount of load that can be shed over a given length of wall.

response to RFI T-0427.

To evaluate horizontal stress, see the guidance provided on Sheet GT-1110

T-0477 **BSE - Multiple Micropile Relocation (Below Grade Obstruction)** **Closed** **04/03/2013** **04/13/2013** **04/04/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Brandon Miller

REQUEST:

Ref: Submittal TG0300-622.4

While installing Micropile W454 as laid out in the approved submittal, BBII encountered a concrete obstruction 8' below grade and was unable to continue drilling at that location. Even though the micropile layout was approved in submittal TG0300-622.4, BBII suspects the drill rig encountered the CDSM Prototype wall as approximately shown in the attached drawing. BBII suggests relocating the micropiles as shown in the attached drawing to avoid the obstruction. The proposed locations for the micropile relocations will be within the geothermal area; however, the proposed locations do not appear to impact geothermal piping.
See attached sketch.
Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Thornton Tomasetti does not object to relocating micropiles W452, W454, W473, W475, W487, W488, and W500 as proposed.

T-0478 **BGP - Shear Reinforcement Clear Cover at Pits** **Closed** **04/03/2013** **04/17/2013** **04/10/2013** **Potentially** ☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Andy Khuu

REQUEST:

Ref. Dwg. 2/S1-3005, 3/S1-3008, and S1-2063

Sheet S1-3005/Detail 2 specifies the typical top clear

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Top clear cover for headed shear reinforcement that is located within a pit shall be 2.25", such that total overall length of the headed shear reinforcement shall

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

cover for the headed shear reinforcement to be 0.75" and for overall length of the headed shear reinforcement to be 57" long. It is not clear if the same clear cover of 0.75" applies to headed shear reinforcement that is within a pit as shown in Sheet S1-3008/Detail 3. Note that typical rebar around the pits are called out to be 3" as shown on sheet SI -2063.

Please confirm top clear cover for headed shear reinforcement that is within a pit.

be 55.5" long at these locations.

T-0479 **BGP - Trestle/Pin pile in MAT Depressions** **Closed** **04/03/2013** **04/17/2013** **04/17/2013** **Potentially** ☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Ref. Dwg. S1-2022, S1-2027, S1-3004, S1-3006

Please reference Sheets S1-2022, S1-2027, S1-3004, and S1-3006 of the Contract Plans. The trestle pile at Gridline D.4 between 4 and 5 is located in the sloped section of the mat slab depression (see highlighted S1-2022). The mat slab depression section plans (S1-3006) do not incorporate this type of sloped pipe penetration. Furthermore, the pin pile between Gridline F.7 and G, just east of 34 is located in the sloped section of the mat slab depression (see highlighted S1-2027). The mat slab depression section plans (S1-3004) do not incorporate this type of sloped pipe penetration. Also, Sheet S1-3003 depicts all pipe penetrations on a horizontal surface only. Please provide a trestle/pin pile penetration detail located on an angle in a mat slab depression incorporating a revised waterproofing detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For trestle piles located at slab depression edge of slope or on face of slope, the flat mud slab has to be lowered to provide 18" clear horizontal to allow waterproof membrane transition. The sides of the depression for the sleeve should be sloped at 45 deg. The sleeves will need to be made longer to suit these situations. Refer to attached SKA 2676 and 2677.

Jeff Thiel 4/17/2013 Pending TJPA approval, a CR for this work is forthcoming.

T-0479.1 **BGP - Trestle and Pin Pile in MAT Depression Clarification** **Closed** **05/28/2013** **06/07/2013** **06/10/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Response to RFI T-0479 provides SKA-2676 and SKA-2677 which apply to two trestle piles in conflict with sloped portions of sump pits. BBII has identified several other pit locations which appear to have trestle piles, pin piles, or bridge piers located so that there is not 18" clear horizontal for waterproofing. Please clarify if the following slab penetration locations require the 18" clear horiontal for waterproofing. If so, please confirm that the details issued in RFI T-0479 can be used for the following locations:

1.) First St. Bridge Pier #5 at pit between Gridlines 17/18 at Gridline H
2.) Trestle Piles #53, #54, and #55 at pit between Gridlines 22.5/23.5 and D/F
3.) Fremont St. Bridge Pier #8 at pit between Gridlines 26/27 at E
4.) Trestle Pile #74 at pit between Gridlines 30/30.5 and D/E.
5.) Trestle Pile #80 at pit between Gridlines 32.5/33 and D/E
6.) Beale St. Bridge Piers #3 and #8 at pit between Gridlines 34/35 at Gridline E
7.) Pin Pile # 6 between Gridlines 4/5
8.) Pin Pile #14 between Gridlines 34/35 and F.7/H

The Design Team does not object to the contractor implementing the solution provided on RFI T-0479 at the locations mentioned in RFI T-0479.1 as a means of attaining the required 18" clear horizontal waterproofing surface. Note for implementation of this detail at pin pile locations, the contractor shall use 24" as the outside diameter of the pin pile sleeve, which is the size from the reviewed sleeve submittal.

T-0479.2 **BGP - Trestle and Pin Pile in MAT Depression Clarification** **Closed** **07/18/2013** **07/28/2013** **07/24/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference RFI T-0479 & T-0479.1

Grace requires that there be a minimum 8" clear horizontal to allow for the waterproofing membrane transition.

For trestle piles and pin piles located at slab depressions at the edge of the slope or on the face off the slope, please confirm that the flat mud slab can be lowered to provide 8" clear horizontal to allow waterproof membrane transition in lieu of the 18" described in RFI T-0479 and T-0479.1

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This RFI is for a substituted system that is not the system designed by the Architect, so the Architect cannot comment on design intent or other aspects of the substituted system. Per specification section 01 16 30 article 1.4/B and other associated specification sections the Contractor is to prepare all necessary documentation to support the contractor's substitution proposal which would include direction on the item noted in this RFI.

The Contractor should have the design professional

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

responsible for the substituted waterproofing design: (1) immediately prepare necessary design documentation for the substituted system including the impacts on adjacent trades as required by specification section 01 16 30 article 1.4/B.5, and stamp and certify that design to the Owner and the Architect; and (2) respond to Contractor submittals and manufacturer questions about the substituted system (with copies to the Owner and the Architect). Until that design professional's documentation, certification, and response process is in place, the Contractor should confirm all waterproofing system questions and details with the waterproofing manufacturer (with copies to the Owner and the Architect).

T-0480 **BGP - Future Train Platform Wall Dimension Conflict** **Closed** **04/03/2013** **04/17/2013** **04/16/2013** **Potentially** ☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Andy Khuu

REQUEST:

Ref. Dwg. S1-2054, S1-2055

Drawing S1-2054, at Grid line E/13 calls out Future Train Platform Room Walls to be 1'- 2" Typ, UNO. Drawing S1-2055, at Grid line C/22 calls out Future Train Platform RM Walls to be 1'- 0" Typ. UNO. Please clarify the proper dimension of the Future Train Platform RM Walls.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The note for future train platform room wall thickness apply per zone sheet. Therefore the future train platform walls are confirmed to be 1'-2" typ UON on S1-2054 and confirmed to be 1'-0" typ UON on sheet S1-2055. Note that for S1-2055, there are 2 future train platform rooms - one at gridline C between 21 and 22 and the other at gridline E west of 19.9.

T-0481 **BGP - Concourse Slab Penetration Sleeves** **Closed** **04/08/2013** **04/18/2013** **04/12/2013** **Potentially** ☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Ref Dwg. A1-2842-2851

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger 4/11/2013 It is not acceptable to post-core (or post-drill) penetration into the lower

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

In SCCI's experience unanticipated modifications and adjustments to the plumbing system are inevitable. Because of this SCCI requests not installing vertical block out sleeves in the concourse level for plumbing prior to slab placement. SCCI shall core penetrations after the slab is placed. The slab shall be scanned for rebar prior to coring to avoid unnecessary rebar strikes. This will allow for any unforeseen modifications or adjustments and ensure there are no unnecessary or extra penetrations in the concourse slab. Please advise if this is acceptable.

concourse slab, except where specifically approved by the Structural Engineer of Record. Contractor shall coordinate penetrations with other trades and embedded assemblies in concrete as required by specifications. Post-installed modifications/adjustments shall be submitted for review.

T-0482 **BGP - Partition Wall Pier Height** **Closed** **04/05/2013** **04/15/2013** **04/17/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference Drawing: S1-9050

Please reference attached sheets S1-9050, A1-9216 and A1-9217 regarding partition wall piers. Detail 9 on S1-9050 shows an h max of 24'8" for wall piers. Detail A on sheet A1-9216, and detail B on sheet A1-9217 appear to be showing piers at a height of 27'2" and 28'11" respectfully. SCCI is requesting clarification with pier height regarding reinforcement as well as opening width allowed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For inquired piers with max height of 28'-11" and max opening width of 6'-5", a 2'-0" min wide X 1'4" min thick pier shall have #9@8"OC EF vertical bars. Remaining information per detail 9/S1-9050.

T-0483 **BGP - Request for reinstatement of a smaller high congestion mock-up.** **Closed** **04/05/2013** **04/15/2013** **04/17/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Stacy Wilson

Co-Author: Webcor Construction LP Kirk Nielsen

REQUEST:

Ref: S1-3202, S1-2204, S1-3201, S1-3208

Via CCO #0035 the TJPA unilaterally deleted Bid Item #14 the high congestion mock-up and disposal. WOJV maintains that the inclusion of a mock-up for areas of high congestion (Exhibit-A) is not only good construction practice but will mitigate if not eviscerate the unquantifiable liability. WOJV recommends, at a

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

VOID per conversations between Kirk Nielson and Gary Krutsch on 4/15/2013. This RFI is considered void. Refer to CR T-063.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

minimum, reinstating a high congestion mock-up configured as follows:

1. The area to mock-up is indicated on marked up sheet S1-3202 (Exhibit-B).
2. The mock-up is representative of the location marked up on sheet S1-2204 (Exhibit-C) and configured as indicated on marked up sheet S1-3201 (Exhibit-D).
3. The mock-up is dimensioned as indicated on marked up sheet S1-3208 (Exhibit-E).

Please issue drawings for a smaller high congestion mock-up that the TJPA deems appropriate, if not indicated on the attached sheets.

T-0484 **BGP - Water Welding Test** **Closed** **04/05/2013** **04/15/2013** **04/18/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference Specification:05 50 10- 2.5.C.2

Per the discussions held at the Metal Fabrications Preparatory DFOW meeting, SCCI is requesting a variance from Spec Section 05 50 10 - 2.5.C.2. This Spec. is feasible in a shop environment prior to galvanization and an effective means to dry and remove water upon completion of testing. These sleeves will be continuously welded in the field both before and after the horizontal waterproofing is installed (depending on the type of sleeve), therefore making it very difficult to seal and handle the water upon completion of the test. Discussions were held regarding leaving the water between the sleeve and pile and evaporating over time. SCCI sees this as a concern due to the backside of the weld and the heat-affected zone will not be galvanized and will potentially become a point of corrosion. SCCI requests 100% visual inspection on both the root and cover passes in lieu of filling the sleeve gap with water. Is this request and variance acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The sleeve joints are to be water tight. Water testing of welds as required in the specification is to be executed. Please submit a test procedure description.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0485	BGP - SCCI Issued Drawings	Closed	04/08/2013	04/18/2013	05/02/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference spreadsheet: See attached.

Please reference attached spreadsheet of SCCI missing contract drawings. Based on drawing index sheets G-0000 - G-0006 issued F.O. 15 there are 33 sheets that have a more current revision than what we have been issue. Please issue the updated drawings referenced.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Reference CR T-068 for the current revisions of requested drawings.

Also, note that drawings S1-3360 through S1-3363 do not exist; drawings S1-3660 through S1-3663 have been provided.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0486	BGP - Extended Time for Concrete Delivery	Closed	04/08/2013	04/18/2013	04/16/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference Specification: 03 30 20

Please reference 03 30 20.3.3.0, which states "Discharge of the concrete shall be completed within 1 1/2 hrs, or before the drum has revolved 300 revolutions, whichever comes first, after the introduction of the mixing waler to the cement and aggregates or the introduction of the cement to the aggregates."

Per ASTM C 94, these limitations are permitted to be waived by the purchaser if the concrete is of such slump or slump flow after the 1 1/2 hr time or 300-revolutionlimit has been reached that it can be placed, without the addition of water, to the batch. Based on the quality of the mixes; the retarding effects of admixtures and SCMs, and the project's mild climate; CEMEX does not believe that placing concrete after 90 minutes negatively affects the quality of the concrete. SCCI and CEMEX requests an extension of delivery time as outlined per the attached letter.

Please confirm the attached parameters are acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ASTM C94 states "discharge of concrete shall be completed within 1 1/2 hour or before the drum has revolved 300 revolutions, whichever comes first, after the introduction of the mixing water to the cement and aggregates or the introduction of the cement to the aggregates."

CEMEX's statement in this RFI "CEMEX does not believe that placing concrete after 90 minutes negatively affects the quality of the concrete" does not provide sufficient support data to address the concern of the concrete initial set after the specified time limit and revolutions. In order to justify extending the mix time/revolutions specified, CEMEX shall run trial batches to proposed extended delivery time and perform necessary tests (initial set time, slump, compression, etc) to verify the quality of the concrete will not be negatively affected.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0486.1	BGP - Extened Time for Concrete Delivery - Mat Slab	Closed	05/06/2013	05/16/2013	05/12/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Filip Filipic

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference Specification: 033020

Pursuant TJPA's response to RFI T-0486 please reference attached letter from SCCI's concrete supplier Cemex. Cemex has performed the set time test to evaluate the time at which at which the onset of hydration occurs for mixes 1556034 and 1558218. For the two mixes referenced herein, is it acceptable to extend the concrete delivery times to 2 hours?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Extending the concrete delivery to 2 hours is acceptable as proposed in RFI T-0486 provided that the tested mixes match approved mix designs.

It is not clear that the tested mixes were the approved mix designs for the mat and foundation wall (we assume the RFI means 3'-0" exterior foundation wall and not any other wall or shearwall and our response only applies to this item) as the mix numbers and/or the mix descriptions do not match any approved mix design.

T-0486.2 **BGP - Extended Time for Concrete Delivery - Mat Slab** **Closed** **05/28/2013** **06/07/2013** **06/03/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference RFI: T-0486

Pursuant TJPA's response to RFI T-0486 please reference attached letter from SCCI's concrete supplier Cemex.

Cemex has performed the set time test to evaluate the time at which at which the onset of hydration occurs for mix #1557204 (Mat Slab Mix).

For the mix referenced herein, is it acceptable to extend the concrete delivery times to 2 hours?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is acceptable to extend the concrete delivery to 2 hours as proposed in RFI T-0486 for mat slab mix #1557204.

T-0487 **BGP - Structural Pier Reinforcement Detail** **Closed** **04/08/2013** **04/18/2013** **04/22/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Ref: A1-9215, 9/S1-9050

Please confirm that the vertical rebar size and spacing of

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

#7@ 8" OC EF (as shown on Detail 9 of S1-9050) applies to the structural pier between GL 4 and 5 which is dimensioned as 2'-0" x 2'-0"(A1-9215).

T-0488 **BGP - Handling HVFA Test Cylinders- Mat Slab** **Closed** **04/08/2013** **04/18/2013** **04/17/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Ref: Specification Section 03 30 20 1.7 F 3 j 2
ASTM C 31

ASTM C 31 Identifies that concrete cylinders should not be transported until at least 8 hours after final set. Per ASTM C 31, Allowable field curing is 48 hours maximum. Typically test cylinders are transported within 24 to 48 hours after casting. Some of the mix designs approved for this project include High volume of Flyash (HVFA) and high dose of Shrinkage Reducing Admixture (SRA). This combination provides a concrete mix with retarded set and slow strength gain. In the interest of providing reliable test results, SCCI and CEMEX requests that transporting of cylinders representative of concrete mixes that include 25% flyash and/or addition of shrinkage reducing admixture be delayed until 3 to 5 days after casting. Protection and storage of cylinders in the field shall be in direct accordance with requirements outlined in section 10 of ASTM C 31. Is this extension of field curing duration acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

TT does not take exception to the delay of handling HVFA test cylinders as proposed in RFI 0488.

T-0489 **BGP - Proposed solutions to trestle pile / concourse level beams (not depicted in t Closed** **04/09/2013** **04/19/2013** **04/18/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Webcor Construction LP Kirk Nielsen

REQUEST:

Ref: S1-2202

Please reference the attached marked up sheet S1-2202 which depicts:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The proposed solutions to move Lower Concourse permanent structure to avoid trestle conflicts are not acceptable. Blockouts for temporary conditions are the responsibility of the Contractor. Refer to general

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

1. Trestle pile #3 conflicting with the line D.4 B77 (36"w x 46"h) beam between lines 3 & 4. In order to avoid the proximity conflict may we:
   a. Relocate the B77 beam North in order to clear the trestle pile?
   b. Skew the B77 beam so that it runs in between cols. 3/D.4 and 4/D?
2. Trestle pile #6 conflicting with the line E.6 B45 (30"w x 44"h) beam between lines 4 & 5. In order to avoid the proximity conflict may we relocate the B45 South, thereby cantilevering the slab, in order to clear the trestle pile?

Please advise.

note GR-9 on S-0005 for additional information regarding blockout guidance, as well as note GR-4 on S-0005.

T-0490 **BSE - Multiple Micropile Relocation (Trestle Overhead Obstruction)** **Closed** **04/09/2013** **04/19/2013** **04/16/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Kelly Phariss

REQUEST:

Ref: TG0300-622.4

Multiple micropiles underneath the trestle cannot be installed as laid out due to an overhead strut support obstruction. BBII suggests relocating these micropiles south to provide 4' of clearance from the overhead strut support to each micropile. The proposed micropile locations will be within the geothermal area; however, they do not appear to impact geothermal piping. See attached sketch.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Thornton Tomasetti does not object to relocating these micropiles as proposed.

T-0492 **BGP - Backfill of Geothermal Pipe** **Closed** **04/11/2013** **04/21/2013** **04/23/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Per discussions following the Turner BSE Progress

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is acceptable to backfill horizontal loop trenches

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Meeting with the geothermal designer, it is acceptable to backfill and compact the continuous loop after having been installed in the trench. This backfill is contingent upon the ends of the loop being left exposed for the loop welds to the manifold. Backfill over these welded joints and manifold will not be completed until the 100 psi hydro test is complete.

Please confirm this is acceptable.

after pneumatic test of individual horizontal loops.

T-0493 **BGP - Geothermal Loop Spacing Tolerances** **Closed** **04/11/2013** **04/21/2013** **04/16/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Ref: RFI T-0473

Per the Engineer response to a WOJV RFI, the geothermal loop spacing cannot exceed 4'. Per discussions after the progress meeting today (4/10/ 13), the 5th and 6th loops in field 1 are acceptable with a spacing of 20". This exception is for this location only and all further exceptions are to be submitted under a seperate RFI at the time of the layout.
Please confirm that this 20" spacing for Field 1 loops 5 & 6 is acceptable at 20".

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed, 20" Separation between Field 1, Loop 5 and Loop 6, is acceptable.

The first sentence of this RFI that the loop spacing cannot exceed 4' is incorrect. The Response to referenced RFI-T-0473 stated: The Minimum Distance between geothermal pipe loops is 4'-0".

T-0494 **BGP - Formwork- Form Release Compatability Certification** **Closed** **04/11/2013** **04/21/2013** **04/16/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Ref: A1-9601 through A1-9606
Specifications Section 03 10 00.1.3.B.6

Please reference specifications section 03 10 00.1.3.B.6. Section states contractor shall submit for record a written statement certifying that form release agent used is compatable with susequent architectural finish materials

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The finish schedules are currently being prepared. After May 30, 2013 the "draft in-progress" schedules could be shared in response to an RFI issued at that time.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

applied to concrete surfaces. Drawings A1-9601 through A1-9606, is the room finish schedule, however the TG06.0 drawing package does not include the above mentioned finish schedule drawings. Without knowledge of the subsequent architectural finish, Shimmick Construction cannot comply with the above mentioned specification.

Please provide a room finish schedule so that Shimrnick Construction can comply with the above mentioned specification.

T-0494.1 **BGP - Architectural Finish Schedule** **Closed** **06/03/2013** **06/13/2013** **06/10/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Per attached RFI response T-0494, please provide SCCI with an architectural fin ish schedule.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to the Draft Room Finish Schedules for the B2 and B1 levels on the attached SKA-2726 and SKA-2727.

T-0495 **BGP - Foundation Wall Concrete Inserts** **Closed** **04/12/2013** **04/22/2013** **04/24/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Ref: A1-2812, A1-2821 A1-2842, A1-2843, A1-6231

Please reference the attached drawings regarding foundation wall concrete inserts. SCCI is requesting details clarifying the locations and scope of the horizontal concrete inserts on the mat slab level foundation walls and vertical concrete inserts on the lower concourse level foundation walls. The following issues have been discovered in the drawings:

1. A1-2843 has specified two contradicting lengths for the continuous vertical wall inserts as shown in the clouded

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Horizontal concrete inserts are to extend entire length of the South foundation wall. Refer to clarification on the attached sketch SKA-2690, which corresponds to sheet A1-2843.

2. There are no concrete inserts along the West foundation wall at B2 (Train Platform) level. Refer to clarification on the attached sketch SKA-2689, which corresponds to sheet A1-2842 for concrete inserts at the B1 (Lower Concourse) level.

3. Clarification notes have been added to SKA-2693,

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

sections.
2. A1-2812 and A1-2842 appear to indicate inserts along the West wall however there is no information declaring lengths and scope.
3. A1-2821 references detail 3 / A1-6231 which is not a detail that is shown on A1-6231.

which corresponds to A1-6231. Reference correction shall be made to read A, B, C/ A1-6231. Also, starting point for horizontal concrete insert has been added on SKA-2687, which corresponds to A1-2820.

Attached sketches, SKA-2687, SKA-2688, SKA-2689, SKA-2690, SKA-2691, SKA-2692 and SKA2693 are included for clarification purposes. Their corresponding sheets shall be formally issued as an ASI at a future date.

T-0496 **BGP - Deneef Swellseal at Micropile Boots** **Closed** **04/11/2013** **04/25/2013** **04/26/2013** **Potentially** ☐

From: Webcor Construction LP Ian Corcorran **To:** Shimmick Construction Comp Ben Gordon **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Ref Dwg. 2/A1-8711

Please reference Detail 2 of A1-8711 of the Contract Drawings and the attached letter from Deneef/Grace. Detail 2 of A1-8711 calls for a 6" diameter, 18 ga. galvanized steel boot to be adhered with trowelable grade adhesive and filled with urethane sealant. Submittal #TG0600-024 approved the use of Deneef Swellseal WA which is the product called out in Spec Section 07 12 10.

The attached Deneef/Grace technical letter dated 04/05/13, states that filling the entire boot with Deneef Swellseal is excessive and state that filling the entire boot with Swellseal WA is more than necessary and affect the curing capability.

Deneef/Grace suggests that the material be installed 2-3" deep and topped with a non-shrink grout such as "Rapid Set CT Construction Grout" or "Rapid Set Cement All" to contain it in the boot. The manufacturer states that the waterproofing ability of the material in this configuration would not be compromised. Please review and advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The design team does not object to your proposal.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0497	BGP - C29 Column Detail Clarification	Closed	04/17/2013	04/27/2013	04/22/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Andy Khuu

REQUEST:

Reference Specification: 03 20 00
Reference Drawing: S1-3300, A1-2850, S1-2030, S1-3303

Contract drawing S1-3300 refers to detail 1/S 1-3303 for the rebar elevation detail of column C29. Detail l/Sl-3303 appears to be for columns that pass through the ramp and based on drawing Al-2853 column C29 does not pass through the ramp.

Please confirm if Detail 1/Sl-3303 is the correct elevation detail for column C29.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The elevation reference for C29 should reference 1/S1-3301 instead of 1/S1-3303.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0498	BGP - Waterproofing Mock Up	Closed	04/18/2013	04/18/2013	04/25/2013	Potentially	☐

From: Webcor Construction LP Kody Cooper **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference Specification: 07 12 10 - 1.6.C.2

The waterproofing manufacturer's field representative/installer are to construct a 10'x10' on site mock up of the full waterproofing assembly. Upon completion of the mock up (excluding any major waterproofing deficiencies), SCCI intends to utilize it as part of the permanent structure. Is this acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is suggested, but not a requirement, the mock-up is installed separate from the work to allow the mock-up to be referenced in the future. Installing the mock-up as part of the work has some benefits in uncovering additional site issues.

2. All shop drawings related to the waterproofing and the proposed materials to be used have not been submitted to the design team for review at this time. The mock-up shall utilize the materials confirmed in the shop drawing process. If the mock-up is constructed with the wrong materials, the mock-up may need to be reconstructed with the proper materials based on the TJPA Representative's determination as to the acceptability of the materials utilized in the mock-up.

3. The mock-up is scheduled to be constructed today. The overall waterproofing work may not happen immediately, in which case the mock-up may need to be replaced if it is not properly protected until the remainder of the work is installed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0499	BGP - Geothermal Manifold Location for Fields1 & 2	Closed	04/18/2013	04/28/2013	04/25/2013	Potentially	☐

From: Webcor Construction LP Kody Cooper **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Reference Drawing: SK-3

Per the contract drawing, the manifold is to be located at an elevation no greater than 14' below finish grade (street) elevation. Per conversations in the preparatory DFOW meeting and other coordination meetings, the Engineer planned to have the manifold in a specific location. Attached is an elevation drawing for Field 1 & 2 Manifolds. Please confirm that the attached elevation details work with the designer's intent for the manifold locations for Field 1 & 2.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Height of vertical sleeve penetrations through the foundation wall is acceptable for loop fields 1 and 2. Please submit similar clarifications for all further ground loop riser penetrations.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0500	BSE - Micropile Blockouts in Mud Slab	Closed	04/18/2013	04/28/2013	05/01/2013	Potentially	☐

From: Webcor Construction LP Kody Cooper **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Kelly Phariss

REQUEST:

Reference Specification: 03 30 00

In mud slab pour 1, micropiles W154, W154R1, W127, W236, and W236R1 are all blocked out. BBII would like the option to pour back the blockouts with 4,000psi neat grout (mix approved for installation of micropiles) or the approved 2,500psi concrete.

Please confirm that either option is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Thornton Tomasetti does not object to using 4000psi neat grout in lieu of 2500psi concrete for filling mud slab blockouts at micropiles.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0501	BGP - Slide Bearing Connection details	Closed	04/18/2013	04/28/2013	04/30/2013	Potentially	☐

From: Webcor Construction LP Kody Cooper **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Jesse Dillon

REQUEST:

Reference Drawings: S1-3204 and S1-3205

The two drawings detail the slide bearing assemblies at the east wall and vehicle/bike ramp. Detail 9-A on S1-3204 does not detail how the 10 gauge carbon steel plate is connected to the bottom support. Similarly, Details 2,3,6 and 7 on S1-3205 do not detail how the assemblies are

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Detail 9/S1-3204: Provide 1"@4"OC max 1/8" fillet weld with 1" min at each corner along each side of the 10 gauge carbon steel plate attachment to the bottom support.

Details 2 & 3 on S1-3205: For 16ga plate to embed plate, weld shall be 1/8" fillet, 2" @3"OC all sides. For

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

connected to the embedded plates. Please provide details on connections between slide bearing assemblies and support/embedded plates.

reinforced elastomeric backing to steel plate, bonded attachment per manufacturer.

Details 6 & 7 on S1-3205: For 16ga plate to embed plate, weld shall be 1/8" fillet, 1"@3"OC all sides. For detail 6 only, reinforced elastomeric backing to steel plate, bonded attachment per manufacturer.

T-0502 **BGP - Slide Bearing Weld Details** **Closed** **04/18/2013** **04/28/2013** **04/29/2013** **Potentially** ☐

From: Webcor Construction LP Kody Cooper **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Jesse Dillon

REQUEST:

Reference Drawing: S1-3205, S1-3210 and S1-3211

The details call for various pieces of the slide bearing assemblies to be continuously and tack welded to plates. See clouded callouts on attached drawings. No welding details are provided with the callouts. Please provide details for continuous welds and spacing for tack welds.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For details 6, 7, & 9 on S1-3204, 3/S1-3210 and 1/S1-3411 for both bottom and top support connections, provide 1"@4"oc max 1/8" fillet weld with 1" min at each corner along each side of the 10 gauge plate.

T-0503 **BGP - Geothermal Pipe Loop Bends** **Closed** **04/18/2013** **04/18/2013** **04/23/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Per the geothermal pipe manufacturer's (Performance Pipe) recommendations, the geothermal pipe should not be bent in a radius smaller than 25 times the pipe diameter. For the geothermal pipe loops, this equates to a bend radius of 41.5". However, the goethermal design drawings depict the loops to be 60" on center that would leave a large overlap (in theory) of almost 24"/2'. To achieve a 41.5" radius, the trench spacing will have to be increased to 83" between the supply and return trench. Please note, that the pipe manufacturer discourage "bulbing" the end of the loop and recommended resolving

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

WSPFK Response: Maintain pipe manufacturers' minimum long term bend radius as required per specifications with loop arrangement as shown on contract documents. Large Radius bends following the manufacturers' minimum pipe bend radius are an acceptable practice per IGSHPA standards (IGSHPA Design Manual Section 7.6.2.1). James Bradshaw 4/19/2013

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

the issue away from bending or "bulbing" the end of the pipe loop.

S3H Inc. is proposing to overlap half of a loop onto another such that the spacing between pipes remains at a 4' minimum (per RFI T-0493). This would create a 8' minimum distance between the supply side of a loop and the return side of a loop. In doing so, a portion of the two overlapping loops would be crossing. Is this acceptable? Please find attached drawing #1 as a reference of the proposed layout. Please note that this proposed method would change the reverse return self balancing configuration of piping. This proposed method also has the possibility of being impacted by various micropile conflicts.

S3H Inc. is also proposing as a fix to field one to install 2 fused - 90 degree elbows at the end of each loop in a U-shape configuration using the current, as installed dimensions between the loops. Please find attached Drawing #2 depicting the 90 degree elbows on the loops This would eliminate the required 83" bend diameter. This is least impact proposal to rectify the already installed field 1, but would be an additional cost.

Please advise as to how to proceed with Field 1 as well as the remaining 14 Fields.

T-0504 **BGP - Radius Foundation Walls - R=637.63'** **Closed** **04/19/2013** **04/29/2013** **05/02/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

Ref: Submittal Package T0600-030

SCCI's plan is to construct the R=637.63' foundation walls in 16' chords. Layout of the construction joints shall be per approved as noted CJ layout submittal. R=637.63' foundation wall runs along the Southwest portion of the project, from GL 3 thru GL 16, or SCCI's wall pours W160 thru W174A. See attached sketch of the wall detail for clarification.
Is this acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The proposal to layout the wall in 16' chord segments is not acceptable. The foundation wall assembly is designed with a 2" zone for the waterproofing assembly and a 3' thick foundation wall. Providing chord segments instead of a curved radius will reduce the thickness of the foundation wall.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0504.1	BGP - Radius Foundation Wall Formwork	Closed	11/19/2013	11/29/2013	11/25/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

Please reference RFI T-0504.

SCCI plans to construct the south foundation walls from GL2.75 to GL 12.08 in 8' chords. See attached sketch for clarification. 8' chording of the walls will keep the wall faces within the construction tolerances.

Is this acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
11/22/2013
RESPONSE:
The 8' chording on the curved part of the foundation wall, as proposed in the RFI, is acceptable.

T-0505	BGP - Protection Board on Horizontal Surface of Waterproofing	Closed	04/19/2013	05/03/2013	04/29/2013	Potentially	☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Ref. Dwg. A1-8710, A1 -8711, S1-3003

Please confirm that there is no protection board installed on top of the waterproofing membrane to receive protection slab. Drawing S1-3003 shows protection board, while A1-8710 & A1-8711 does not.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Protection board is not required on top of the waterproofing membrane which is to receive protection slab, as shown on the architectural drawings A1-8710 & A1-8711.

T-0506	BGP - Continuous Horizontal Concrete Inserts	Closed	04/22/2013	05/02/2013	05/07/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference Drawing: A1-6231

Please reference the attached sheets regarding continuous concrete inserts. On the enlarged detail C of A1-6231 SCCI is proposing the layout of the horizontal concrete inserts. Raising the bottom insert 1- 1/2" and lowering the top insert 1" will provide a greater clearance between the inserts and the construction joint. Achieving a greater clearance from the construction joint will reduce the risk of rock pockets or voids. Please confirm these dimensions as acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The proposal to raise the bottom insert 1 ½" and lower the top insert by 1" is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0507	BGP - Continuous Concrete dobie-mat slab	Closed	04/22/2013	05/02/2013	05/06/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please see attached sheets regarding mat slab bulkhead forms. SCCI is proposing the use of a continuous concrete dobie as part of the bulkhead design along the vertical construction joint. The continuous dobie will be installed with the reinforcement mats and will act as a cast-in portion of the formwork. The dobie will become a permanent member and will meet all specifications that the mat slab concrete mix design requires. Please confirm approval of the use of the continuous dobie.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The use of a continuous dobbie acting as both reinforcement support and permanently cast-in construction joint form is not acceptable to Thornton Tomasetti. We are concerned that the continuous nature of the proposed dobbie will increase likelihood of introducing two cracks in the mat (one at each face of the dobbie). Per spec, bottom reinforcing bars in mat slab shall be supported by precast concrete bricks or individual high chairs, supports which are not continuous. TT recommends either to move the dobbie in line with the form work and remove it prior to the next concrete pour, or use another removable option to form below the bottom reinforcement while providing required support for the reinforcement away from the construction joint.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0508	BGP - Drainage Composite Joint Orientation	Closed	04/23/2013	05/03/2013	04/25/2013	Potentially	☐

From: Webcor Construction LP Kody Cooper **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference Specification: 07 12 10-3.2.F

This spec section states "Install drainage composite either vertically or horizontally and lap sheets 1 inch in the direction of water flow." The manufacturer's instructions state "the drainage side laps must be tightly butt joined together so there are no gaps or voids between them." SCCI suggests butt joining the drainage composites per the manufacturer's instructions. Is this acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The proposal to butt joint the panels is not acceptable for the conditions of this project.

The purpose of interlocking is to aid in supporting the drainage panels by hanging one from the one above.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0510	BGP - Internal Bracing Pin Pile #8 in conflict with Moment Beam BMATV	Closed	04/23/2013	05/03/2013	04/30/2013	Potentially	☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Robert Kjome

Co-Author: Webcor Construction LP Kirk Nielsen

REQUEST:

Please reference attached marked up sheet S1-2202.

The location of internal bracing pin pile #8 conflicts with

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per discussions during 04/25/2013 "W/OJV Assist Meeting", this pin pile is being re-visited by Contractor to consider being eliminated as well as to be

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

moment beam BMATV. General Note GR-9 on sheet S-0005 precludes blocking out moment frames. Upon submitting for the internal bracing system the TG03 BSE subcontractor was not aware of the location of beam BMATV to coordinate around. WOJV is requesting a variance from note GR-9 and is requesting to block out beam BMATV around pin pile #8.

Please advise.

coordinated with the in-progress re-bracing solution. Please close this RFI as currently presented.

T-0510.1 **BGP - Internal Bracing Pin Pile #8 in conflict with Moment Beam BMATV** **Closed** **05/02/2013** **05/14/2013** **05/15/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please reference attached marked up sheet S1-2202.

The location of internal bracing pin pile #8 conflicts with moment beam BMATV. General Note GR-9 on sheet S-0005 precludes blocking out moment frames. Upon submitting for the internal bracing system the TG03 BSE subcontractor was not aware of the location of beam BMATV to coordinate around. On 4/23/13 WOJV submitted RFI #T-0510 requesting a variance from note GR-9 and is requesting to block out beam BMATV around pin pile #8. During the 4/25/13 "WOJV SE Assist Meeting," when the issue was brought up, a PMPC employee suggested prematurely removing strut STA09 because it has diminished load. On 4/30/13 WOJV received RFI response #T-0510 stating pin pile #8 was going to be removed hence WOJV should close the RFI #T-0510. In addition to strut STA09 pin pile #8 supports strut #STB09 which is carrying a load, not that the internal bracing EOR would allow the premature removal of two strut levels. WOJV again requests a variance from note GR-9 and is requesting to block out beam BMATV around pin pile #8.

Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

At pin pile #8 location, we will allow contractor to block-out the Lower Concourse beam. Contractor shall limit the width of block-out to 1/3 the width of the beam and refer to GR-9 for other block-out info. Block-out reinforcement shall be included in rebar shop drawings.

Note that the Lower Concourse structure acts as a brace for the foundation wall. Contractor is responsible for the stability of the structure per GR-4 as well as coordinating with other packages.

Note that the RFI mis-quotes the reason why the original RFI #510.0 was commented to be closed

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0511	BGP - Deneef Swellseal at Electrical Grounding System Boots	Closed	04/23/2013	05/07/2013	05/09/2013	Potentially	☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please reference SCCI RFI #130, Detail 5/A1-8710, and the attached letter. Detail 5/A1-8710 calls for 2" diameter, 18 ga galvanized steel boot to be adhered with trowelable grade adhesive and filled with urethane sealant. Submittal #TG0600-024 approved the use of Deneef Swellseal WA which is the product called out in Specifications 07 12 10.

The attached letter Deneef/Grace technical letter dated 04/05/13 states that filling the entire boot with Deneef Swellseal is excessive and state that filling the entire boot with Swellseal WA is more than necessary and may affect the curing capability.

Deneef/Grace suggests that the material be installed 2-3" deep and topped with a non-shrink grout such as "Rapid Set CT Construction Grout" or "Rapid Set Cement All" to contain it in the boot. The Manufacturer states that the waterproofing ability of the material in this configuration would not be compromised.

Please review and advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The manufacturer's recommendations are acceptable.

The question on RFI T-0511 is very similar to the question on RFI T-0496 and could have been consolidated in to one RFI, or better yet, this installation method should have been researched and proposed on the Waterproofing shop drawing submittal

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Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0512	BGP - Additional Fasteners for Protection Board Installation	Closed	04/23/2013	05/07/2013	04/26/2013	Potentially	☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Ref. Spec. 07 12 10-3.2.D

Please reference Spec Section 07 12 10- 3.2.D. Spec Section 07 12 10 - 3.2.D states the following: "Secure 1/4" protection board to flanges of soldier piles with powder driven fasteners and washers spaced 12 inches o.c. Butt vertical joints. Maximum joint width: 1/4" ..."

The manufacturer of membrane waterproofing system (Laurenco) has indicated that due to "out of plane" piles, and relaxation of CDSM substrate requirement, they are requiring intermediate fasteners to hold the 1/4" protection board tight to the CDSM wall. Please review and advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The design team does not object to the proposal.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0513	BSE - Steel plate at CDSM piles 738-739	Closed	04/24/2013	05/04/2013	05/08/2013	Potentially	☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Shad Gardner

REQUEST:

Ref: Specification Section 31 56 13

During leak grouting at level 5 excavation, a section of the CDSM wall panel between soldier piles 738-739 became dislodged, resulting in a high volume leak. In an effort to stabilize the damaged CDSM panel and stop the leak, BBII installed a steel road plate between soldier piles 738-739 and injected grout behind it.

BBII is concerned that removing the plate will likely cause the panel to become destabilized and could reopen the flow of water. BBII surveyed the face of the plate and found that at pile #738, the face of plate is 3' 0-5/8" back from the inside face of concrete wall and at pile #739 the plate is 3' 1-7/8" back from inside face of concrete wall. BBII proposes leaving the steel plate in place to maintain integrity of the CDSM panel. The edges of the plate may be grouted to provide a smooth transition to the CDSM wall for waterproofing.

Please confirm this is acceptable

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is acceptable to leave the steel plate in place as proposed in the RFI. This will result in the waterproofing membrane encroaching in on the foundation wall at pile 738. The foundation wall at pile 738 may be reduced to 34 5/8" thickness and the foundation wall vertical reinforcement shall be modified per proposed solution presented in RFI 0448.0 for wall thickness reduction up to 3" and applied between piles 737 and 739.

W/O Note: Acceptable provided BBII take a survey of the face of the plate and provide coordinates.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0513.1	BGP - Steel plate (RFI #T-0513) encroachment between CDSM Piles No. 738 & 739	Closed	05/16/2013	05/26/2013	05/24/2013	Potentially	☐

From: Webcor Construction LP Kirk Nielsen **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

As depicted in attached SK-0153.1, the encroachment of the steel plate is primarily in the mat slab pour. WOJV is proposing to locally adjust the reinforcement in the mat slab pour to achieve the required cover. There will be no change to the reinforcement on the wall width.

As a means of chamfering the offset the result of steel plates edges to the face of CDSM wall:
WOJV is proposing to mechanically fasten expanded metal lath to the CDSM beams using powder activated fasteners. Rapid set mortar is then applied to the required depth ensuring all edges of the plates have a gradual slope back to match the existing face of the CDSM wall.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

This is acceptable however this work should be coordinated with other disciplines.

Thornton Tomasetti Response:

It is not clear from the RFI when the Contractor proposes "...no change to the reinforcement..." if this means the unmodified wall contract bars stay in original location or if the bars will move inward. Based on the provided encroachment info, there is still encroachment in the wall. If the bars are proposed to move inward, the thickness of the wall is reduced and therefore the original response of T-0513 shall apply.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

If the Contractor proposes not to modify the wall reinforcement, please submit technical justification.

T-0514 **BGP - Mech Room Slab Finish Elevation and Grate Clarification** **Closed** **04/24/2013** **05/04/2013** **04/30/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Ref: P1-2022

Drawing P1-2022 details slab elevations "TOC = -35'-8"" and "Future FFE = -35'-5"" Detail C/P1-4001 depicts a section view of the mat slab in the mechanical pump room; however, it is not clear whether both the Future FFE and TOC of mat slab are shown.

1. Please confirm if the attached marked up drawing is correct in detailing the two elevations.

2. Also, please confirm if the grates shown in Detail C/P1-4001 are part of the TG06 scope of work. If so, then please provide details for the grate.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. The two elevations are correct.

2. It is the design team's veiw the pits and oil-sand interceptor covers are not part of the TG06 scope of work. WOJV shall confirm the scope of work in each bid package.

T-0514.1 **BGP -Mech Room Slab Finish Elevation and Grate Size Clarification** **Closed** **05/03/2013** **05/10/2013** **05/07/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Webcor Construction LP Robert Kjome

REQUEST:

Reference Drawings A1-2102, P1-4001

Sheet A1-2102 between G.L. 4/5 and C.3/D note reads "PITS AND COVERS REF. TO MEP DWGS." MEP drawings do not provide grate sizes for the SFG, SE, nor OSI on C/P1-4001 in RFI T-0514.

Please clarify the MEP drawing that displays this information.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractor is responsible for determining the scope of work of each bid package. Contractor shall clarify this item for sub-contractor. In the future, do not submit scope of work questions between sub-contractors to the design team.

The TJPA Representative does not believe the Covers for SPG, SE, and OSI are included in TG06 scope of work.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0515	BGP - Epoxy Coating for Form Saver Couplers	Closed	04/23/2013	05/07/2013	05/06/2013	Potentially	☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Ref. Dwg. 6/S1-3001

Please confirm the typical splice form saver couplers (for future const.) as called out in detail 6/S1-3001 are to be epoxy coated per ASTM A-775 specifications.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed that epoxy coating of splice form saver couplers (for future const.) as called out in detail 6/S1-3001 shall be per ASTM A-775. In compliance with manufacturer's requirements (IAPMO-ER #0129), all threads of the coupler are to be free of debris, including epoxy coating, at the time of coupling, thus epoxy coating is to be applied to the exterior surface only (not the thread area). Note that the epoxy coating for the form saver is only required for the case where the form savers are used for splicing bars for future construction as noted in the detail 6/S1-3001. Other couplers do not need to be epoxy coated.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0516	BGP - C Channel Conflict	Closed	04/24/2013	05/04/2013	05/09/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Specification: 03 30 20
Reference Sketch: attached
Reference Photos: attached

The C Channels welded to the soldier piles of the CDSM wall will inferfere with the installation of vertical reinforcement of the foundation walls (See attachments). Is it acceptable to remove the C-Channels one level at a time with each foundation wall lift in order to allow installation vertical reinforcement overlap.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

C-Channels should be removed when the associated level of bracing and waler are removed during the build-out of the train box.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0517	BGP - Geothermal Pipe Loop Bends	Closed	04/25/2013	05/05/2013	04/26/2013	Potentially	☐

From: Webcor Construction LP Kody Cooper **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

SCCI and S3H Inc. are looking to confirm conversations from the Geothermal Design Engineer from the 4/24/2013 progress meeting.

-The Geothermal Piping can "bulb" eccentrically and

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Geothermal Piping can "bulb" eccentrically and concentrically to incorporate the minimum 25D bend radius. -WSPFK Response: 25 Times OUTSIDE DIAMETER of pipe required for bend radius. Eccentric and Concentric "bulbs" are acceptable to achieve the

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

concentrically to incorporate the minimum 25D bend radius.
-The bulbing of the geothermal loops can cause the loops to overlap and this is acceptable at the bulb locations.
-Due to the bulbing, the geothermal loo[may become in conflict with the micropile locations, please confirm that the pipe loopspacing can be adjusted.
-Please confirm that the staking of the geothermal loop pipe is acceptable to achieve the 25D bend radius requirement as long as the stakes are removed for backfill.

radius

-The bulbing of the geothermal loops can cause the loops to overlap and this is acceptable at the bulb locations. WSPFK Response: This is acceptable. At the meeting S3H agreed to provide some backfill between the pipes to prevent kinking of the pipes when they cross over each other.

-Due to the bulbing, the geothermal loo[may become in conflict with the micropile locations, please confirm that the pipe loopspacing can be adjusted. WSPFK Response: Loop Spacing at the bulbs can be less than the 4'-0" from RFI 473 in the areas required to miss micro piles but should return to 4'-0" minimum spacing after the conflict is passed.

-Please confirm that the staking of the geothermal loop pipe is acceptable to achieve the 25D bend radius requirement as long as the stakes are removed for backfill. WSPFK response: Temporary supports to maintain the 25 time OUSIDE DIAMETER bend radius are the means and methods of the contractor.

T-0518 **BGP - Differential Movement in Waterproofing Layers** **Closed** **04/25/2013** **05/05/2013** **05/20/2013** **Potentially** ☐

From: Webcor Construction LP Kody Cooper **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Per the Engineer's response to Submittal TG0600-023.2, the Contractor is to install the waterproofing system to incorporate "provisions for differential movement". Please reference the contract documents that specify the design criteria for the differential movement of the structure. Please advise to a specification or drawing note that details such.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

RFI retracted as a request by W/O

T-0518.1 **BGP - Differential Movement in Waterproofing Layers** **Closed** **05/01/2013** **05/10/2013** **05/14/2013** **Potentially** ☐

From: Webcor Construction LP Kody Cooper **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Per the response to SCCI RFI #146 - Differential Movement in Waterproofing Layers, is movement expected and if so, how much movement is expected? If movement is expected, please provide Specification Section or Contract Drawing stating so.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

As with all buildings there is expected to be movement due to settlement and at this site hydrostatic uplift on the building after the construction phase dewatering is turned off as well as movement from seismic events.

Please reference the geotechnical report for information regarding these issues.

W/O Note: The Geotechnical report was included in TG06 package as a reference document.

T-0519 **BGP - Waterproofing Detail Clarification at "Pressure Slab" Joints** **Closed** **04/25/2013** **05/05/2013** **04/29/2013** **Potentially** ☐

From: Webcor Construction LP Kody Cooper **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please reference Specification Section 07 12 10 - 3.3.G and Detail 4/A1-8710. Detail 4/A1-8710 shows a typical waterproofing detail for cold joints (construction joints) at walls. Spec Section 07 12 10 - 3.3.G states the following: "Apply two 9" wide strips staggered 6 inches and 3 inches centered over the following joints:
1. Under cold joints in the pressure slab. Temporarily protect the exposed side with protection board until the adjacent slab is cast.
2. On protection boards to receive blindside waterproofing."

1. Please clarify what the "pressure slab" is referring to as there is no reference to "pressure slab" in the Contract Drawings.
2. Please provide a detail for waterproofing for this condition as a detail does not exist in the Contract Documents. Detail 4/A1-8710 does not reflect what is called out in Specifications Section 07 12 10 - 3.3.G for construction joints.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. The term "Pressure Slab" in Specification Section 07 12 10 is the 5' thick "Mat Slab" on the drawings.

2. The contract drawings and specifications cover the general requirements and waterproofing system parameters. Specification 07 12 10 - 3.3.G is clear regarding membrane configuration below cold joints. The contractor should provide a submittal detail following the waterproofing manufacturer's recommendations for this condition.

T-0520 **BGP - Finish Floor Elevation** **Closed** **04/26/2013** **05/10/2013** **05/06/2013** **Potentially** ☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Shimmick Construction Company, Inc Andy Khuu

REQUEST:

Ref. Dwg. P1-2022
Ref. Spec. 22 13 01

Contract drawing P1-2022 calls out "Future FFE = -35'-5"" for the Future Finish Floor Elevation. This elevation note does not appear in any of the other mat slab plumbing drawings (P 1-2023 to P 1-2030). Please confirm if the Future Finish Floor Elevation applies to the entire mat slab.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The call out 'Future FFE = -35'-5" applies only to the Future Floor Finish Elevation for the area containing service rooms at B2 Level North West bounded by the the points GL B, 1.5; GL B, 5.5; GL F.7, 1.4 and GL C.5, 5.5.

T-0521 **BGP - 1 in Aggregate in Protection Slab Cast-in-Place Concrete Mix Design** **Closed** **04/29/2013** **05/09/2013** **05/02/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Ref: Submittal TG0600-200.1

Please reference submittal TG0600-200.1 (cast-in-place concrete mix design - Protection Slab). Per the referenced submittal and submittal response, sent to SCCI April 12, 2013 and returned as "Make Corrections Noted," SCCI intends to use 1" aggregate in the above mentioned cast-in-place concrete mix. In addition, the above mentioned mix design was also reviewed at the TG06.0 Protection Slab Preparatory DFOW meeting, held April19, 2013.

Please confirm the use of 1" aggregate in the Protection Slab is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed: the use of 1" aggregate at the Protection Slab is acceptable.

T-0522 **BSE - Micropile Relocation- Performance Test Pile Zone 2 (Sequencing)** **Closed** **04/29/2013** **05/09/2013** **05/03/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Stacy Wilson

Co-Author: Balfour Beatty Infrastructure, Inc. Brandon Miller

REQUEST:

Ref: S1-2023

The primary performance test micropile is yet to be installed for Zone 2. Due to sequencing advantages, BBII proposes relocating this pile from the original location

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

At the request of W/O, this RFI will be pulled back from the design team, and superseded by RFI T-0522.1.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

shown in S1-2023 to GL 15 between B&C. The relocated micropile location is within the geothermal area; however, it does not appear to impact geothermal piping. See attached sketch.

Please confirm this is acceptable.

T-0522.1 **BSE - Micropile Relocation- Performance Test Pile Zone 2 & 3 (Sequencing)** **Closed** **05/02/2013** **05/12/2013** **05/03/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Brandon Miller

REQUEST:

Ref: Specification Section 31 63 33 1.1B

This RFI supersedes RFI T-0522.
DTDS proposes to reduce the design length of the Micropiles East of Gridline 17 (EG17) from 80 feet to 70 feet. DTDS has shown through testing and reduced post-grouting that a higher soil-grout bond than originally assumed in the design can be achieved in the field. DTDS will install two (2) performance test piles to verify the capacity of a 70 foot micropile EG17. One performance test pile will be installed in Zone 2 at gridline 17 between piles E005 and E008. The second performance test pile will be installed in Zone 3 at gridline 20 between piles E136 and E137. DTDS believes that 70 foot micropiles EG17 will still achieve the maximum required load capacity of 2.4 times Design Load (560 kip). The performance test piles will be installed with one (1) round of post-grout. Based on the results of the testing, additional post-grouting can be provided as necessary.

Upon completion of the testing DTDS will submit revised micropile working drawings and calculation supplement.

All production micropiles will continue to be proof tested per the Specifications. The performance test locations provided would supplant the performance test locations shown in the Contract plans for Zones 2 and 3.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The proposed relocation for the zone 2 performance test micropile is acceptable.

The proposed relocation for the zone 3 performance test micropile is not acceptable. (The contract documents indicate the zone 3 performance test micropile to be located at GL E and to the east of GL 22. If the contractor desires to relocate the zone 3 performance test micropile, the proposed location will not be approved at locations west of GL 22.)

Thornton Tomasetti does not object to the other aspects of the RFI except to note that the maximum required load capacity for the performance test remains at 2.8 times the Design Load (not 2.4), per the contract documents.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0523	BGP - Floor Drain Elevation in Foot Traffic Areas	Closed	05/01/2013	05/09/2013	05/07/2013	Potentially	☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Ian Corcorran

Co-Author: Shimmick Construction Company, Inc Andy Khuu

REQUEST:

Ref: Specification Section 22 13 01 - 3.2 D.3

Contract specification 22 13 01 - 3.2.D.3 have the following criteria for installation of floor drains:

a. Set drain rims flush and level with finished floor in areas subject to foot traffic.
b. Set drain rims minus 1/8-inch to 1/4-inch from finish floor elevation, so as to provide positive drainage, where drain is not subject to foot traffic.

Please provide a map of areas which are to be subject to foot traffic.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

All floor drains to be installed with rims and grates flush and level with finished floor, also the floor sinks.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0524	BGP - Protection Slab Minimum Thickness	Closed	05/08/2013	05/18/2013	05/08/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference Drawing: S1-3201, A1-8710

SCCI wiII set the top elevation of the protection slab at -40.67' as shown on the attached contract drawing. Protection slab thickness may vary due to mudslab elevation, mudslab heaving or built-up waterproofing membrane, adhesive and flashings.

Please provide minimum thickness for protection slab.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Protection slab to be 4" thick typical throughout, but can locally reduce to 3".

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0525	BGP - Asphalt Cement Specification	Closed	04/30/2013	05/10/2013	05/03/2013	Potentially	☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Ref: Specification Section 07 12 10 - 3.2.E.

Please reference Specification Section 07 12 10 - 3.2.E. Specification 3.2.E states "Install two plies of asphalt saturated felts over the protection board in walnut sized

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Asphalt Flashing Cement product should conform to ASTM D3747 for bituminous emulsions or D4586 Class I Type I for solvent bearing depending on how dry the substrate is. An example is Karnak's Perfectseal, Flashing Cement, Amphibikote or "Slaters

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

gobs of asphalt cement sufficiently spaced to hold felts in place." Spec Section 07 12 10 does not specify the type of asphalt cement to be used. SCCI submitted Roofxtender RX-100 Flashing Cement which was rejected. Shimmick is now proposing to use Laurenco recommended AIM # 340 Flashing Cement. Please confirm that this is acceptable.

Cement". The Contractor shall provide a shop drawings submittal with their proposed product for use on the project.

T-0526 **BGP - Replacement of T9 Wall Cross Ties with S3 Open Stirrups** **Closed** **05/02/2013** **05/14/2013** **05/07/2013** **Potentially** ☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Andy Khuu

REQUEST:

Ref Dwg. S1-3201

Please confirm that it is acceptable to replace two T9 wall cross-ties, as depicted in detail 1 on S1-3201, with a single S3 open stirrup. Reference the attached sheets depicting the configuration of the T9 crosstie and S3 open stirrup.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Proposed replacement of two cross-ties with a single open stirrup is structurally acceptable. However, please verify the proposed reinforcement scheme does not negatively affect the constructability.

T-0527 **BSE - Revision to Zone 4 bracing elevations level A-D** **Closed** **05/01/2013** **05/11/2013** **05/14/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Danny Walsh

REQUEST:

Ref: Specification section 31 55 00

Please confirm the design team has no exceptions to raising the Zone-4 bracing elevations, all levels of struts/walers and all related strut supports/trestle bracing, 1'-0" so as to facilitate the specified waterproofing lap in relation to the top of wall.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is acceptable with regards to the geotechnical aspects of building the excavation.

The Contractor shall coordinate this change with regards to potential conflicts during the construction of the other building trades.

Stacy Wilson 5/13/2013 URS: WO/BBII is required to provide written documentation from the Internal Bracing and Access Trestle design Engineers of Record (PB&A), stating that they have reviewed and approved this elevation change. If this contractor requested change is approved by PB&A and the design team (AAI, Arup, Thorton-Thomasetti, etc.), the

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Internal Bracing submittal is to be revised accordingly and resubmitted in constructware for review and approval.

T-0527.1 **BSE -Revision to Zone 4 Bracing Elevations Level A-D** **Closed** **05/10/2013** **05/20/2013** **05/14/2013** **Potentially** ☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Stacy Wilson

Co-Author:

REQUEST:

As installed and or planned the current elevation of the A-level internal bracing walers conflicts with the TG06 wall termination elevations relative to the waterproofing overlap which was unspecified when the internal bracing was submitted. Please find attached RFI SK-527.1-1, WOJV proposes to:

1. Reduce the TG06 top of wall elevation 2'-0" to an elevation of +7.50' between approx. GL(s) 1 to 16-17.
2. Reduce the TG06 top of wall elevation 1'-0" to an elevation of +3.50' between GL(s) approx. GL(s) 16-17 to 25-26.
3. Reduce the TG06 top of wall elevation .75' to an elevation of +1.50' between GL(s) approx.. GL(s) 25-26 to 35.

This scope reallocation would exchange concrete rebar and waterproofing from TG06 to TG07 package, which assuming a prompt response, there is still time to do.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

W/O to coordinate.

W/O Comment: WOJV is herein amending the TG06 documents to reflect the top of wall elevations specified in above items 1-3. The TG06 Trade Subcontractor is to provide a credit for, to include however not limited to, the concrete rebar and waterproofing which has been deleted from the TG06 scope of work.

T-0527.2 **BSE - Revision to Zone 4 Bracing Elevations Level A-D** **Closed** **05/28/2013** **06/07/2013** **06/11/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Sketch: SK-5773

Webcor is proposing that the vertical changes in elevation

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Acceptable

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

(per RFI T-527.1) from +7.50' to +3.50' at level A gridline 16 - 17 will occur at a distance of 14'4" from gridline 16 and will be located between CDSM piles 164 - 165 on the north wall elevation and between CDSM piles 618 - 619 on the south elevation

Also vertical changes in elevation level A between gridline 25-26 from +3.50 to +1.50 will occur at a distance of 18'4" from gridline 25 and will be located between CDSM piles 265 - 266 on the north wall elevation and between CDSM piles 517 - 518 on the south elevation

Please confirm is this is acceptable

T-0527.3 **BGP - Revision to the top of the foundation wall Elevations TG06** **Closed** **10/25/2013** **11/04/2013** **10/29/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Gary Krutsch

Co-Author:

REQUEST:

Due to the revision of the Zone 4 internal bracing and the use of the already procured steal sections the lookout installed for level A bracing were installed at a lower elevation than first planned resulting in the need to revise the finished elevation of the foundation wall downwards for the TG06 package.
This scope reallocation will now be moved to the TG07.2 work package. See sketch SK01 attached for TG06 foundation wall finish elevations.

Please confirm if this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Judy Long
10/25/2013
RESPONSE:
This RFI involves the Contractor's Means and Methods. It is not the Design Team's role to define Scope of Work.

T-0528 **BSE - Zone 4 Level 2 Excavation** **Closed** **05/02/2013** **05/12/2013** **05/13/2013** **Potentially** ☐

From: Webcor Construction LP Kody Cooper **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Danny Walsh

REQUEST:

Per sheet GT-1111, excavation at each level is limited to

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

3' below the centerline of internal bracing struts. In zone 4, the spacing between Level A and B struts is only 8' O.C. (typically 12' to 14' elsewhere), which provides extremely limited clearance below Level A for excavation & demolition equipment at level 2 excavation. BBII requests the limit of level 2 excavation be extended to 7' below centerline of level B struts. (Note: the plans already allow for a +/- 2' variation in bracing elevation from those shown on sheet GT-1111. Therefore, BBII is only requesting two additional feet of excavation over what is allowed based on the contract drawings). Please advise if this is acceptable.

It is acceptable to overexcavate the center of the excavation below the centerline of the level B struts in accordance with the illustration titled Stage 5 on sheet GT-1111 of the drawings. Berms along the shoring wall must be maintained.

T-0529 **BGP - CJ Layout at Gridline J** **Closed** **05/02/2013** **05/14/2013** **05/13/2013** **Potentially** ☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Andy Khuu

REQUEST:

Ref. Drawings: S1-2052
Ref. Spec. 03 30 20- 3.2.A.4

Per Contract Specification 03 30 20- 3.2.A.4, foundation wall, lower concourse floor slab, and ground floor construction joints shall align with the location of the mat slab joint below.

SCCI proposes to have a construction joint at grid line J as shown on attached drawing CJ -11; however, the construction joint would end up dividing the knockout wall into 2 pieces. SCCI proposes to install the J-line construction joint through the mat slab and typical foundation walls while omitting the construction joint through the knockout wall.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The construction joint presented in the RFI is acceptable.

T-0530 **BGP - Dimension conflict between space allocated for BGP waterproofing and BGI** **Closed** **05/03/2013** **05/12/2013** **05/28/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Webcor Construction LP Kirk Nielsen

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Ref: GT-2101 Detail 1
Specificaiton Section 07 12 10

To include however not limited to, sheet 1/GT-2101 allows 2" for the specified below grade waterproofing. The installed waterproofing system (07 12 10) thickness is 2-1/4". The insulation layer of the waterproofing system is specified at ½" (07 12 10.2.5.E).

So as to resolve the proximity conflict may the contractor reduce the specified insulation thickness from ½" to ¼"?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The insulation of the waterproofing assembly is to remain at the specified thickness of 1/2".

T-0531 **BGP - Waterproofing Detail Clarification for Flashing Penetrations** **Closed** **05/03/2013** **05/12/2013** **05/14/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Specification: 07 12 10
Reference Drawings: A1-8710, A1-8711

Contract Drawings and approved shop drawings show sheet metal boots over micropile penetrations set in trowel grade adhesive over two plies of Laurenco.

Spec Section 07 12 10- 3.4 states the following:

A Install flashing at terminations and penetrations

B. Flash waterproofing with a minimum of 2 plies of woven glass fabric and 3 applications of adhesive. Extend first ply 6 inches onto each membrane and second 8 inches

C. At penetrations, apply a minimum of2 plies spirally wrapped and a target patch per Manufacturer's requirements. Where indicated on the drawings provide stainless steel drawbands.

Contract Drawing details and approved shop drawing submittal details do not match what is called out in the above Spec section. Please advise as to which detail is to be used (shop drawing or

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The micropile penetration detail is shown on 2/A1-8711, which is also shown on the BGP Modified Bitumen Waterproofing Shop Drawings. There have been subsequent RFI responses regarding the sealant fill for the boot.

Please refer to Specification Section 07 12 10 1.4 C regarding details prepared specifically for this project. The shop drawing concurs with the designed detail. If the contractor believed this detail conflicts with intentions of the specification and design requirements, this issue should been raised earlier and an alternative proposal made for consideration at the shop drawing stage.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

specifications).

T-0532 **BGP - Sump Pit Grate Requirements** **Closed** **05/07/2013** **05/17/2013** **05/14/2013** **Potentially** ☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Andy Khuu

REQUEST:

Ref. Dwg. P1-2022 through P1-2027

There are several sumps shown on the referenced Architectural drawings which are not shown and/or defined on the corresponding Plumbing drawings. The Plumbing Drawing Sheet Notes indicate the grating requirements for all other sumps and Catch Basins on the project (reference note No 1 ,2, 14 and 16 on P1-2022 through P1-2027) There are no such notes for grating requirements for the sumps shown on the attached marked-up Contract Drawings. See attached. Please verify that no grating is required for these sumps.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

There is no grating required for these sumps.

T-0533 **BGP - Mat Slab Drainage System Testing** **Closed** **05/06/2013** **05/16/2013** **05/09/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

Reference Specification Section 22 13 01 3.3 E, Reference 2010 California Plumbing Code article 712.

Article 712.1 Media, of the California plumbing code states that: "The piping of plumbing, drainage, and vent piping systems shall be tested with water or air except that plastic pipe shall not be tested with air."

For testing of the cast iron drainage lines that get embedded in the Mat slab SCCI would like to utilize the air test method.Air test method is specified in the California plumbing code article 712.3, and achieved by: "forcing airinto the system until there is a uniform gauge pressure of five (5) PSI. The pressure shall be held without

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

As the Contractor is aware of, the Plumbing Code outlines minimum requirements. The system shall be tested per the Contract Documents as described in specification Section 22 13 01, paragraph 3.3.E.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

introduction of additional air for a period of not less than fifteen (15) minutes."

Is this acceptable?

T-0534 **BGP - Request for Latest Revit Model** **Closed** **05/07/2013** **05/16/2013** **05/09/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Andy Khuu

REQUEST:

Reference Specification: 01 31 26

SCCI is requesting access to the latest, most up to date Structural and Architectural Revit models from the designers. The 3D database would be used for reference only and will not be used for construction. SCCI understands that the 3D Database is subject to change as the project design evolves. As a user of this 30 database, SCCI accepts the risk and acknowledge that the data is subject to change. SCCI also acknowledges the terms and conditions outlined in the Transbay Transit Specification Section 01 31 26.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The updated In-Progress Revit computer model will be issued to TJPA for review and comment on May 31, 2013. TJPA will forward this model to the Contractor for information, review, and comment. The Revit model is clearly clarified as not a Contract Document for use in construction. The documents issued on May 31, 2013 are not being issued for bid or construction. The Contractor shall determine when, for what purpose, and how the model is shared with their Sub-contractors.

T-0535 **BGP - Elevator Opening Encroachment at Concrete Beam B131** **Closed** **05/07/2013** **05/16/2013** **05/09/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference Drawing: A1-2842, S1-2202, S1-3401

Please reference attached Contract Drawings A 1-2842, S 1-2202 and S 1-3401. DrawingS 1-2202 calls out concrete beam B131 running east to west between the elevator and Stair openings. The dimensions of concrete beam B131 are 22 inches wide and 36 inches high. See drawing S1-3401 for beam schedule. A1 -2842 calls out the spacing between openings to be 1'-9". This makes the elevator pit encroach 1 inch into concrete beam B131. Shall the elevator opening be relocated 1 inch to the south to

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The openings in the Lower Concourse slab shall remain as shown on A1-2842. The beam shall be modified to 21" wide by 36" deep. Longitudinal reinforcement for this beam shall be 2-#10 for continuous top bars, 3-#10 continuous for bottom bars, and 3-#10 additional short bottom bars (L=18'-0" centered at midspan). Stirrups shall be #4's, type 2, 12@8"OC from each end, balance at 12" OC. Top & bottom clear cover to the stirrup shall be 3" and 1.5", respectively.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

accommodate the concrete beam? Please advise.

T-0536 **BGP - Sump Conflicting with Trestle Pile** **Closed** **05/07/2013** **05/06/2013** **05/22/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Andy Khuu

REQUEST:

Reference Drawing: A1-2817, S1-2027

Based on the latest BBII trestle model available to SCCI and contract drawing A1-2817, there appears to be a conflict between a sump pit and trestle pile near column line "34" and "E". Please refer to the attached screen shot from SCCIs Revit Model.

8/31/2012 IFC drawings did not show this sump pit as it was added in ASI No. 0099.

Please provide direction on how to proceed

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The sump pit located at 7'-6 ¾" west of GL 34 per A1-2817 shall be relocated to 12'-3" west of GL 34 to avoid this conflict.

W/O note: Please confirm that the relocation of this sump pit does not conflict with any micropiles in the surrounding area.

T-0537 **BGP - Sump Pit/Catch Basin Clarification at Gridlines C/19.1** **Closed** **05/07/2013** **05/16/2013** **05/13/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Andy Khuu

REQUEST:

Reference Specification: 22 13 01
Reference Drawing: A1-2815, S1-2055, P1-2025

The pit near gridlines C/19.1 is identified as a catch basin in drawing A1-2815 but identified as a sump pit in drawing S1-2055. Drawing P1-2025 does not show any piping for this pit. Please confirm if this should be a sump pit or is the piping detail missing?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is a sump pit in an escalator pit. There is no grate or piping associated with this sump pit.

T-0538 **BGP - Sump Pit Frame Elevation** **Closed** **05/07/2013** **05/15/2013** **05/10/2013** **Potentially** ☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Shimmick Construction Company, Inc Jesse Dillon

REQUEST:

Ref Dwg. P1-2022, P1-6001

Please reference attached sketch SK-0163 and Contract Drawings P1-2022 and P1-6001. Drawing P1-2022 calls out Top of Concrete = -35'-8" and Finish Floor Elevation= -35'-5". P1-6001 Detail 8 shows top of sump grate frames to be flush with the surface in which it is embedded. It is unclear whether this is top of concrete or top of finish floor. SCCI has not been provided drawings to confirm topping slab extents. There shall be a 3 in vertical edge if sump pit frames are placed flush with top of mat slab concrete and a topping slab is placed in the future. See attached SK-0163 for details. SCCI intends to place top of sump pit frames flush with top of mat slab concrete. Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

All sump pits and catch basins identified on plumbing drawings and located in the future track areas have the grating flush with top of concrete at elevation -35'-8".

T-0539 **BGP - ASTM 123 Galvanizing Variance** **Closed** **05/07/2013** **05/17/2013** **05/07/2013** **Potentially** ☐

From: Webcor Construction LP Kody Cooper **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference Specification: 05 05 15.3.3.B and the attached letter from AZZ Galvanizing

The steel pipe penetration sleeves are to be coated under the Structural Shapes and Plate Material Category with a grade of 100 and 3.9 mils thickness per Tables 1 & 2 of ASTM A123. The first 2 shipments of steel penetration sleeves (approximately 12 pin pile and 17 trestle pile) were coated under the pipe and tubing material category with a Grade 75 per Table 1 of ASTM A123. This coating grade requires 3.0 miles per Table 2 - Coating Thickness Grade. SCCI is requesting that the Grade 75 be allowed for the first two pin pile in Area 1 that are fit and welded to the intermetallic layers having still penetrated the material and per the attached letter, the process used will insure a long service life. The average thickness for the specified pin pile above is 3.2 mils. Is this acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

No

T-0541 **BGP - Protection Board Installation at SW Corner** **Closed** **05/09/2013** **05/23/2013** **05/13/2013** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Ref Spec. 07 12 10- 3.2.D

Please reference Specifications Section 07 12 10- 3.2.D. This spec states the following: "Install protection board on vertical surfaces with long dimension vertical and the polyethylene film side facing the soil/cement surfaces. Secure 1 /4" protection board to flanges of soldier piles with powder driven fasteners and washers spaced 12 inches o.c .... "

At the SW comer of the project, the soldier beams are spaced greater than the width of the protection board. We suggest rotating the protection board 90-degrees so that the long dimension is horizontal instead of vertical. This would allow for attachment to the soldier piles and the inside comer of protection board to be heated and formed into the comer. We also suggest using this method where pile spacing exceeds 4' on center.

Please review and advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The contactor's suggestion to rotate the protection board 90-degrees is acceptable where the soldier pile spacing and the waterproofing manufacturer require.

T-0542 **BGP - Drainage Mat Installation Clarification** **Closed** **05/09/2013** **05/23/2013** **05/13/2013** **Potentially** ☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Ref. Spec. 07 12 10- 3.2.F.

This spec section states the following: "Install drainage composite in largest practical sizes over the entire area of the felts. Install either vertically or horizontally and lap sheets 1" in direction of flow ... "

1. If drainage composite is installed vertically, please confirm that direction of water flow is down vertically towards the mudslab.

2. Please confirm that only horizontal joints in the drainage composite will be lapped 1 inch.

3. Please confirm that vertical drainage core joints will be butt jointed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Design Team confirms that Items 1, 2 and 3 of this RFI are correct.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0543	BGP - Galvanizing Varying Material Category Variance	Closed	05/09/2013	05/23/2013	05/21/2013	Potentially	☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Ref. Spec. 05 05 15- 3.3.B.2

Reference is made to Specification Section 05 05 15-3.3.B.2 and the attached 'Ask Dr. Galv' galvanizing article. Section 3.3.B.2 states "When galvanizing assemblies of components of varying material category and material thickness, provide minimum coating thickness grade for all members equal to or exceeding the maximum highest material category coating grade."

For the dewatering and piezometer mat slab penetration sleeves, A513 tube is being used, which has a Grade 75 designation per ASTM A123. Based on the above specification, Grade 100 must be followed because these sleeves have plate components. The reason Grade 75 is specified in ASTM A123 is that it is the minimum consistent attainable galvanizing coating for the thickness and chemistry of the material being coated. As an aluminum killed steel product, it is not a natural catalyst to galvanizing as silicon is per the attached article. To specify Grade 100 goes beyond A123 specifications. Therefore, SCCI requests Grade 75 be used, with a minimum coating thickness of 3.0 mils, for the dewatering wells and piezometer mat slab penetration sleeves. Please be advised if Grade 100 (3.9 mils) is required, the galvanizing process to attain the thicker coating can lead to embrittlement and delamination of the coating. Is Grade 75, with a minimum 3.0 mil coating thickness on the dewatering well and piezometer mat slab sleeve penetrations, acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per specification section 05 05 15 / 1.3 submit shop drawings of the galvanizing schedule, submit samples of the galvanizing, and submit monthly certificate signed by the galvanizer. If in the shop drawing process the Contractor submits a certificate signed by the galvanizer as required by specification section 05 05 15 / 1.3D stating the proposal above meets the recommendations of and is in compliance with the specified ASTM standard's minimum requirements, the Contractor's proposed galvinanizing thickness will meet the design intent of the contract documents.

The last galvanizer certificate received in the Transbay shop drawing process was dated January 4, 2013 and it is not clear if that shop drawing covers the item referenced in this RFI.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0544	BSE - Micropile Relocation - W990 & W986 (Well Obstructions)	Closed	05/10/2013	05/11/2013	05/13/2013	Potentially	☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Brandon Miller

REQUEST:

Micropiles W990 and W986 as laid out are both in conflict with dewatering wells. BBII recommends relocating W990 south 3' and W986 north 3'. See attached sketch.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Thornton Tomasetti does not object to moving micropiles W990 and W986 as proposed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0545	BGP - Embedded Junction Box Details	Closed	05/10/2013	05/24/2013	05/24/2013	Potentially	☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Jesse Dillon

REQUEST:

Ref. Dwg. A1-2842, A1-2850

Please reference Contract Drawings A1-2842 to A1-2850. These drawings contain numerous "EJB" callouts. SCCI's issued drawings do not contain details for embedded junction boxes. SCCI is trying to determine if there will be any conflicts with the EJB locations. Will the EJB's be selected by the future contactor in which this scope is contained? If specific EJB's have been specified already, please provide the detail so SCCI can confirm there are no conflicts with SCCI's scope.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to the electrical drawings and specifications section 260534 for EJB specifications. The related information to select and detail the box is included in the Documents.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0546	BGP - Shear Reinforcement and Drainage Conflict at Grldlines 4/C	Closed	05/09/2013	05/23/2013	05/28/2013	Potentially	☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Andy Khuu

REQUEST:

Ref Dwg A1-9215, S1-2022

At gridlines 4/C, the floor clean out and floor sinks (see A1-9215) cannot be installed due to the spacing of the top layer mat slab and shear reinforcement (see S1-2022). Please advise on how to proceed. Reference the attached sketch of conflict.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

TT response: From the floor sink dimensional info provided in the RFI, it appears the floor sinks will interrupt the top bars of the mat. Contractor shall apply detail 1 on S1-3501 for reinforcement requirements at top mat bars that are interrupted by the floor sinks.

WSP Flack and Kurtz response: The floor sink located east of column 4/C may be moved North, next to the Fire Pump room North wall. The floor clean-out may be moved to a similar position, south of the relocated floor sink. The associated vent and the trap primer line will be relocated in front of the Fire Pump Room north wall.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0546.1	BGP - Follow Up to RFI 173- Shear Reinforcement and Drainage Conflict at 4/C	Closed	06/28/2013	07/08/2013	07/12/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Drawing A1-9215, S1-2022, Spec Section 03

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

AAI - Please see SKA-2763 for new location of FSK

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

20 00

Response to SCCI RFI #I73 (WOJV RFI#T-0546) did not provide SCCI with clear direction on how to proceed with the conflicts between the floor clean out and floor sinks at gridline 4/C (Ref A 1-9215 and
S 1-2022) with top layer of rebar and shear reinforcement. TT response only addresses the top bars of the mat, and not the shear reinforcement that will be in conflict with the floor clean out and floor sinks. WSP Flack and Kurtz suggests possible alternate locations of the floor sink and cleanout vent and trap primer.
Please provide clear direction on what action SCCI is to take.
If the locations are to be moved, please provide exact locations of the floor sink and cleanout.

and FCO within the Fire Pump Room.

TT - The floor sink and cleanout shall be moved such that they do not conflict with the headed shear reinforcement. From the floor sink dimensional info provided in the RFI, it appears that floor sinks will interrupt the top bars of the mat regardless of where they are located. Contractor shall apply detail 1 on S1-3501 for reinforcement requirements at top mat bars that are interrupted by floor sinks.

F&K - For revised piping layout of the Fire Pump Room, see attached sketch PSK-2022

T-0547 **BGP - North Shear Wall** **Closed** **05/09/2013** **05/23/2013** **05/24/2013** **Potentially** ☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

Ref Dwg. 3/S1-3204

Reference detail 3 on the contract drawing S1-3204, and the attached sketches. From the noted detail, it is unclear whether the designer's intent was to construct the foundation wall to North-most shear wall interface monolithic. Please confirm.

If the intent of the Designer is to pour shear wall and foundation wall monolithic, it will be difficult to properly secure formwork in the acute corner of the walls interface. Due to the constructability issues of this foundation area SCCI suggest to add vertical construction joint to the North shear wall. See attached sketches for reference. Is this acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

We do not object to the proposed construction joint for the north shearwall.

T-0548 **BGP - 3 ft Chamfer at South Foundation Wall** **Closed** **05/08/2013** **05/22/2013** **05/22/2013** **Potentially** ☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

Ref. Dwg. S1-2030, 2/S1-3204, A1-2110

Reference attached contract drawings S1-2030, S1-3204 (detail2) and A1-2110. Structural drawings do not show the detail for termination of the 3 ft chamfer at the end of the south foundation wall. CD A1-2110 indicates that the 3 ft chamfer terminates at the face of the knockout wall.

Please provide details and where does the 3ft chamfer, at the West end of the South foundation wall, terminate?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The chamfer along the south foundation wall terminates at the face of the west knock-out wall as shown on sheet S1-2060 (Mat Top Reinforcement - Zone 10 Plan), and is not intended to show on S1-2030. Vertical bars of pilaster reinforcement extend to bottom of mat and the hairpins & cross-ties extend 12" below top of mat.

T-0549 **BGP - Testing of WPM-1 Seams** **Closed** **05/13/2013** **05/23/2013** **05/14/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

During the 5/10/13 waterproofing meeting Jon Laurence (Laurenco) and Carl Keim (AAI) clarified that specification section 07 12 10.3.5.B (independent testing all seams) only applies to the Laurenco products i.e. membrane layers, butyl tape, and flashings. Please confirm.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Design Team confirms that statement in the RFI is correct.

T-0550 **BGP - Request to Revise Lower Concourse Elevation** **Closed** **05/14/2013** **05/24/2013** **05/24/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Exhibits: A - G

The BSE IFC drawing S1-3201 (Exhibit-A) depicted the Lower Concourse slab at an elevation of -8'-8" between grid lines 9-3 and West of grid 3 & North of grid E.6.

Although specification section 01 13 00.1.3.H.3 precludes the TJPA from making scope changes in submittals, on 3/29/11 the TJPA returned submittal package ID TG0300-541/submittal ID TA2010-315500A10 (Exhibit-B) which included a note stating the Lower Concourse level slab varies as follows:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The contractor's suggestion to revise the Lower Concourse slab elevation is NOT acceptable. The contractor is to follow the elevations set out on the latest Below Grade Package documents.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

T/Lower Concourse slab East of gridline 9 = -8'-2"
T/Lower Concourse slab West of gridline 9 = -5'-5"

Although specification section 00 07 00.1.01.37 stipulates a Field Order is not to involve a change in Contract Sum or Time, on 9/7/12 after the zone-1 level-B bracing and trestle was installed (Exhibit-C), the TJPA issued Field Order #T-00008 / ASI #0097 (Exhibit-D) which revised the top of the Lower Concourse slab elevation between grid lines 1-5.5 from -8'-8" to -5'-5" a difference of -3'-3" reference sheets S1-3201 (Exhibit-E) and S1-2202 (Exhibit-F).

The latent elevation change of the Lower Concourse slab has created proximity conflicts with the previously installed internal bracing and trestle steel depicted on the attached marked-up drawings (Exhibit-G).

WOJV has surveyed the internal bracing and trestle steel conflicting with the Lower Concourse slab and believes the most cost and schedule efficient solution would be to again revise the elevation of the Lower Concourse slab to -6'-6".

Please advise if the proposed elevation revision is acceptable.

T-0551 **BGP - CR T-069 Wall Penetration Link Seals** **Closed** **05/14/2013** **05/28/2013** **05/29/2013** **Potentially** ☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Ref Dwg. 4/A1-8712

SCCI is in receipt of CR T-069 regarding the below grade modifications. On Plan Sheet A1-8712, Detail 4 was modified to relocate the second link seal to opposite end of the penetration sleeve. Originally, both link seals were located in series at the surface of the concrete wall. This relocation is not constructible in that the link seal cannot

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is acceptable to have the linkseals installed in the sleeves from the inside, with exception of the incoming electrical service ducts to the transformer vaults that are located inboard of the exterior walls. This applies to the sleeves serving electrical vaults B1322, B1325, B1561 and B1562. Because these sleeves must be concrete encased as they enter the building and cross the service corridor, the linkseals need to be provided

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

be installed or tightened properly when located 3ft into an embedded sleeve. In addition, this link seal cannot be installed prior to placing concrete due to access issues adjacent to the CDSM wall. Is it acceptable to return the relocated link seal to it's original location near the surface of the concrete wall? This would be per the original design shown on A1-8712, Detail 4.

at the exterior side of the foundation wall penetration to prevent migration of water through the sleeves across the corridor.

T-0552 **BGP - CR T -069 Electrical Scope** **Closed** **05/14/2013** **05/28/2013** **05/29/2013** **Potentially** ☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

SCCI is in receipt of CR T-069 regarding the below grade modifications. In the modifications, many of the mechanical, plumbing, and electrical rooms have been modified. In some cases, additional rooms had been added like that of the emergency electrical room. With theses changes, none of the electrical drawings pertaining to these rooms or additional rooms had been modified to account for these changes.

Please confirm that there will be no electrical changes other than grounding as a result of CR T-069.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The electrical scope is identified with clouds and deltas on the drawings. For future reference please include specific drawing sheets and issue information (Sheet E1-2022 - ASI#0102 dated 04/29/2013) as we are not familiar with the CR T-069 reference used in this RFI.

T-0553 **BGP - Examination of Substrate Clarification** **Closed** **05/14/2013** **05/28/2013** **05/23/2013** **Potentially** ☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please reference Specification Section 07 12 10- 3.1.A.

Specification Section 07 12 10 - 3.1.A states the following: "With manufacturer's representative present, examine surfaces to which insulation and waterproofing will be applied prior to beginning work."

Please confirm that this is in reference to CDSM wall and mudslab.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

07 12 10 - 3.1.A is in reference to surfaces to which waterproofing is applied, including the CDSM wall and mudslab. The specification statement is clear and the question is superfluous.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0554	BGP - Field Quality Control	Closed	05/14/2013	05/28/2013	05/25/2013	Potentially	☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please reference Specifications Sections 07 12 10 - 3.3-3.5.

Specifications Section 07 12 10- 3.5.A states the following: "The manufacturer's field representative shall be present before and during installation as specified above."

Please confirm that this is in reference to Section 3.3 "Application" and Section 3.4 "Flashing" which are directly above Section 3.5, A on page 07 12 10-8 of the Specifications (attached for reference).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

No. The specification is clear and the question is superfluous. "The manufacture's field representative shall be present before and during installation" (for surface examination, protection board installation, felt installation, drainage installation and other activates before the membrane is installed). Section 3.1 also requires the manufacturer's presence related to substrate examination.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0555	BGP - Waterproofing Asphalt Cement Walnut Sized Gob Spacing	Closed	05/16/2013	05/26/2013	05/23/2013	Potentially	☐

From: Webcor Construction LP Kody Cooper **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Specification Section 07 12 10, 3.2, E states the following:

"Install two piles of asphalt saturated felts over the protection board in walnut sized gobs of asphalt cement sufficiently spaced to hold felts in place."

SCCI and Best have been informed that this layer is to act as the shear/slip plane for structural movement. Please provide the spacing requirements of the walnut sized gobs.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Follow the Waterproofing Manufacturer's installation instructions.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0556	BGP - Waterproofing Asphalt Cement Diameter of Walnut Sized Gobs	Closed	05/16/2013	05/26/2013	05/20/2013	Potentially	☐

From: Webcor Construction LP Kody Cooper **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Specification Section 07 12 10, 3.2, E states the following:

"Install two piles of asphalt saturated felts over the protection board in walnut sized gobs of asphalt cement sufficiently spaced to hold felts in place."

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The approximate diameter of a walnut sized gob is 3/4" min to 7/8" max.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please provide approximate diameter of walnut sized gobs (maximum/minimum will suffice).

T-0557 **BGP - Waterproofing Asphalt Cement with Laps in Felt Layers** **Closed** **05/16/2013** **05/26/2013** **05/21/2013** **Potentially** ☐

From: Webcor Construction LP Kody Cooper **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

In reference to Specification Section 07 12 10, 3.2, E, the specifications do not mention laps in felt layers needing to be fully sealed in asphalt cement. Please confirm that fully sealed laps are not required.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The end laps are not to be sealed. Lap ends of felt layers in the direction of water flow.

T-0557.1 **BGP - Waterproofing Asphalt Cement with Laps in Felt Layers** **Closed** **05/31/2013** **06/10/2013** **06/03/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please reference RFI #T-0557 response and Specifications Section 071210-3.2. RFI #T-0557 response confirms that end laps are not sealed, but does not address the side laps.

Please confirm that this applies to the side laps as well.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Do not seal any laps of the felt layers. Neither the end laps, the side laps nor any other laps are to be sealed.

T-0558 **BGP - Waterproofing Asphalt Cement at Protection Board Transitions** **Closed** **05/16/2013** **05/26/2013** **05/23/2013** **Potentially** ☐

From: Webcor Construction LP Kody Cooper **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

In discussions with the TJPA and Designers, the "gaps" where the 2' protection board meets 6" turnout at the base transition, shall be filled with asphalt cement. Is it acceptable to fill these "gaps" with asphalt cement?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is a contractor's means and methods item

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0559	BGP - ASI 102 Change Clarification at Elevator Pit Near GL 2-E 2	Closed	05/14/2013	05/28/2013	05/23/2013	Potentially	☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Ref. Dwg. A1-2812, 1/A1-9214, 3/S1-3006

Revision 0 of A1-2812 previously contained dimensions for the elevator pit near gridlines 4-E.2; however, as a result of ASI 102 revision 1 of A1-2812 no longer contain the dimensions for the elevator pit and the referenced detail 1 of A1-9214 does not either. Please provide the dimensions of the elevator pit.

Also, detail 3 of S1-3006 indicates that there is a change in the thickened section of the elevator but it does not appear that there were any changes made. Please confirm if there are changes to the thickened section.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The elevator dimensions have been revised and will be included in ASI 104. Please refer to the attached SKA 2709 (based on A1-9214) for revised dimensions.

Thornton Tomasetti response:

Detail 3 of S1-3006 is clouded because the pit depth and plan dimensions were revised in ASI 102. While the changes will require only minimal revision of the rebar lengths/bend locations/etc for rebar fabrication, and the structural intent of the rebar detailing remains unchanged, the mat depression region on 3/S1-3006 was clouded to alert the contractor to the need for these dimensional rebar detailing revisions due to the pit resizing. (We agree that on first glance there do not appear to be any revisions to the thickened section of the detail; the revisions are graphical only, and small enough that they are not noticeable except in an aligned overlay.)

T-0560	BGP - Grade 60 ASTM A-615 Conforming Bar In-Lieu of ASTM A-706	Closed	05/16/2013	05/29/2013	05/29/2013	Potentially	☐

From: Webcor Construction LP Ian Corcorran **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Andy Khuu

REQUEST:

Ref. Dwg. RE-2/S-0007

Gerdau proposes to use Grade 60 ASTM A-615 bar in place of Grade 60 ASTM A-706 material in the locations defined within RE-2 on sheet S-0007 which include foundation walls, columns and moment frame beams. The Grade 60 ASTM A-615 bar shall conform to the strength properties published in the attached ASTM specifications.

This is not a request to replace all Grade 60 ASTM A-706 bars with Grade 60 ASTM-615. Is it acceptable to use ASTM-615 bars, when available, that would otherwise be wasted during the rebar fabrication process?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

We will allow the use of A615 bars in lieu of A706 for inquired scope of elements provided that test data for the A615 bars meet ACI 318 section 21.2.5. Please submit test data that meets code requirements and identify where these bars will be used.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0561	BSE - Standard for Determining Buttress Concrete Strength	Closed	05/16/2013	05/26/2013	05/20/2013	Potentially	☐

From: Webcor Construction LP Kirk Nielsen **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Spec. section 31 63 29.3.9.D states,

"Not less than 28 days after concreting is completed, perform HQ coring over the full depth of 10% of the shafts to verify the quality of concrete and test whether the shafts are free of defects. Provide these cores for inspection by the TJPA Representative. The TJPA's Representative will select the locations where coring shall be performed and will select the cores which will be tested for strength."

The aforementioned language in addition to spec. section 31 63 29.1.6.A which states:

"Perform work in accordance with ACI 301, except where otherwise specified. Specifications herein set minimum results required and references to procedures to establish minimum guidelines."

reads as if ACI 301 would be the specified standard for determining the required buttress concrete strength (specifically ACI 301 section 1.6.6.2) hence acceptance.

Please confirm what if not ACI 301 is the standard for determining the buttress concrete strength hence acceptance.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ACI 301 is the standard.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0562	BGP Stair 403 Embed Conflict	Closed	05/17/2013	05/27/2013	05/24/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Jesse Dillon

REQUEST:

Reference Drawings: S1-7011, Sl -7600, S1-7602, and sketch SK-194.

Detail 3 on S1-7011 has a callout for 11/S1-7600 and 8/S1-7602. Both of these angles are embedded in the top edge ofthe stair opening. The locations of embeds overlap at the Northeast and Southeast portions of the opening. See SK-194 for details. The 8" legs of the angles are to be on different surfaces of the concrete causing future stair

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Detail 8/S1-7602 has been revised to be an L8x8x1/2 angle. This change will be issued in a forthcoming ASI. Additional angle shown on 11/S1-7600 is not required.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

installation issues.

Please provide details on how to proceed.

T-0562.1 **BGP - Stair 403 Embed Conflict** **Closed** **08/13/2013** **08/23/2013** **08/21/2013** **Potentially** ☐

From: Webcor/Obayashi Joint Venture Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

1) Please reference RFI response T-0562. Please confirm the 7' -6" long embed per detail 8 on S I -7602 starts from the western edge of the opening, as shown in the attached sketch.

2) Also, please clarify embedded angle conflicts highlighled on attached sketch, where embed as shown on detail 11, S1-7600 and embed as shown on detail 8, S1-7602 are specified to be installed at the same location.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
8/20/2013
RESPONSE:

1. 7'-6" long applies to stair 501 only (shown on 6/S1-7016). At stair 403, the L8x8 angle shall run the full length of the stair opening.

2. Where L8x8x1/2 is provide per 8/S1-8602, the L8x4x1/2 x 1'2" long and (2) ¾" welded studs shall be deleted. The 3" pipe is welded directly to the L8x8x1/2 angle.

T-0563 **BGP - Use of Laurenco Adhesive and Temporary Fasteners as Alternative for Insul** **Closed** **05/20/2013** **05/20/2013** **05/25/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Specification Section: 071210 3.2 G

In reference to Specification Section 07 12 10, 3.2, G, "Install insulation with long dimension horizontally. Secure with insulation manufacturer's recommended adhesive."

The EPS insulation manufacturer recommends the use of ADCO Millenium One Step Foamable Adhesive for this vertical application. The waterproofing membrane manufacturer has indicated that they will not provide a warranty for their system unless the adhesive has been

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per Specification Section 07 12 10, 1.4, E, 1: the manufacturer is to supply certificates stating that materials in the system are physically and chemically compatible. This specification statement is clear and question parts 1 & 2 are superfluous; all component manufacturers will need to comply with this section of the specification. The alternative method of installation in part 3 is not acceptable without such certifications and additional fasteners, even temporary are not acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

tested in the same application. Please confirm the following is acceptable:

1. The testing data is required for the manufacturer's recommended adhesive for EPS insulation installation.

2. Laurenco must approve of the use of every component in the system (protection board layer to insulation layer) even though it is called out to follow the insulation manufacturer's recommendation per the specifications.

3. As an alternative to the specification requirements, the Laurenco adhesive (with temporary fasteners and washers) is to be used for the insulation installation, until the insulation manufacturer's recommended adhesive (ADCO) is tested and submitted. Once the manufacturer's recommended adhesive (ADCO) is approved, the ADCO adhesive will be used for the insulation installation in place of the laurenco adhesive.

Please confirm this is acceptable.

T-0564 **BGP - Water Treatment for Geothermal** **Closed** **05/21/2013** **05/31/2013** **06/03/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Specification 23 57 34 Sub Section 3.4

During the TG06 IFB process section 3.4 was added to the Ground Loop Heat Exchanger specifications. We believe this requirement is intended for a future bid package during the commissioning of the system. Please confirm.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The water treatment scope of work issued in mechanical specification section 23 57 34-3.4 for the ground loop system is intended to be part of the Below Grade Package bid. However, this specific scope of work could be deferred and bid out with the remainder of the water treatment work for the project in the Main Building Package. Turner/TJPA to provide final direction on scope allocation between different trade packages.

Jeff Thiel:
Geothermal water treatment may be deferred until water treatment of the building condenser water piping system, to which the ground loop heat exchanger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

piping will be connected to in a future scope of work, takes place. CM/GC to leave geothermal system as described in specification section 23 57 34, 3.2.J until treatment takes place.

T-0565 **BGP - Waterstop Injection Hose Boxes** **Closed** **05/22/2013** **06/01/2013** **05/23/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please reference attached drawing A1-8711. Please confirm all Waterstop Injection Hose Boxes in the Mat Slab are to be mounted as illustrated in the attached drawing (flush@ -35' -8"). With the installation of a future topping slab, mounting these boxes at Mat Slab elevation may render the injection hose system inaccessible at that time.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Design Team confirms that that Waterstop Injection Hose Boxes in the Mat Slab are to be mounted flush at -35'-8". The rail bed system (by others), which will not be determined until a future time, will need to make provisions for access to these boxes.

T-0566 **BSE - Zone 2 A-Line CDSM Embedded Metal Part at Soldier Pile 96** **Closed** **05/22/2013** **06/01/2013** **05/24/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Dean Wallahan

REQUEST:

Ref: BIM 360 - Field Condition Report (FCR) 000013
Specification Section 31 56 13

Per FCR 000013: "An Embedded Metal part is visible in the CDSM wall between Solder Piles 96 & 97. A Corrective Action Plan must be submitted to remove the object and repair the CDSM wall. Spec 31 56 13." Please see attached BBII proposed Corrective Action Plan.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Acceptable

T-0567 **BGP - Fire Management System** **Closed** **05/23/2013** **06/02/2013** **06/03/2013** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Ref: 5/E1-6001, E1-2202, E-0006

Per Plan Sheet E1-6001 , Detail 5. (attached) the embedded conduits for the fire managment system do not extend above or into the lower concourse floor slab. Additionally, on Plan Sheet E1-2202 for the lower concourse level, Sheet Note A (attached) states that the "scope of work on this sheet is limited only to grounding electrode conductors embedded in slab and main grounding bus (MGB) in the main electrical room." From these two notes, it is clear that the fire alarm system scope is limited to the train platfonn level.

However, on Plan Sheet E-0006 (attached) General Note R., "For fire alarm devices, provide embedded boxes, conduit, and pull strings in the lower concourse slab for service to fire alarm devices for both levels".

Please proved direction as to whether or not the fire alarm system conduit is to be installed in the lower concourse level slab.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The referenced detail is limited to the conduits for devices that are mounted on walls or columns at the Train Platform level. Refer to Sheet E-0006, Note R, for the requirements for the fire alarm raceways and boxes to be embedded in the Lower Concourse slab.

T-0568 **BGP - Monitoring Instrument Sleeves Detail** **Closed** **05/23/2013** **06/02/2013** **05/30/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference Drawings: 3/A1-8711, 4/S1-3009

Detail 4 on Sl-3009 does not apply to the monitoring instrument sleeves shown on A1-8711. The sleeves are continuous through the Mat Slab, and thus do not require a blockout.

Please provide a typical mat slab rebar detail that is applicab le to the monitoring instrument sleeves referenced herein.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

As the contractor notes in this RFI, the blockout in the top region of the mat slab per 4/S1-3009 is not required at monitoring instrument sleeves. Contractor shall apply the rebar detailing of detail 7/S1-3009 to both the top and bottom of the mat at these sleeves.

T-0569 **BGP - Reinforced Concrete Wall Clarification** **Closed** **05/23/2013** **06/02/2013** **05/30/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Shimmick Construction Company, Inc Andy Khuu

REQUEST:

Reference Drawing: A1-2122

Per the note on A1-2122, walls called out as "RCW" are reference drawings and not in TG06's scope of work. "RCW" walls are generally illustrated with dotted lines; however, when referencing the walls for the elevator pit and stairs near gridline 2E, the walls are called out as "RCW" but also illustrated with solid lines. Please confirm which walls are part of the TG06 package and which are RCW. Also, please confirm if the entire South wall of the fuel tank room is supposed to be "RCW" or if it is just the wall section as shown.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The walls at the elevator pit and stairs near gridline 2,E are part of the TG06 package. The entire south wall of the fuel tank room is also part of the TG06 package. The referenced enlarged detail 1/A1-9214 shows the solid walls without the RCW annotation. The RCW annotation has been removed from these particular walls on drawing A1-2122 and is included ASI 104.

T-0570 **BGP - Underside of Beam Embed Conflict** **Closed** **05/24/2013** **06/03/2013** **06/03/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Jesse Dillon

REQUEST:

Ref: S1-7011, S1-7900/Detail 9, S1-9100/Detail 2, Attached SK-0201

Please see attached Contract Drawing S1-7011 and Sketch SK-0201 . Stair opening 403 has stair post plates embedded on the underside of the concrete beams. See S1-7600/D9 for details. The underside of the concourse slab also contains continuous concrete inserts. See S1 - 9100/D2 for details and A1-2844 for locations. The two embeds overlap on the underside of the beams on the north and south sides of stair opening 403. See SK-0201 for drawing of conflicting embeds. This also occurs on the south side of stair opening 501.

Please provide details on how to install the two conflicting embeds on the underside of the concourse.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The continuous concrete insert in this RFI does not conflict with detail 9/S1-7600. The continuous concrete insert embed locations have been updated. Please see attached SKA 2713 to SKA 2717 for updated Continuous Concrete Insert layout on Lower Concourse Slab Edge Plans.

T-0571 **BGP - New Waterproofing Install Instructions (Additional Adhesive)** **Closed** **05/28/2013** **06/07/2013** **05/31/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Specifications Section 071210

We are in receipt of Laurenco Waterproofing Products, Inc.'s Installation Instructions revision dated 5/15/13 and have found several discrepancies with what is called out in Specifications Section 071210. Section 8, f, iv, 4, (d), vi calls for an additional layer of adhesive on walls prior to concrete. It calls for a coat of Laurenco Adhesive over COMPLETED membrane and cold joint reinforcement applied after wall ply adhesive has cured at least (3) days and (1) to (3) days in advance of reinforcement steel application for walls. This is added scope as this additional layer is to be applied over the completed membrane and is not called out in the Specifications.

Please confirm that SCCI is to use the manufacturers installation instructions

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Contractor is to follow specification section 07-12-10 Modified Bitumen waterproofing (WPM-1) where the Manufacturer involvement is specified.

Questions on the proper installation of the system are to be directed to the waterproofing membrane manufacturer. Questions on the detailed installation procedure (Waterproofing Install Instructions) should be directed to Laurenco, not to the TJPA Reps via RFI.

T-0572 **BGP - New Waterproofing Install Instructions (3 day Cure)** **Closed** **05/29/2013** **06/08/2013** **05/30/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Specifications: 071210

We are in reciept of Laurenco Waterproofing Products, Inc.'s Installation Instructions revision dated 5/15/13 and have found several discrepancies with what is called out in Specifications Section 071210. Section 8, f, iv, 5, (d), v calls for a minimum (3) days wait for top ply to firmly adhere before starting the rest of flashing details and placing concrete topping slab. This is not called out in the specifications and may significantly impact the project schedule.

Please confirm that SCCI is to use manufacturers installation instructions.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Contractor is to follow specification section 07-12-10 Modified Bitumen waterproofing (WPM-1) where the Manufacturer involvement is specified.

Questions on the proper installation of the system are to be directed to the waterproofing membrane manufacturer. Questions on the detailed installation procedure (Waterproofing Install Instructions) should be directed to Laurenco, not to the TJPA Reps via RFI.

T-0573 **BGP - Locations of Electrical Outlets, Equipment, and Fixtures** **Closed** **05/29/2013** **06/08/2013** **06/11/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Reference Specification 26 05 34, 3.2 B.

The exact locations of the electrical equipment are to be provided by the TJPA through the RFI process. With the electrical equipment provided and installed at a later date under a separate contract, please provide the dimensions of the electrical equipment, boxes, and cabinets to allow for accurate electrical riser locations in the concrete slabs. The equipment, boxes, and cabinet dimensions in Zone 1, Area 1 are needed first with the areas to the east to follow.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

WSP Response: To address the specific information that is being requested, please identify which "equipment" is not sufficiently located in the drawings and requires clarification. Sheet E1-0006 notes specific requirements for coordinating the location of equipment and connections. Details on sheets E1-6001 and E1-6006 provide additional location requirements. Wireways have been indicated to position the conduits stubbing out of the slabs in the electrical rooms. Plans locate the embedded light fixture box layouts. Specifications 260502.3.4 require coordination of the work and contractor's coordination shop drawing layouts for review of the electrical room layouts.

T-0574 **BGP - Field Galvanizing of Mat Slab Sleeve Penetrations** **Closed** **05/31/2013** **06/10/2013** **06/09/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc John Berggren

REQUEST:

Reference Specification Section 05 05 15-3.3.B

The shop applied coating thickness for the pin and trestle pile sleeve fabrications is determined to be 3.9 mils per Table 2 in ASTM A 123. Under Section 05 05 15-3.5 the repair/restoration field-applied coating thickness is specified to be 8.0 mils. For field touch-up of damaged areas Section 05 50 10-3.2.D states to apply a thickness of 2.5 to 3.5 mils. For the coating hold back areas for the sleeve field weld joints and for any damage coatings that may arise during installation - is a uniform required mimimum field-applied thickness of 3.9 mils acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The question asks for clarification of the galvanizing coating repair thickness required for a specific location and for specific repair or touchup. The location noted in the question is not clear enough to answer the question. Resubmit the question with a more specific location noted. "Sleeve field weld joints and for any damage coating that may arise during installation" is too vague. Also, clarify if you are asking about field repair or field touchup of damaged zinc coatings.

The 8.0 mil repair thickness specified in section 05 05 15 applies to repair/restoration on most items as specified in 05 05 15 / 1.1.A: "zinc galvanic coatings applied in the shop or factory to surfaces of iron and steel installed at exterior locations and either totally or partially exposed to weather, humidity, moisture or precipitation; and elsewhere as indicated and specified." Specification Section 05 50 10 / 2.6 call for Hot Dip Galvanizing per specification section 05 05 15. Specification 05 50 10 / 3.2D applies to field

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

touchup of damaged zinc coatings at areas covered by specification 05 50 10.

T-0575 **BSE - Micropile Relocation - E038 (Overhead Obstructions)** **Closed** **06/03/2013** **06/13/2013** **08/14/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Lynn Kowallis

Co-Author: Balfour Beatty Infrastructure, Inc. Brandon Miller

REQUEST:

Reference : Attached Sketch

Micropile E038 as laid out cannot be installed due to an overhead strut obstruction. BBII recommends relocating E038 east 1. .

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Void RFI T-0575 and Ref to RFI T-0575.1

T-0575.1 **BSE - Micropile Relocation - E038 (Overhead Obstructions) Revised** **Closed** **06/04/2013** **06/14/2013** **06/08/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Brandon Miller

REQUEST:

Reference : Attached Sketch

This RFI supersedes RFI 375.
Micropile E038 as laid out cannot be installed due to an overhead strut obstruction. BBII now recommends relocating E038 east 3'4" to be in line with E037 and E039. See attached sketch.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Thornton Tomasetti does not object to moving micropile E038 as proposed.

T-0576 **Wall Alignment on Westside of Zone 1** **Closed** **05/31/2013** **06/10/2013** **06/11/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Webcor is proposing to change the alignment of the Concrete Foundation wall on the west elevation along gridlines 1 & X1-1.

The Concrete wall which runs along gridline 1 would be offset into the structure by 0.2656' (3-1/8") (proposed Face of concrete Foundation wall would now be 15-1/8" of gridline 1). Similarly along gridline X1-1 the wall would also be offset into the structure by 0.1575' (1 7/8") these offsets would enable the contract reinforcement to be installed without the need for further modifications to the reinforcement due to encroachment of the CDSM piles.

See sketch SK-1 showing Cross section of concrete Foundation wall between CDSM piles 818 - 822 GL 1 in proposed revised location.

Please confirm if this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For the pile encroachments at the Zone 1 West and South West CDSM walls, as described and illustrated in this RFI, the Design Team confirms it is acceptable to offset the alignment of the inside face of the Concrete Foundation Walls as the contractor proposes in RFI T-0576 BGP.

T-0577 **BGP - Internal Wall Discrepancies 002** **Closed** **06/03/2013** **06/13/2013** **06/03/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

Reference Drawing: B/A1-9217

Referenced detail shows mechanical opening at the GL C.3 being in conflict with the future tank lid (Not in TG06 package).
Please confirm that this opening is to be constructed as called out on B/A1-9217.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

There is no conflict with the future tank lid. The Mechanical Opening at GL C.3 is located above the door on the service corridor wall and is more than 18' in front of the tank. Please read the concrete wall elevations in conjunction with the plan on A1-9215.

T-0578 **BGP - Micropile Relocation - W916 (Timber Pile Obstruction)** **Closed** **06/03/2013** **06/13/2013** **06/19/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Brandon Miller

REQUEST:

Reference Drawing: attached.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Thornton Tomasetti does not object to moving

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Micropile W916 encountered a timber pile during installation. It was moved in the field and installed 1' west of plan location. This does not appear to impact geothermal piping.

Please confirm this is acceptable.

micropile W916 as proposed.

T-0579 **BGP - Cross-tie Wall Reinforcing, Grade Conversion and Spacing Change** **Closed** **06/04/2013** **06/14/2013** **06/10/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Andy Khuu

REQUEST:

Reference Drawings: S1-3201
Reference Specification: 03 30 20

Based on a recently constructed mock-up of the 1st lift of typical wall reinforcing a potential problem with congestion has been identified. The contract drawings on sheet S1-3201 depict the typical wall reinforcing details include #8 horizontal wall reinforcing at 8" O.C. E.F. typical. Additionally, the #4 cross-tie spacing has been designed at either 6" O.C. or 12" O.C depending on the location (elevation) within the wall. With the non-uniform spacing of the cross-ties and horizontal bars, the cross-ties are secured only to the vertical bars and have the potential during concrete placement to shift or slide down the vertical bars until resting on the next adjacent horizontal bar. The inconsistent spacing of the cross-ties and horizontal bars congests the reinforcing configuration which may lead to potential problems when interfacing the concourse level reinforcing with the walls. In order to eliminate these potential problems Gerdau proposes to perform a grade 80 conversion of the cross-ties such that the size of the cross-tie remains as a #4 bar but the spacing of the cross-ties are installed with uniform spacing to the horizontal reinforcing at 8" O.C. within the designed 6" O.C. ranges or 16" O.C. within the designed 12" O.C. ranges.

Please advise if this grade and spacing change is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Proposed modification to the spacing of the foundation wall cross-ties is not acceptable due to two reasons:

1) Per ACI 318, assumed yield strength for transverse reinforcement cannot exceed 60 ksi.

2) In zones where foundation wall cross-ties are spaced at 6"; the proposed change to 8" spacing violates the spacing requirements for transverse reinforcement of flexural members in ACI 318-11."

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0579.1	BGP - Horizontal Wall Reinforcing Equal Area Conversion	Closed	06/19/2013	06/29/2013	06/20/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: S1-3201, Spec Section 03 30 20

Gerdau (SCCI's subcontractor) has recently constructed a mock-up of the 1st lift of typical wall reinforcing and identified a potential problem with congestion and quality of the final designed product. The contract drawings on sheet S1-3201 depict the typical wall reinforcing details including #8 horizontal wall reinforcing which is designed at 8" O.C. E.F. Typical. Additionally, the #4 cross tie spacing has been designed at either 6" O.C. or 12" O.C depending on the location (elevation) within the wall. With the non-uniform spacing of the cross-ties and horizontal bars the cross-ties are secured only to the vertical bars and have the potential during concrete placement to shift or slide down the vertical bars until resting on the next adjacent horizontal bar. Additionally, the inconsistent spacing of the cross-ties and horizontal bars congests the reinforcing configuration which may lead to potential problems when interfacing the concourse level reinforcing with the walls. Gerdau would like to propose an equal area conversion for the horizontal reinforcing from #8 @ 8" OC to #7 @ 6" OC in order to make the spacing between the horizontal bars and cross-ties uniform. Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

TT does not see slippage of the cross-ties will be a concern if they are properly tied, and we don't see reducing the spacing of the horizontal bar from 8" to 6" will help the congestion issue raised. However, we don't take exception to the proposed change as long as it does not affect the cost and schedule.

T-0580	BGP - Type 2 Coupler at Outside Vertical 4th Lift	Closed	06/04/2013	06/14/2013	06/08/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Andy Khuu

REQUEST:

Reference Sketch: attached.

Please confirm it's acceptable to incorporate an approved Type 2 coupler on the outside face #11 vertical bar in the same plane as the contract coupler in the fourth wall lift just above the final horizontal wall construction joint.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It will be acceptable to incorporate an approved Type 2 coupler on the outside face of foundation wall as proposed.

T-0581	BGP - Internal Walls Discrepancies 001	Closed	06/04/2013	06/14/2013	06/07/2013	Potentially	☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

Ref: A1-9215, A1-9216, A1-9217

Reference attached sketch and CD A1-9215, A1-9216, and A1-9217. Revision 1 of the noted drawings, dated 4/28/2013 , were used to generate this RFI. Elevation views, Detail A on noted CDs A1-9216 and A1-9217 depict discrepant details of the interior wall penetrations between GL 3 and 4.75.

Please provide drawings with consistent details.
If not able to provide such drawings, please specify which drawing details take precedence.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please refer to attached SKA-2733 (based on A1-9216 rev 1) and SKA-2734 (based on A1-9217 rev 1) for updated MEP openings on wall elevations.

T-0582 **BGP - Use of Laurenco Adhesive and Temporary Fasteners as Alternative** **Closed** **06/05/2013** **06/15/2013** **06/14/2013** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Ref: RFI #T-0563 and Submittal #TG0600-024

Please reference the response to RFI #T -0563 and Submittal #TG0600-024. The response to Part 3 of the RFI is unclear. Is it the designer's intent to deem temporary fasteners unacceptable with or without the certifications? Or are the temporary fasteners acceptable with the certifications?

Please clarify.

Please note, the certifications were submitted and approved on 2/11/13 as part of Submittal Package #TG0600-024.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The use of temporary fasteners are acceptable provided that the contractor and membrane manufacturer verify that their use does not restrict the design concept which is to maintain a shear plane.

T-0583 **BGP - BBII Monitoring Instruments/Piezometers** **Closed** **06/06/2013** **06/06/2013** **06/14/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference Drawings: 6/A1-8711, 3/A1-8711

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The dewatering wells shall be capped and sealed in

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Per coordination discussions with WOJV (email attached), SCCI is to install BBII Piezometer sleeves per Detail 6 of A 1-8711. In this detail, the sleeve is to be blocked out of the Mat Slab and poured back at a later date contrary to the piezometer/monitoring instrument detail 3 on A1-8711. Is it acceptable to eliminate the blockout portion of detail 3/ A 1-8711 and pour the BBII piezometers into the mat slab?
The ARUP piezometers will remain operational (per Detail 3/ Al-8711) after the mat slab has been poured to monitor the water table levels.

accordance with detail 6/A1-8711. The timing to decommission the dewatering wells is stated in the specifications and the structural drawings.

The piezometers installed by Arup shall be protected as they will be used until further notice. Refer to detail 3/A1-8711 for detail at the mat slab.

If BBI installed piezometers, these will be sleeved and waterproofed in accordance with detail 3/A1-8711 and shall be decommissioned when directed by BBI.

T-0583.1 **BGP - Dewatering / Piezometer Clarification** **Closed** **07/11/2013** **07/11/2013** **07/23/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference RFI T-0583, RFI T-0602
Reference Drawing: A1-8711

In follow up to a phone conversation with George Metzger, detail 3/A1-8711 is to be used for all permanent instruments. Since the piezometers installed by BBII will be removed when the dewatering system is turned off, please confirm which waterproofing detail should be used.

Also, please confirm if any of Arup's instruments will not be permanent. If they are not permanent, please confirm which waterproofing detail should be used.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

As indicated in the previous RFI regarding this subject, it is acceptable to use detail 6/A1-8711 for the BBII piezometers, since they will be decommissioned, capped and infilled when the dewatering system is turned off.

Detail 3/A1-8711 is to be used for the Arup piezometers and extensometers, as these will be used for one year after the dewatering system is decommissioned.

T-0584 **BGP - Dewatering Well and Concrete Wall Conflict** **Closed** **06/05/2013** **06/15/2013** **06/17/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Andy Khuu

REQUEST:

Please reference the attached drawings S 103.0 and S 104.0 from SCCI's Rev it model. Based on BBII's latest

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The shear wall and the concrete partition walls cannot be moved.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

as-built AutoCAD file ("20 13-05-01 BBII Dewatering Well Coordinates.dwg") and SCCI field measurements, it appears that de-watering wells #1, #3, #21 and #22 conflict with the concrete partition walls and shear wall.

Additional information below:

1. BBIIs dewatering well layout submittal was approved MCN 5/10/2011

2. Dewatering wells in conflict rough installation dates:
   Dewatering Well # 1 - 1/18/2012
   Dewatering Well # 3 - 1/19/2012
   Dewatering Well # 21 - 1/24/2012
   Dewatering Well # 22 - 1/23/2012

3. A1-2122 was issued for construction 8-30-2012 placing concrete walls in conflict with previously approved and installed dewatering wells.

Can these walls be blocked out at these locations? Can these walls be moved? Will the dewatering wells need to be relocated (diffiicult as the mud slab has been already poured in these locations)? Please advise as to how to proceed.

Dewatering wells at partition walls in this RFI may be blocked out.

The structural shearwall at dewatering well #3 was reflected in TG0600 BGP documents before dewatering installation which should have been coordinated between packages by the Contractor. Contractor has the option to move dewatering well #3 or provide a block-out (take special notice of note 3 below).

The following comments apply for block-outs:

1. Refer to General Note GR-9 on S-0005 for additional block-out information.

2. Contractor to propose/incorporate block-out reinforcement into shop drawings for review and approval.

3. Note that the shearwall at dewatering well #3 provides lateral stability for the west end wall when the cross-lot bracing is removed. The re-bracing will need to be re-designed to relieve the load off of the blocked-out shearwall and submitted for review.

T-0584.1 **BSE - Abandoning Dewatering Well #3 at Shearwall** **Closed** **07/25/2013** **08/04/2013** **07/26/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference RFI: T-0584
Reference SK-001 and SK-002

BBI is proposing to abandon the dewatering well #3 at the mudslab level. This will mitigate the impact of shear wall dowels and penetration sleeve in the vicinity of the mat slab penetration created by dewatering well #3, in lieu of creating a blockout in the shear wall and designing rebracing to address structural concerns.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is acceptable to abandon dewatering well #3, however the Design Team is concerned that the contractor's proposed solution, to cut off the plugged well flush with the top of the mud slab, may expose the underside of the waterproof membrane to potential damage due to differential movement. All of the mat slab penetration sleeve details were developed as mitigation in case potential movement occurs e.g. buoyancy movement.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

BBI has discussed this with Viking Drillers and have confirmed they can abandon this well. BBI is proposing to cut the pvc casing flush with the top of mudslab, drill and epoxy #4 bars 2" down from top of casing with 3" embedment. The bars will be installed in the north, south, east, and west face through the casing and are installed to better ensure the dewatering well cement plug does not upheave. They will use Type II Portland Cement with a 5% bentonite content. Waterproofing will then be installed over the dewatering well, lapping as necessary to the adjacent waterproofing.

Please confirm that this is acceptable.

The Design Team proposes that the mud slab is to be broken out sufficiently to allow a 4" excavation below the underside of the mud slab. The dewatering well cut off and filled. Compressible material : 4" of Styrofoam installed into the excavation and over the plugged dewatering well. Then the opening in mud slab is to be repaired with reinforced concrete infill.

Note that BBII is still solely responsible for maintaining the dewatering.

T-0584.2 **BGP - Dewatering Well & Concrete Partition Conflict** **Closed** **07/30/2013** **08/09/2013** **08/08/2013** **Potentially** ☐

From: Webcor Construction LP Ryan Burke **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: RFI T-0584, Attached sketch

Please refer to RFI 584 and the attached sketch of the proposed block out in concrete partition walls as referenced in RFI 584. The 28" x 28" blockout in the mat slab will be transferred to the blockout of the wall and be 25" from the mat slab elevation to the top of blockout. This will create 3'-0" from top of penetration sleeve to top of wall blockout. We are proposing to use formsavers and the male ends will extend the length of the blockout.

Please confirm this is acceptable or provide acceptable solution.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The proposed block-out for the dewatering well & concrete partition conflicts is acceptable provided the following:

1. Confirm the vertical bar size for max height partition at these locations.

2. Extend the vertical bars in the block-out a min 4" into the top of mat.

T-0585 **BGP - Mass Concrete Specifications** **Closed** **06/05/2013** **06/05/2013** **06/13/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Filip Filipic

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Specifications Section: 03 30 20 3.5 & 3.11
Reference attached letter from CTL Group

SCCI is asking for variance to the temperature differential requirements for the mat slab concrete. If granted, this variance would be based on performance based temperature differential limit (PBTDL), which is tailored to both the Project's mass concrete mix design and the placement. Refer to the attached letter from CTL.
The intent of this PBTDL is to prevent thermal cracking, and at the same time reduce duration of the thermal control requirement.

Is this acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It will be acceptable to use the contractor-proposed performance-based temperature differential limit approach for spec section 3.11.B provided the following:

1. This approach shall be approved mix-specific.

3. The maximum temperature of 3.11.B as well as remaining mass concrete specification requirements shall still apply.

4. CTL shall provide the required measurements as well as field quality control.

4. Contractor shall still remain responsible for providing a mat foundation that meets requirements of the contract documents.

T-0586 **BGP - Fire Management System and Concourse Slab Electrical Scope** **Closed** **06/05/2013** **06/05/2013** **06/17/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Reference Drawing: E-0006, E-0000, 6/E-2202
Reference RFI: T-0567

Per the response to RFI T-567, the fire management system conduit is to be installed into the concourse slab per Note on Sheet E-0006 . However, per Plan Sheet E-0000, only a small grounding portion of electrical drawings are in the TG06.0 concourse slab scope. The remaining concourse level electrical drawings are "For Reference Only" and for informational purposes only. Please confirm that the only TG06.0 electrical scopes in the concourse slab are the grounding wire extensions from the mud slab (per Detail 6/E 2202-TG06.2 scope), lighting conduit and boxes for Type "F15" and Exit Signs, and 4" 90 degree elbows per Details 1 & 2 on TE 1-8000. Please confirm that outside of those scopes, all other electrical scopes of

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

WSPFK Response: Per sheet note J on Sheet E1-006, the scope for TG06.0 shall include fire alarm system conduits embedded in the Lower Concourse slab that are required to serve fire alarm equipment that is located at the Train Platform level. Note that conduits for fire alarm devices on the Lower Concourse level will be provided under a separate scope package.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

work in the concourse slab are to be part of a later electrical scope package as indicated on the E-0000 index and the "for information only" plans.

T-0586.1 **BGP - Fire Management System in the Concourse Slab Only** **Closed** **07/12/2013** **07/22/2013** **07/19/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Per the response to RFI T-567 (attached), please confirm that the only slab with embedded fire system conduit is the concourse slab. All stub ups or risers will either come up out of the concourse slab for the concourse level fire management system or drop down out of the concourse slab for the fire management system on the train platform level.
Please confirm that the fire management system is not embedded in the mat slab.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This RFI gets into contractors' means and methods. The contractor can route the fire alarm conduit embedded in either the Lower Concourse slab or the Foundation Mat Slab as required to provide connectivity to the fire alarm devices shown on the electrical drawings.

T-0587 **BGP - Future Train Platform Wall Reinforcing Size and Spacing** **Closed** **06/05/2013** **06/15/2013** **06/16/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference RFI:T-0480

The contractor is to construct the future train platform walls using the thickness of the wall as called out within the specific zone sheet (1'-0" or 1'-2"). When coordinating the wall thickness called out in the Plan with Detail 5 on S1-3205 Future Wall Detail no specific bar size or spacing is called out for the 1'-2" thick walls. Please confirm if the reinforcing required for the 1'-2" walls is the same as that called out for a 12" wall, #6 @ 8" oc.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed, the dowels for future train platform room walls that are 1'-2" thick are #6@8"OC each face.

T-0588 **BGP - Future Partition Wall Dowel Size Spacing** **Closed** **06/06/2013** **06/06/2013** **06/10/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Contract drawing S1-2052 depicts 12" Partition Walls and 12" Future Partition Walls. Contract drawing S 1-9050 provides the reinforcing details for the Partition Walls which depict #7 @ 12" OC reinforcing dowels for a 12" wall. Per S 1-3205 Future 12" Walls receive #6 @8" OC reinforcing dowels. Please confirm the proper bar size for the Future Partition Wall dowels.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

"Future 12 thk conc wall partitions" shall be reinforced per S1-9050 as they are labeled as partition walls. Detail 5/S1-3205 is for future walls within the train platforms.

T-0589 **BGP - Epoxy Coating Thickness Over Formsaver Couplers** **Closed** **06/06/2013** **06/16/2013** **06/17/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: 6/S1-3001, Attached Letter

The response to RFI T 0515 confirmed to coat the form saver couplers for future construction as specified in ASTM A 775. Per ASTM A 775, the standard coating thickness specifies a required thickness range by which different size bars are to be coated 7 to 12 mills for bar sizes 3 to 5 and 7 to 16 mills for bar sizes 6 to 18; however, detail 6 on S1-3001 indicates a 12 mill minimum coating thickness over the couplers. Per the attached letter from Stanley Johnson the Regional Manager for Erico (Lenton) the epoxy coated form-saver couplers specified for use cannot be procured with a guaranteed 12 mill coating but rather an epoxy coating that meets the requirements of the ASTM A 775 standard. Please confirm that supplying an epoxy coated form-saver coupler that meets the ASTM A 775 standard but may contain a mill thickness less than 12 is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

We understand that the epoxy-coated form-saver couplers supplied by Lenton may contain a mill thickness less than 12 while still complying with ASTM A 775 and consider this acceptable.

T-0590 **BGP - Mechanical Room Plumbing Clarifications 002** **Closed** **06/06/2013** **06/16/2013** **06/12/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Attached Drawing, P1-2022, Spec Section 22 13 01

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See the WSP/MDS comments on the attached document.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Reference attached mechanical room layout drawing P-112. Per the marked up referenced drawing please clarify or provide following:
1. Invert elevations of the piping connecting the sumps.
2. Verify dimensions of the pipes spacing and offsets, per attachment.
3. Size and locations of the equipment pad.

T-0591 **BGP - Mechanical Room Plumbing Clarifications 001** **Closed** **06/06/2013** **06/06/2013** **06/11/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Attached Drawing, P1-2022, Spec Section 22 13 01

Reference attached drainage layout drawing P-110. Please verify marked up dimensions for the pipe spacing.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The dimensions for pipe spacing are acceptable.

Comments:

1. The "1/2 SAN" shown for the floor sink to be corrected to show 1/2" trap primer.

2. All vent connections to horizontal drainage pipe shall have their inverts taken off above the drainage pipe center line downstream of the trap being vented (CPC 505.2). Generally, this is accomplished by rolling-up the wye fitting.

T-0592 **BGP - Mechanical Room Plumbing Clarifications 003** **Closed** **06/06/2013** **06/16/2013** **06/12/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Attached Drawing, P1-2022, Spec Section 22 13 01

Reference attached drainage drawing P-113. Please verify marked up dimensions for pipes spacing.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For the stairs 202 and 203 there are only (2) drain and vent piping connections. (1) 6" sprinkler drain and (1) 3" vent (refer also detail 3/P1-6001). The 6" sprinkler drain to be located with the center line 12" from the face of the column (or wall for stair 203) and then 12"

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

to the 3" vent. Also, all vent connections to horizontal drainage pipe shall have their inverts taken off above the drainage pipe center line downstream of the trap being vented (CPC 505.2). Generally, this is accomplished by rolling-up the wye fitting.

T-0593 **BGP - Concrete Clear Cover of Reinforcing Support Bars** **Closed** **06/06/2013** **06/16/2013** **06/11/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Drawing 5/S1-3001, Spec Section 03 30 20

Gerdau would like to confirm that non-contract reinforcing support (carry) bars are to maintain the required concrete clear cover as specified in detail 5 on S 1-3001 and not encroach upon the designated clear cover limits. See the attached sketch for reference.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed that the clear covers for carry bars shall achieve at minimum the clear cover requirements of 5/S1-3001.

We note that for concrete cast against waterproofing (which is the condition at the bottom of the mat) the required clear cover per 5/S1-3001 is 2" for #6 or larger bars, and 1.5" for #5 and smaller bars, unless otherwise noted. While the clear cover to bottom typical continuous bars is to be 3" per Mat Bottom Rebar Note 7 on S1-2022, the smaller clear cover of 5/S1-3001 is appropriate to use as a minimum clear cover for carry bars, provided that in doing so the 3" clear to typical continuous bottom bars per Mat Bottom Rebar Note 7 on S1-2022 is still achieved.

T-0594 **SSS - Pendulum Bearing Specification** **Closed** **06/07/2013** **06/17/2013** **06/14/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Specification: 03 20 02 2.6

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Verify these bearings are within the scope of the

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Spec Section 03 20 02 was issued to W/O on 4/26/13 as part of the TG07.1 IFB set dated 2/19/13 to be issued to existing W/O subcontractors for construction. 03 20 02 2.6 includes Pendulum Bearings . Please provide drawings and details depicting the location and quantity of Pendulum Bearings required.

Please also confirm any placement and attachment details for pendulum bearings and structure.

Structural Steel Superstructure Package. They are located at Gridlines 34 and 35, used between two concrete members.

2) Location of Pendulum Bearings is provided in Detail 2/S1-3302. Detail 2/S1-3302 is associated with three column types; C9, C10 and C11 (refer to Column Schedule). Performance requirements are provided in Section 2.6 of Specification 03 20 02. Also see Sections 1.3, 1.4, 3.2 of the same Specification for other requirements on pendulum bearings. Attachment details are per manufacturer's recommendations.

T-0595 **Geothermal Piping Under Construction Personnel Hoist Concrete Pad** **Closed** **06/10/2013** **06/20/2013** **06/11/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: Attached Drawings

Please see the attached drawing of the proposed manlift pad to be installed flushed with the mudslab in Zone 2. Per WSP/Flack & Kurtz the dimension of soil between mudslab and top of geothermal pipe must be maintained at all times. It was stated that the geothermal piping could be installed 12" deeper as long as the rise of the pipe follow the radius loop bend requirments, in the method that the geothermal is installed in the sump pits. Please confirm that this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

WSP Response: Please provide the structural loading weight of the Personnel Hoist and concrete pad in pounds per square foot.

T-0596 **BGP - Sump Pit Grate and Frame at Gridline 19/C** **Closed** **06/11/2013** **06/21/2013** **06/20/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Jesse Dillon

REQUEST:

See attached drawing CB-2 of returned submittal package TG0600-710, P1-2025, and A1-2125.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The sump pit at grid lines 19/C is located within an escalator pit. Frame and grate are not required.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

The returned (returned to WOJV/SCCI on 06/07/13) shop drawing submittal (TG0600-710) for catch basin and sump pit grating indicates an additional sump pit grate and frame at approx. GL 19/C per drawing CB-2. The contract drawing P1-2025 does not have a call-out for a grate and frame at this location. Furthermore, drawing A1-2125 has the sump pit located within an escalator pit in the mat slab level. Per Field Order T-00011, all escalator pits do not receive grates or frames.

Please confirm the sump pit at GL 19/C does not have a grate and frame. An expedited response is requested in order to release the full order of frames and grates in a timely manner.

T-0597 **BGP - Concourse Deck Capacity for Construction Loads** **Closed** **06/11/2013** **06/21/2013** **06/12/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: Attached Documents

Please confirm it is acceptable to use a Sky Trak 8042 forklift with an approximate operating weight of 25,365 lbs and rated load capacity of 6,000 lbs on the concourse level deck without temporary shoring in place. The forklift is intended for use on the concourse level deck for the installation of wall reinforcing steel. Should this weight exceed the capacity of the structure please advise as to the structure's load capacities without temporary shoring in place for alternate equipment selection and planning.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The design load of the concourse level floor is noted on the contract document S-1002. Provide information on maximum fork-lift wheel reaction If the contract would want TT to evaluate the floor framing for the load imposed by the fork-lift.

T-0597.1 **BGP - Concourse Deck Capacity for Construction Loads** **Closed** **06/28/2013** **07/08/2013** **07/09/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Per response to SCCI's RFI 215 (T-0597) see attached

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The forklift identified in the RFI is acceptable for use

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

axle loadings for Sky Trak forklift model no. 8042. The forklift is intended for use on the concourse level deck for the installation of wall reinforcing steel.

Please confirm if it is acceptable to use noted forklift on top of concourse slab.

on top of the Lower Concourse slab. NOTE that this response is for the forklift and its carrying capacity only and does NOT consider additional construction loads that may be present at the time of this forklift use.

Please refer to original RFI T-0597 response for reference to Lower Concourse design loads.

T-0598 **BGP - Fire Management System Class A vs. Class B** **Closed** **06/12/2013** **06/22/2013** **06/15/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Attached Documents, E1-5201

After consulting with Siemens on the fire management system a clarification is needed. The riser diagram on sheet EI-5201 shows Class A conduit routing for the train platform level and the lower concourse level. Using a Class A wiring layout limits the system to 3 or 4 strobe devices per circuit. Under the NFPA 130 6.3.3.2.8 specification, the embedded (note (1) of the specification) fire management conduit protects against the ASTM E119 fire conditions and Class A isn't required per NFP A specification. Is it acceptable to design the fire management conduit system to meet the NFP A 130 specification under Class B requirements and impliment 6 or 7 strobe devices per circuit instead of the 3 or 4 stobe devices per Class A. By implimenting a Class B system, the future fire management system (installed under a future contract) will be less costly all while meeting the the NFP A 130 requirements.
Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

WSP Response: We confirm the Specification requirements for Class A wiring shall apply. The design of the conduit systems shall be configured to achieve Class A wiring for the fire alarm communication circuits that will power the strobelights at the Train Platform Level and Lower Concourse Level. Although we have designed for embedded conduit where possible, we cannot assure in the future design that we can embed or provide approved fire rated cable from the source fire alarm panel to the end device, since the fire rated cable systems that were planned for extension of the circuits have had their listings voided. Embedment and layout for Class A wiring will provide the required protection to meet code and to provide the future flexibility for the life of the building.

T-0599 **BGP - Continuous Concrete Insert Elevations** **Closed** **06/13/2013** **06/23/2013** **06/21/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference: Attached Documents, Drawing A1-6231

Please reference the attached - clouded, Submittal TG0600- 110 BGP -Concrete Formwork Lift #1 sheet, comment regarding the elevation of the cast-in-place continuous concrete insert. The submittal comment requests an adjustment of the concrete insert elevations. In the attached RFI T-0506 the elevations of the concrete inserts were given to accomplish equal spacing as required by the drawings, as well as incorporate the agreed upon adjustments to the top and bottom insert. SCCI would like to verify that the given elevations of the cast-in members in the clouded section of RFI T-0506 are the correct elevations.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please refer to the attached SKA -2745 which confirms the elevations of the continuous concrete inserts.

T-0599.1 **BGP - Horizontal Cast-In Inserts at EFCO Form Panels** **Closed** **11/19/2013** **11/29/2013** **11/20/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

See attached photo and reference RFI 599.

Interrior rib of the EFCO form panels lines up with the cast-in insert at EL -27.08'. SCCI intention is to bolt the inserts to the forms and this makes it difficult to properly secure the cast-in insert prior to concrete placement. SCCI proposes to lower or raise this insert 2" in order to properly secure it to the form.

Is this acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
11/20/2013
RESPONSE:
It is acceptable to lower the cast-in insert as indicated in the RFI.
Cast-in insert at EL -27.08' can be lowered 2" to have a new elevation of EL -27.25' to coordinate with the formwork installation.

T-0600 **BGP - Internal Wall Discrepancies 003** **Closed** **06/17/2013** **06/27/2013** **06/24/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference attached marked up CD AI-9217 detail D.

Referenced detail shows openings in the wall along the GL

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to attached SKA-2743 which shows modifications to the Detail Elevation D on A1-9217 for the Mechanical Opening adjusted for the beam CD-15

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

D. These openings appear to be in conflict with the moment beam that runs along GL D.
Please clarify.

along GL D.

T-0601 **BGP - Internal Wall Discrepancies 004** **Closed** **06/17/2013** **06/27/2013** **06/24/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference attached marked up CD A 1-9217 detail E.

Referenced detail shows openings in the wall near GL5 and GL D. This opening appears to be in conflict with the moment beam that runs along GL D.
Please clarify.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to attached SKA-2744 which shows modifications to the Detail Elevation E on A1-9217 for the Mechanical Opening adjusted for the beam CD-15 along GL D.

T-0602 **Arup Monitoring Instruments** **Closed** **07/02/2013** **07/12/2013** **07/17/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawings: 3/A1-8711 and 6/A1-8711

BBII's dewatering wells and piezometers are installed per Detail 6 on Sheet A1-8711 which clearly shows how the wells and piezometers will be filled and capped after the dewatering has been decommisioned. Detail 3 on Sheet A1-8711 does not provide any indication that these piezometers will be plugged and/or filled. Does the design team intend on leaving these piezometer holes open after the dewatering is shut off? If not, please provide a revised 3/A1-8711 clarifiying the design teams intent.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The monitoring instruments / piezometers will continue to function for a few years after the entire building has been completed, therefore will remain as shown on detail 3 / A1-8711. No additional detail is required at this time.

The instrumentation cables are inside a 2" dia steel pipe. A seal between the sleeve and the pipe is provided by the two linkseals. When the instruments are decommissioned, the conduit is cut off and the opening sealed. Then a steel cap is fully welded to the ring flange at the top of the sleeve, which is flush to the top of the mat slab.

T-0603 **BSE - Beale PG&E Utilities** **Closed** **06/19/2013** **06/29/2013** **07/01/2013** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan Gary Krutsch **Answered By:** Transbay PMPC Douglas Jacobson

Co-Author: Balfour Beatty Infrastructure, Inc. Rodney Gordon

REQUEST:

Refer RFI T-0286
Specification Section 01 53 13

Please reference W/O RFI T-0286. For First and Fremont street BBII was directed to use a cable weight of 8.2 lb/ft to be used with the 6" conduit. BBII was supplied with a weight of 3 lb/ft for fiber cable used in 4" conduit (not PG&E conduit). BBII does not have a cable weight for 4" PG&E conduit.

1. Please confirm that the 6" PG&E conduit on Beale Street will contain a 8.2 lb/ft cable.
2. Please clarify the weight/ft of the cable used in the 4" PG&E conduit on Beale Street.

This information is necessary to design the utility supports on the Beale street Bridge.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Based on the attached Reference Data table, the total wt. of rigid conduit + conductors: 4" dia = 19.7 plf; 6" diameter = 40.0 plf

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T-0604 **#2 CPH Platform through Mat Slab in Zone 2** **Closed** **06/20/2013** **06/30/2013** **07/28/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please see the attached shop drawings and layout of the construction personnel hoist (CPH) to be installed in Zone 2. The CPH elevated steel PLATFORM to be installed and later removed and poured back such as the trestle pile penetrations.

All work dimensions have been coordinated with structure overhead into future bid packages as well as as-built information of internal bracing in the field.

We propose to :

1) Lower the geothermal piping an additional 12" to maintain the same 15" deep trench under all concrete. This will be performed the same way they install the piping in the sump pits with correct bend radius.

2) Install at 19'-6" x 13'-0" x 16" thickened slab incorporated with the current 4" reinforced mudslab. The

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The proposed Zone 2 personnel hoist installation described in the RFI is acceptable to the Design Team.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

thickened slab will contain #5 bars 12" OC EW T&B and we have confirmed that the total load of thickened slab, CPH, and platform will not exceed 500 PSF.

3) Install CPH elevated steel platform through the mat slab with 3'-0" of clearance between top of mat slab and bottom of platform deck and beams.

4) Waterproof platform legs per detail 5/A1-8711 04/29/13 per ASI 0102 Issued for Construction, Below Grade Package, including galvanized penetration sleeves and waterproofing. Penetration sleeve will be 30" diameter.

5) Reinforcing details will be the same as all other reinforcing at pin/trestle pile blockouts.

Please confirm this is all acceptable.

T-0605 **BGP - Plumbing and Electrical Autocad Files** **Closed** **06/21/2013** **07/01/2013** **06/27/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

SCCI requesting access to the latest, most up to date Auto cad files for the Plumbing (P1-series) and Electrical (E1-series) drawings from the designers. The files would be used for Reference only and will not be used for construction. SCCI understands that the Autocad files are subject to change as the project design evolves.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The TJPA may release Autocad files on a case by case basis. Contact the TJPA Engineering Manager and provide the nature of the request and final distribution of Autocad files. We understand that the information requested covers drawings that have not been released for construction.

T-0606 **BGP - Mat Slab Pour and Bracing Removal- Area 1 to 4** **Closed** **06/21/2013** **07/01/2013** **06/28/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor/Obayashi Joint Ve Spencer Sayles

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Spec Section 01 13 00

The latest Webcor's weekly update schedule received by

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

In response to your RFI 232 the requested analyses cannot be performed until rebracing submittals are received from the BSE contractor and reviewed for

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

SCCI (Data date 06.17.2013), shows that Balfour Beaty (BBII)'s activity "Bracing Removal- Level D- BBII- Z1 A1", in Zone 1, area 1 cannot commence until the completion of Webcor's activity "Mat Slab Cure- Z1Al ".The same relationship exists between the two activities for Area 1 to Area 4. Preliminary rough analysis done by SCCI suggests that there is not sufficient sliding resistance to permit the slab in each area to act as effective support for the base of the shoring wall when the lowest level of bracing is removed in that area. The preliminary analysis also suggests that bracing removal level D in Area 1-4 should not commence until the entire mat slab in Area 1-4 are in place.

Please confirm that :
1. Webcor has performed a detailed analysis that the relationship as shown in the schedule between the Bracing Removal- Level D and Mat Slab Cure can be performed in each area, independent of any other areas.
2. SW Comer bracing level D could be removed if only Areas 1 &2 are poured and cured
3. NW Comer bracing at Level 2 could be removed if only Areas 3&4 are poured and cured

approval.

T-0607 **BGP - Bracing Removal Sequence- Area 5-16** **Closed** **06/21/2013** **07/01/2013** **06/28/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:** Webcor/Obayashi Joint Ve Spencer Sayles

Co-Author:

REQUEST:

The latest Webcor's weekly update schedule received by SCCI (Data date 06.17.2013), shows that:
* "Bracing Removal- Level D" (BGSOX-1120) is the driving predecessor to "Wall Waterproofing- 1st lift" (BGSOX-4000)- in each area.
* "Bracing Removal- Level E" (BGSOX-41 00) is the predecessor to "Wall Waterproofing- 2nd lift" (BGSOX - 4110)- in each area
* "Bracing Removal- Level B" (BGSOX-6000) is the predecessor to "Wall Waterproofing- 3rd lift" (BGSOX - 6010) in each area

Based on the current schedule logic, the bracing will need

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

As was discussed in yesterday's schedule meeting, please provide a detailed wall pour sequence schedule and indicate where specific waler conflicts are anticipated. We will be able to perform an analysis at that point in time.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

to be modified to allow the removal of walers and struts in each area, separately and independently from each other. E.g: Any walers spanning two areas will need to be cut during removal ofbracing so seer can proceed with the waterproofing install in that area, without having to wait for the adjacent area. This is applicable to Bracing Removal level B, C and D.
Please confirm.

T-0608 **Detail of transition between modified reinforcement to contract reinforcement** **Closed** **06/26/2013** **07/06/2013** **07/28/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: Exhibits A - C, RFI SCI# 236

This RFI addresses the transition between modified reinforcement to contract reinforcement at GL6 at the south west corner see Location Plan exhibit - A
Exhibit - B (RFI- T-0448.5) proposed the modification of the reinforcement and this detail exhibit C clarifies the exact location and detail where the modified reinforcement changes to the contract reinforcement

This detail if approved would be incorporated into the TG06 shop drawings
Please confirm if this detail is acceptable

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The proposed foundation wall reinforcement transition is acceptable.

T-0608.1 **BGP - Revised Spacing to Foundation Wall Vertical Reinforcement in Area 2** **Closed** **10/10/2013** **10/20/2013** **10/14/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

A 16-ft portion of the Area 2 wall vertical reinforcement, between GL 6 and 7, has been installed at 6" OC instead of the required WR1 spacing (8" OC).

Please confirm the as-built vertical wall reinforcement

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/11/2013
RESPONSE:
Please resubmit the RFI with the sketch referenced in the question.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

spacing identified in the attached sketch is acceptable.

T-0608.2 **BGP - Revised Spacing to Foundation Wall Vertical Reinforcement in Area 2** **Closed** **10/14/2013** **10/24/2013** **10/18/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please reference drawing S1-2061.

A 16-ft portion of the Area 2 wall vertical reinforcement, between GL 6 and 7, has been installed at 6" OC instead of the required WR1 spacing (8" OC).

Please confirm the as-built vertical wall reinforcement spacing identified in the attached excerpt drawing sheet S1-2061 is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/16/2013
RESPONSE:
As built vertical wall reinforcement spacing indicated in the RFI is acceptable. Please incorporate this change into as-built drawings.

T-0609 **BGP - Clear Cover to the Vertical Reinforcement on the Foundation Wall** **Closed** **07/03/2013** **07/13/2013** **07/10/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: Exihibit A, Attached

At some locations the clear cover to the vertical reinforcement on the foundation wall will be far in excess of the 2" shown on detail 1/S1-3201. Base on the RFI T-180.1 (see Exhibit - A) the clear cover could potentially be up 8" at the interface between the foundation wall at lower mat slab elevation and the waterproofing system.

Existing grade elevation = +25' + (protection slab elevation = -42') = 67' X 1/200 (CDSM pile vertical tolerance) = 4"

4" (CDSM pile vertical tolerance) + 4" (set back Per RFI T-180.1) + 2" (design clear cover to rebar) - 2" (waterproofing thickness subject to change) = 8" clear cover to rebar

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Maximum acceptable clear cover between the waterproofing system and foundation wall vertical reinforcement is 6 inches. For clear cover larger than 6 inches, evaluation will be made on a case by case basis. Submit information for review where clear cover exceeds 6". For this calculation, waterproofing thickness can be assumed 2 inches and location of foundation wall reinforcement can be assumed as indicated in contract drawings.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please confirm that this clear cover between the waterproofing system and the vertical reinforcement is acceptable.

T-0610 **BGP - Micropiles at CPH #2 Thickened Slab** **Closed** **06/24/2013** **07/04/2013** **07/01/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Sketch: SK-001

There are 4 micropiles within the perimeter of the thickened slab at CPH #2. Hand excavation will occur around these micropiles to keep from damaging the grout columns. The grout columns will be considered penetrations, in the structural design of the thickened mudslab and trim steel will be installed accordingly at each micropile. We will be installing butyl tape around the exposed grout column and onto the micropile, to top of thickened mudslab as a bond breaker. Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Thornton Tomasetti does not object to proposed micropile detailing at thickened mudslab as presented in RFI.

Adamson Associates Comment: The proposal in this RFI is not to alter the waterproofing system.

T-0611 **SSS - Grout Hole Diameter and Material** **Closed** **06/24/2013** **07/04/2013** **07/01/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference RFI: CN-005

Following up with the response to RFI CN-005 please clarify the following:

1. Please advise if steel pipes intend to be filled with grout or concrete.

2. If the filler is grout, a 1" hole for venting should work. We do not need a 3" hole for venting.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Steel pipe is to be filled with 4000 psi pea gravel concrete.
2. As noted in the response #1 to RFI CN-005, the 1" dia hole in the cast node will be remain to serve as a vent hole.
3. Hole in the cast node is to be used as vent hole, not as a grout port. W/O should review the constructability issue raised as this is a means and method issue.
4. As noted in item 2 of RFI CN-005 response, the 3" dia hole and patching details will be provided in a

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

3. If the filler is grout please advise if locations of the grout holes in cast nodes have been reviewed in the 3D model for accessibility in the field after nodes are attached to structural steel.

4. If steel pipes are filled with concrete and 3" hole must be patched with partial penetration weld please provide proposed detail and procedure for PJP weld.

5. Please provide procedure for patching the node grout hole.

future ASI.
5. 1" dia hole in the node does not require patching.

T-0611.1 **SSS - Grout Hole Options** **Closed** **08/19/2013** **08/29/2013** **08/23/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawings: S1-4002
Reference RFI: T-0611
Reference Sketch: Sketch 1, Sketch 2

Design documents do not specify or provide procedures for filling the steel pipe column with 4,000psi pea gravel. The following two options are proposed, please review and advise.

Option 1 (prefered)
1. Locate 3" grout hole at the back of the pipe to provide access from inside of the building.
2. Locate 3" grout hole about 6" below CJP weld.
3. Fill out pipe with concrete up to the hole.
4. Use 1" vent / grout hole in the cast node to fill out the upper void with grout (not concrete). If it is not required leave the void to reduce added cost.

Option 2
1. Weld a pipe nozzle with threaded end with a valve to 3" grout port.
2. Pump up concrete to completely fill the pipe column including voids in cast nodes.
3. Shut down the valve and wait until concrete sets.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is a contractor's means and method issue. Arup fire/blast engineer indicated that the fill needs to be concrete with carbonate aggregate with strength from 4000 to 6000 psi. From the IFC document, a 3" dia grout hole is to be provided for concrete pumping. If the pea gravel cannot travel thru the 1" dia hole in the bus deck cast node, a second group hole is needed above the bus deck node for pumping concrete above the bus deck. Using grout (with siliceous aggregates) is not permitted.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

4. Cut the pipe nozzle off.
5. Clean up the nozzle weld, remove extra concrete, weld in the plug, grind to AESS requirements, touch up.
6. Note: this option will be very expensive.

T-0611.2 **SSS - Grout Hole Options** **Closed** **08/28/2013** **09/07/2013** **09/09/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference RFI: T-0611.1
Reference Sketch: Attached

The response to RFI T-0611.1 does not address the question. If grouting of the void in the cast node per Option 1 is not permitted, then Option 2 should be applied to completely fill the pipe column and the void in the cast node with concrete. Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

TT has previous responded to RFI 611.1. TT's original response is excerpted below:

"This is a contractor's means and method issue. Arup fire/blast engineer indicated that the fill needs to be concrete with carbonate aggregate with strength from 4000 to 6000 psi. From the IFC document, a 3" dia grout hole is to be provided for concrete pumping. If the pea gravel cannot travel thru the 1" dia hole in the bus deck cast node, a second group hole is needed above the bus deck node for pumping concrete above the bus deck. Using grout (with siliceous aggregates) is not permitted."

TT is not in the position to give instruction to the contractor on how to fill the pipe with pea gravel concrete, as it is contractor's Means and Methods as stated in the original response. Some other possible options are discussed below for contractor's consideration:

Instead of using a 3" grout hole above the ground floor node as noted in Option 2, the contractor can pour the concrete through a 3" hole above the bus deck node and let the grout flowing through the 1" hole in the bus deck node to the pipe below, and the existing grout hole in the ground floor node can be used as a vent hole.

The Contractor may decide to grout the pipe by pouring concrete from the top of the lower pipe before

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

the bus deck cast node is welded.

The Contractor may decide to grout the pipe by pouring concrete from the top of the upper pipe after the bus deck cast node is welded but before the roof node is welded (an external vibrator might be needed to facilitate the flow of the pea gravel concrete thru the 1" hole in the center of the bus deck node.

T-0612 **B2 Electrical Room** **Closed** **06/24/2013** **07/04/2013** **07/02/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawing: A1-9214

Please confirm the pilaster size and whether a control joint is required at the single door opening to B2 Emergency Electrical Room B2880 adjacent to GL C, 1.4 and verify adjacent wall openings.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please refer to attached SKA-2746, 2747, 2748, 2749 and 2750 which provides updated wall, door opening and control joint locations for the B2 Emergency Electrical Room B2880.

T-0612.1 **BGP - Revised Plumbing Layout in Emergency Electrical Room B2** **Closed** **08/14/2013** **08/24/2013** **08/15/2013** **Potentially** ☐

From: Webcor Construction LP Joanne Filipas **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Stacy Wilson

Co-Author:

REQUEST:

Reference: T-0612

The response to RFI T-0612 BGP revised the location of the doors to Emergency Electrical Room B2280. Are there any Mechanical, Electrical or Plumbing revisions required in Below Grade Package, to accommodate equipment layout changes resulting from the modified door locations.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For revised routing of vent and trap primer lines within the mat slab at Room B2280. Refer to attached sketch PSK-2022.

Minola Anghel / MDS 8/14/2013

☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0612.2	BGP - Updated Plumbing Drawing	Closed	09/06/2013	09/16/2013	09/09/2013	Potentially	

From: Webcor Construction LP Marina Rosso **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please refer to T-0612.1 and drawing P1-3002.

The vent and trap primer lines within the mat slab at Room B2280 were revised in the Foundation Level Zone 02 Plumbing Plan PSK-2022 via RFI T-0612.1. The revised drawing did not include an enlarged plan detail.

Please provide the revised enlarged drawing plan shown on detail 1 of sheet P1-3002 for coordination.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
9/9/2013
RESPONSE:
See the attached drawing PSK-3002.
CMGC should note that RFI's are answers to questions. The Contract Documents are not continuously updated to follow all questions and answers that arise during construction. All drawings that may relate to a RFI answer will not necessarily be updated when the RFI answer is provided.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0613	BSE - Excavation For Zone 4 Timber Pile Survey	Closed	06/24/2013	07/04/2013	07/28/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Kelly Phariss

REQUEST:

Please see attached BBII Letter 4225-000-1232.

1. In Zone 4, East of the buttress shafts, BBII would like to excavate down 3 feet within the 50' berm in order to uncover timber piles. Please confirm this acceptable.

2. Please confirm if the soils need to be immediately backfilled upon completion of the survey or if the excavated elevation can remain.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

This is acceptable east of the buttress and west of Beale Street only.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0614	BGP - C21 Column Vert Std. Hooks, Replace with HRC 555 T-head	Closed	06/24/2013	07/04/2013	07/28/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Drawing S1-3302

Section 1 on sheet Sl-3302 depicts a standard hook at the bottom ofthe #11 vertical for the embedded C21 column. Please confirm it's acceptable to replace the standard hook with an HRC 555 T-head similar to that of the typical vertical wall reinforcing.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is not acceptable to replace the standard hooks with heads in Detail 1/S1-3302. The possibility of using heads in the second layer of vertical bars in this detail was previously discussed with Seismic and Structural Review Committee (SSRC). Citing minimum clear spacing requirements between headed bars, SSRC recommended use of hooks in the second layer of

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

vertical bars as indicated in the construction drawings.

T-0615 **BGP - Clear Cover Notation Discrepancy with RFI 339 Response** **Closed** **06/24/2013** **07/04/2013** **06/27/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Drawing S1-3302, S1-3201

Section 1 on S1-3302 details 2-1 /4" clear cover from the face of concrete to the typical wall vertical reinforcing. Per the response to RFI T-0339, the clear cover to the vertical reinforcing was confirmed to be 2" and the cross-ties would encroach into the 2" clear cover. Please confirm the wall vertical reinforcing cover detail in 1/S 1-3302 is superseded by the response outlining the clear cover requirements in RFI T-0339.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The wall vertical reinforcing cover detail in 1/S1-3302 is not superseded by our response to RFI T-0339. RFI T-0339 was on detail 1/S1-3201. Detail 1/S1-3201 and detail 1/S1-3302 correspond to different sections through the foundation wall. Detail 1/S1-3201 is a typical section and detail 1/S1-3302 is embedded columns within the foundation wall. 2-1/4"cover to the vertical reinforcement is specified in Detail 1/S1-3302 because of the larger cross ties required in the embedded columns.

T-0616 **BGP - Micro Pile and Mat Slab CJ Conflict** **Closed** **06/24/2013** **07/04/2013** **06/26/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Drawing S1-3001

See attached sketches of the mat slab joint between S101 and S102. While perfoming the layout of the mat slab construction joints SCCI has discovered a conflict between one of the micro piles and the CJ between the two noted mat slab areas. SCCI will not be able to construct the joint as shown Detail 2 on CD S1-3001, with the micro pile in the way. SCCI proposes to modify the mat slab construction joint, to clear the conflicting micro pile, as shown on the attached sketches.
Is this acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It will be acceptable to modify the mat construction joint as proposed in the RFI.

T-0617 **BGP - Catch Basin at the Construction Joint** **Closed** **06/24/2013** **07/04/2013** **07/08/2013** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Drawing A1-2813

See attached lift drawings S105.0, S105.4, and CD A1-2813. For construction convenience, SCCI is proposing to move catch basin that falls between GL 8-9 and South of GL J, 24" westward (towards GL 8). Moving noted CB will make this part of the drainage system fall within the S105 mat slab our, and not have CB split between the CJ.
Is this acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is acceptable to shift the catch basin 2'-0" directly West to avoid conflict with the mat slab construction joint. See attached sketch SKA-2756.

T-0618 **BGP - Mechanical Room Plumbing Clarifications 004** **Closed** **06/25/2013** **07/05/2013** **07/11/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Drawing P1-2022, Spec Section 22 13 01

Reference attached marked up CD PI-2022 and the drainage layout drawings. One of the floor sinks is located in the pin pile blockout. This creates a conflict between the added reinforcement in the mat slab and the floor sink. Please provide details for this conflict.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For revised piping layout of the Domestic Booster and Irrigation Pump Room, see attached sketch PSK-2022 and SKA-2761.

T-0619 **BGP - CDSM Wall Encroachments rebar details- RFI T-0448.5** **Closed** **06/26/2013** **07/06/2013** **07/02/2013** **Potentially** ☐

From: Shimmick Construction Company, Inc Ben Gordon **To:** Webcor Construction LP Jackson Tukuafu **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author:

REQUEST:

Within the issued response to RFI 448.5 no details were provided to depict the reinforcing configuration at the point in which the wall steps from it's reduced width back to it's original contract width of 36".
Please provide a detail depicting the acceptable configuration at both the typical wall section and of the concourse level which includes the spandrel beam/wall interface.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please refer to RFI response T-0608. The WOJV generated RFI T-0608 anticipated these revisions and was submitted prior to RFI T-0619 (SCCI #236).

☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0620	BGP - Strut Bracing Conflicts With Shear Walls and Columns	Closed	06/26/2013	07/06/2013	07/15/2013	Potentially	

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Drawing S1-3260, S1-3301, S1-2030

Based on the layout of the shoring and diagonal struts in the West end of the job, shear wall reinforcement (as shown on CD S1-3260) and the diagonal struts are in conflict. CD S1-3260 shows continuous vertical shear wall reinforcement from top of the mat slab to top of concourse deck. To avoid constructability issues SCCI suggests for shear walls to be constructed with horizontal construction joints at the same elevation as the first level of foundation walls. Adding horizontal joints will require modification of the reinforcement. Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractor-proposed addition of horizontal CJ's for the shearwalls is acceptable. Contractor to propose reinforcement changes for submittal review.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0621	CDSM Soldier Pile Enchroachment Area 3	Closed	06/26/2013	07/06/2013	07/07/2013	Potentially	☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: Exhibits A - H

This RFI addresses the impact of the encroaching CDSM soldier piles (SP) on the north wall in slab area 3 as well as all levels of the encroachment into the foundation wall between CDSM piles 1 to 32 as well. Location Plan see exhibit - A

Exhibit - B , C & H depict the location and degree in which the SP are encroaching

Option A
Webcor is proposing to change the alignment of the Concrete Foundation wall on the north elevation along gridlines A between gridlines 1 and 5 - 6 (CDSM piles 1 to 50)
The Concrete foundation wall which runs along gridline A between gridlines 1 and 5-6 would be offset into the structure by 0.1979' (2-3/8") the proposed Face of concrete Foundation wall would then be 2-3/8" off gridline A, this offset would enable the contract reinforcement to be installed without the need for further modifications to the reinforcement due to encroachment of the CDSM piles in concrete pour Areas 3 & 4. See Exhibit - H

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Option A

For Option A the proposed revision is acceptable, with the following conditions:

The Train Box design is restricted at the B2 Train Platform Level by the Rail Vehicle Kinematic Envelopes (RVKE). The B1 Lower Concourse Level is strictly controlled by space planning constraints, particularly minimum requirements for Public Utility rooms, service rooms and associated structural and service coordination.

The CDSM wall zone described in this RFI is outside of the RVKE, therefore at the B2 level the foundation wall face can be offset as proposed. However, at B1 Level, the offset will affect Utility Room and Service configurations.

If Option A is adopted, either:

1) Provided the foundation wall configuration and structural design permit, the offset should only occur in this area at the B2 Level and transition back to the

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Option B
WOJV proposal: (See Exhibit - B) Between CDSM piles 1 to 20-21 WOJV is proposing to decrease the specified 36" wall thickness to 33 5/8" to clear all the encroaching SP. This foundation wall area was originally a WR1 reinforcement area (#11@8"oc EF vertically) and would change to #11@6"OC this reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on SE stamped Detail A/Sk.1 see Exhibit - D.
Between CDSM piles 20-21 to 22 WOJV is proposing to decrease the specified 36" wall thickness again to 33 5/8" to clear all the encroaching SP, originally this was a WR2 reinforcement area #11@6"oc vertically and would change to #11@5"OC the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on SE stamped Detail A/Sk.3 option 2 (Exhibit - E)
Between CDSM piles 22 to 31 the reinforcement would remain unchanged as per the Contract Reinforcement.
See Exhibit-G showing a detail of transition between modified reinforcement to contract reinforcement with a non-contact reinforcement lap detail.
Either of these options if approved would be incorporated into the TG06 shop drawings
Please confirm if either of these options would be acceptable

original alignment on Gridline A before reaching the B1 Level.

OR

2) Any offset to the foundation wall face at B1 Level will require adjustment to space planning, coupler layouts, structural / service opening coordination and potentially may need further negotiations with Public Utility Companies i.e. it is not acceptable to simply 'shave off' a couple of inches from a room at this level.

Note that all transitions are to be smooth and not stepped.

Our comments for proposed Option B are as follows:

1) It is not acceptable to transition foundation reinforcement width and/or vertical rebar spacing within sections where specified foundation wall reinforcement is "WR2" or where there is an embedded column per construction documents. Provide uniform reinforcement width and rebar spacing within these regions. The transitions can be acceptable at the ends of (or just outside) these regions.

2) Foundation wall rebar WR2 and embedded columns are designed using vertical rebar spacing of 6" (see construction documents). Proposed changes to this spacing can negatively impact the constructability moment frame beam at the lower concourse level. As an example, see attached sketch which shows the rebar detail at the lower concourse moment frame beam and foundation wall. To assist in addressing these constructability issues it may be acceptable to move wall rebar a maximum of 3/4 inch as needed.

3) Use of tighter foundation wall rebar spacing than those specified in the construction drawings will negatively impact the constructability at the ground floor, where moment frame beams join the foundation wall. To assist in addressing these constructability

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

issues it may be acceptable to move wall rebar a maximum of 3/4 inch as needed.

4) Min center-to-center spacing between two #11 foundation wall vertical rebar with heads cannot be less than 5" (3.5 times bar diameter). The rule does not apply for hooked rebar. This is a general comment provided as a reminder for future revision requests."

The Design Team must be informed of the contractor's preferred approach prior to committing to shop drawings.

T-0621.1 **CDSM Soldier Pile Encroachment Area 3** **Closed** **07/12/2013** **07/22/2013** **07/23/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: Exhibits A - C

This RFI is an additional request based on the response to RFI T- 621 option A (see exhibit - A) The original RFI T-621 option A addressed the impact of the encroaching CDSM soldier piles on the north wall in slab in areas 3 and 4 by proposing to offset the face of concrete foundation wall by 0.1979' (2-3/8") into the structure. WOJV note the original response where it was acceptable to offset the foundation wall between B2 and B1 elevations but would have to transition back to design alignment between B1 and ground elevation however this transition back would not be possible as there are CDSM piles encroaching the full high of the foundation wall, with that WOJV is proposing the following possible solution, to continue the revised offset alignment between B1 and ground elevation however limiting it to an area between GL 1 and 2-3 (CDSM piles 1 to 21)full wall height , WOJV acknowledge the fact the PG&E transformer room need to remain at its current size but feel there may be some scope to slightly change the dimensions of the main switchgear room or the service corridor or both see exhibit B and exhibit C.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

As discussed in the meeting with TJPA, WOJV, Turner, AAI and WSP (07/22/13), the proposed solution to maintain the offset of the foundation wall up through Level B1 is acceptable to the Design Team subject to the following adjustments:

PG&E Transformer Vault (B1223/4) shall remain the same size and shift south by 2-3/8". Main Switchgear Room (B1222) will absorb the 2-3/8" wall shift south. Floor opening in NW corner of Main Switchgear Room will shift south 2-3/8" with wall. North Electrical Room (B1289) shall remain same size and shift down 2-3/8" (with electrical slab opening). Landscape Storage (B1288) will accommodate the 2-3/8" wall shift south. Fire Main POE (B1290) wall will move 2-3/8" south. Plumbing Intake Room (B1229) shall absorb the 2-3/8" foundation wall shift south.

Please also note that RFI 621 was on Area 3, not on 3 and 4 as indicated in RFI 621.1

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

This proposal if acceptable to offset the foundation wall would enable the contract reinforcement to be installed without the need for further modifications due to encroachment.
Please confirm if this option would be acceptable

T-0621.2 **BGP - CDSM Soldier Pile Encroachment Area 3** **Closed** **07/24/2013** **08/03/2013** **07/30/2013** **Potentially** ☐

From: Webcor Construction LP Ryan Burke **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please refer to RFI T-0621 Response Option B Responses #2 & #3.

The RFI response states that it is acceptable to move vertical wall rebar a maximum of ¾" as needed to avoid clashes with horizontal mat reinforcing. As the vertical reinforcing is #11 bar (1 3/8") and the mat reinforcing is #10 (1 ½"), in the worst case a mat reinforcing bar will clash with the vertical bar when the layout ends up with both bars installed on the same centerline. Please confirm that in this case, the reinforcing can be moved the 1 3/8" to avoid the clash.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Moving the foundation wall vertical rebar more than 3/4 inch is not acceptable. Clashes between foundation wall vertical rebar and mat rebar, if any, can be addressed moving the mat rebar up to 1-3/8 inches.

T-0621.3 **BGP - Area 3 North Wall Verts Clearance Near GL 2** **Closed** **01/27/2014** **02/06/2014** **01/31/2014** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Reference: RFI T-0621.1 and drawing S1-3201.

Due to the CDSM soldier pile encroachment, the area 3 North foundation wall reinforcement was moved 2-3/8" towards the center of the structure per RFI T-0621.1. During placement of a 4'-6" section (8 vertical bars) of the first lift of the foundation wall exterior vertical steel approximately 2'-0" west of GL 2, it was discovered that

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
1/29/2014 It is acceptable to omit the cross ties in the region depicted in the RFI provided that additional ties be provided elsewhere as follows:
Assume encroachment region measures L x h. For a distance equal to L/2 on both sides of the encroachment region, provide double the number ties over a height equal to 2 x h. Additionally, provide

there was 1/4" to 1" of clearance between the waterproofing and vertical bars. The concern is once the cross-ties are placed between the vertical bar and waterproofing, there would not be enough concrete coverage.

Please confirm if it is acceptable to omit the first 3 rows of cross-ties (24 total) in the area as described.

double the number of ties for a distance, L, and a height, h, directly above the encroachment. It is acceptable to secure the added ties to the wall horizontal reinforcing on the opposite side of the normally required ties, i.e. an even spacing increment is not required.

T-0622 **BGP- CDSM Soldier Pile Encroachment Area 4** **Closed** **06/26/2013** **07/06/2013** **07/07/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: Exhibits A - J

This RFI addresses the impact of the encroaching CDSM soldier piles (SP) on the north wall in slab area 4 as well as all levels of the encroachment into the foundation wall between CDSM piles 31 to 60 as well. Location Plan see exhibit - A
Exhibit - B ,C & J depict the location and degree in which the SP are encroaching

Option A
Webcor is proposing to change the alignment of the Concrete Foundation wall on the north elevation along gridlines A between gridlines 1 and 5 - 6 (CDSM piles 1 to 50)
The Concrete foundation wall which runs along gridline A between gridlines 1 and 5-6 would be offset into the structure by 0.1979' (2-3/8") the proposed Face of concrete Foundation wall would then be 2-3/8" off gridline A, this offset would enable the contract reinforcement to be installed without the need for further modifications to the reinforcement due to encroachment of the CDSM piles in concrete pour Areas 3 & 4. See Exhibit - J

Option B
WOJV proposal: (See Exhibit - B) Between CDSM piles 31-32 to 35 and 41-42 to 45-46 WOJV is proposing to decrease the specified 36" wall thickness to 33 5/8" to

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Option A

For Option A the proposed revision is acceptable, with the following conditions:

The Train Box design is restricted at the B2 Train Platform Level by the Rail Vehicle Kinematic Envelopes (RVKE). The B1 Lower Concourse Level is strictly controlled by space planning constraints, particularly minimum requirements for Public Utility rooms, service rooms and associated structural and service coordination.

The CDSM wall zone described in this RFI is outside of the RVKE, therefore at the B2 level the foundation wall face can be offset as proposed. However, at B1 Level, the offset will affect Utility Room and Service configurations.

If Option A is adopted, either:

1) Provided the foundation wall configuration and structural design permit, the offset should only occur in this area at the B2 Level and transition back to the original alignment on Gridline A before reaching the B1 Level.

OR

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

clear all the encroaching SP, originally this was a WR2 reinforcement area #11@6"oc EF vertically and would change to #11@5"OC the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on SE stamped Detail A/Sk.3 option 2 (Exhibit -E) Between CDSM piles 35 to 41-42 and 45-46 to 49 WOJV is proposing to decrease the specified 36" wall thickness to 33 5/8" to clear all the encroaching SP. This foundation wall area was originally a WR1 reinforcement area (#11@8"oc EF vertically) and would change to #11@6"OC this reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on SE stamped Detail A/Sk.1 (Exhibit - D). Between CDSM piles 49 to 60 the reinforcement would remain unchanged as per the Contract drawings. See Exhibit-G, H & I showing details of transition between modified reinforcement to contract reinforcement.

Either of these options if approved would be incorporated into the TG06 shop drawings
Please confirm if either of these options would be acceptable

2) Any offset to the foundation wall face at B1 Level will require adjustment to space planning, coupler layouts, structural / service opening coordination and potentially may need further negotiations with Public Utility Companies i.e. it is not acceptable to simply 'shave off' a couple of inches from a room at this level.

Note that all transitions are to be smooth and not stepped.

Option B

For Option B, proposed revision is acceptable however, we note the following:

1) Near gridline 4, move the proposed reinforcement width transition to west by a few feet so that uniform wall thickness can be achieved within the WR2 zone.

2) See Option B Comments 2 and 3 provided in response to RFI #T-0621.

The Design Team must be informed of the contractor's preferred approach prior to committing to shop drawings.

T-0622.1 **BGP - CDSM Soldier Pile Encroachment Area 4** **Closed** **08/13/2013** **08/23/2013** **08/22/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: Exhibits A & D

This RFI addresses the previous comments to RFI T-622 see exhibit - D.

The contractor preference approach is to use a modified option B originally outlined in RFI T-622

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1-) We have not received any formal information from the contractor regarding the reduction in the thickness of the waterproofing system mentioned in this RFI. Therefore, we cannot assess the impact of the change in waterproofing system thickness to the encroachment calculations presented in Exhibit C. Also, the calculations provided in this RFI seem to consider 2 inch thickness for the waterproofing

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Exhibit - A shows the revised Plan view with modifications made. Exhibit - C depict the degree in which the SP are encroaching in area 4.

Based on the response to previous RFI's the number of encroaching beams in area 4 has been reduced mainly due to the decreased thickness of the waterproofing system and the contractor willingness to use some of the construction tolerances in an effort to mitigate some of the smaller encroachments. This has resulted in only one area where modified reinforcement will have to be installed; Between CDSM piles 47 to 49 WOJV is proposing to decrease the specified 36" wall thickness to 33 5/8" to clear the encroaching SP number 48. This wall area was originally a WR1 reinforcement area (#11@8"oc EF vertically) and would change to #11@6"OC this reduction in foundation wall thickness would be compensated by reducing the rebar spacing.

In all other locations in area 4 the reinforcement would remain unchanged.

See Exhibit-B showing details of transition between modified reinforcement to contract reinforcement.

Please confirm if this solution is acceptable.

system, which is unchanged from previous RFIs.

AAI Comment: The below grade waterproofing Substitution Request accepted by the TJPA does not significantly change the overall dimension of the materials in the waterproofing system.

2-) As indicated in our response to RFI T-0626, if the contractor prefers to address small encroachment issues through acceptable construction tolerances, this approach is acceptable

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T-0622.2 **BGP - Wall Vertical Reinforcement Spacing in Area 4** **Closed** **10/10/2013** **10/20/2013** **10/18/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: RFI T-0622 and RFI T-0622.1.

The Area 4 wall vertical reinforcement has been installed different from the layout in RFI T-0622.1.

Please confirm the revised vertical wall reinforcement spacing as shown in the attached sketch is acceptable.

Note that the wall thicknesses remain the same as

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/16/20013
RESPONSE:
Revised vertical wall reinforcement spacing is acceptable as long as all vertical rebar have cross-ties. Please incorporate these changes into as-built drawings. Note that using tighter rebar spacing in foundation walls than required in construction drawings may negatively impact constructability at

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

approved in RFI T-0622.1.

Lower Concourse and Ground Levels where beam and slab rebar is embedded into the foundation walls.

T-0623 **BSE - Micropile Relocation - Overhead Obstructions** **Closed** **06/28/2013** **06/28/2013** **07/01/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Brandon Miller

REQUEST:

Reference : Attached Documents, Spec Section 31 63 33

Nine (9) micropiles under trestle span 3.3 in Zone 3 had to be relocated in the field due to overhead obstructions and a very confined working area. See attached chart and drawings for as-built relocation information.

Please confirm these relocations are acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Thornton Tomasetti does not object to moving the 9 micropiles presented in RFI as proposed.

Reminder for Contractor to verify/coordinate potential conflicts with future train platform walls.

T-0624 **BSE - Micropile E231 Relocation - Instrumentation Pipe - Overhead Obstructions** **Closed** **06/28/2013** **07/08/2013** **07/01/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Brandon Miller

REQUEST:

Reference: Attached Drawing, Spec Section 31 63 33

Micropile E231 under trestle span 3.4 in Zone 3 had to be relocated in field 5.5' north due to overhead obstructions. Blue piping with instrumentation wiring inside was directly in the way of the micropile.
See attached drawing for relocation information.

Please confirm this relocation is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Thornton Tomasetti does not object to moving micropile E231 as proposed.

T-0625 **BSE - Micropile E137 Relocation - Above Ground Equipment Obstruction** **Closed** **06/28/2013** **07/08/2013** **07/01/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Brandon Miller

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference: Attached Drawing, Spec Section 31 63 33

Micropile E137 in Zone 3 was installed 1' south of original location because it was in conflict with the de-sanding equipment. See attached drawing for relocation information.

Please confirm this relocation is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Thornton Tomasetti does not object to moving micropile E137 as proposed.

T-0626 **BGP- CDSM Soldier Pile Encroachment Area 5** **Closed** **07/02/2013** **07/12/2013** **07/10/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: Exhibits A - J

This RFI addresses the impact of the encroaching CDSM soldier piles (SP) on the north & south walls in slab area 5 as well as all levels of the encroachment into the foundation wall between CDSM piles 60 to 81 on the north elevation and 702 to 732 on the south elevation. For Location Plan see exhibit - A.

Exhibit - B, & C depict the location and degree in which the SP are encroaching

For this RFI, the combined layers of the water proofing system had been assumed to be 2" thick, which is subject to change, this may increase or decrease the number of encroaching piles depending on the thickness of the system used.

WOJV proposal North elevation on gridline A: (See Exhibit - B) Between CDSM piles 60 to 62 and 69 to 71 WOJV is proposing to decrease the specified 36" wall thickness to 33 5/8" to clear the encroaching SP 61 & 70, originally these were WR1 reinforcement area's #11@8"oc EF vertically and would change to #11@6"OC, the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on SE stamped Detail A/Sk.1 (Exhibit - D). Between CDSM piles 76 to 78-42, WOJV is proposing to decrease the specified 36" wall

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1-) It is not acceptable to transition foundation reinforcement width and/or vertical rebar spacing within sections where specified foundation wall reinforcement is "WR2" or where there is an embedded column per contract documents. Provide uniform reinforcement width and rebar spacing within these regions. The transitions can be acceptable at the ends of (or just outside) these regions. In Area 5, this comment applies near GL 8, North Wall.

2-) Per Exhibit D, encroachments for some piles seem very small (for example, pile 61). For small encroachments, a 'no remedy' approach can be followed as long as the actual construction is executed within the tolerances specified in the contract documents (see specifications for information on construction tolerances).

3-) Mock up specimen is being developed for a location where an embedded column is used within the foundation wall. Embedded columns include two layers of #11 rebar with 6" spacing. The contractor proposes to use #11@5" in lieu of WR2 foundation wall reinforcement (#11@6") at a number of locations to remedy encroachment issues. If this option is adopted, the tightest foundation wall reinforcement will become #11@5". Revise the foundation wall mock up specimen shop drawings to include #11@5" single

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

thickness to 33 5/8" to clear the encroaching SP 77. This foundation wall area was originally a WR2 reinforcement area (#11@6"oc EF vertically) and would change to #11@5"OC this reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on SE stamped Detail A/Sk.3 option 2 (Exhibit - E).

WOJV proposal on the South elevation: (See Exhibit - B & F) Between CDSM piles 704 to 706, WOJV is proposing to decrease the specified 36" wall thickness to 33 5/8" to clear the encroaching SP 705, originally this was a WR1 reinforcement area #11@8"oc EF vertically and would change to #11@6"OC, the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on SE stamped Detail A/Sk.1 (Exhibit - D).

In all other areas without CDSM encroachment issues the reinforcement will remain unchanged as per the Contract drawings.
See Exhibit-G, H, I & J showing details of transition between modified reinforcement to contract reinforcement.
These solutions if approved would be incorporated into the TG06 shop drawings.
Please confirm if these solutions would be acceptable.

layer foundation wall vertical reinforcement.

4-) Foundation wall rebar WR2 and embedded columns are designed using vertical rebar spacing of 6" (see construction documents). We note that proposed changes to this spacing can negatively impact the constructability of the foundation wall joints at mat, lower concourse and ground levels (e.g, installing beam rebar, foundation wall dowels at the mat). An example was provided with our response to RFI T-0621.

T-0626.1 **BGP - CDSM Soldier Pile Encroachment Area 5** **Closed** **08/13/2013** **08/23/2013** **08/23/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: Exhibits A & D

This RFI addresses the previous comments to RFI T-626 see exhibit - D.

Exhibit - A shows the revised Plan view with modifications made. Exhibit -C depict the degree in which the SP are encroaching in area 5.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1-) See our response to RFI T-0622.1.

2-) Revised reinforcement detail near GL 8, North wall is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Based on the response to the previous RFI the number of encroaching beams in area 5 has been reduced mainly due to the decreased thickness of the waterproofing system and the contractor willingness to use some of the construction tolerances in an effort to mitigate some of the smaller encroachments. This has resulted in only one area where modified reinforcement will have to be installed this is Between CDSM piles 73-74 to 78 on the north wall elevation WOJV is proposing to decrease the specified 36" wall thickness to 33 5/8" to clear the encroaching SP number 77. This wall area was originally a WR2 reinforcement area (#11@6"oc EF vertically) and would change to #11@5"OC this reduction in foundation wall thickness would be compensated by reducing the rebar spacing.

In all other locations on the north and south walls of area 5 the reinforcement would remain unchanged.

See Exhibit-B showing details of transition between modified reinforcement to contract reinforcement.

Please confirm if this solution is acceptable.

T-0627 **BGP- CDSM Soldier Pile Encroachment Area 6** **Closed** **07/03/2013** **07/13/2013** **07/11/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: Exhibits A - J

This RFI addresses the impact of the encroaching CDSM soldier piles (SP) on the north & south walls in slab area 6 as well as all levels of the encroachment into the foundation wall between CDSM piles 81 to 104 on the north elevation and 679 to 703 on the south elevation. For Location Plan see exhibit - A.

Exhibit - B, & C depict the location and degree in which the SP are encroaching

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is not acceptable to transition foundation reinforcement width and/or vertical rebar spacing within sections where specified foundation wall reinforcement is "WR2" or where there is an embedded column per contract documents. Provide uniform reinforcement width and rebar spacing within these regions. The transitions can be acceptable at the ends of (or just outside) these regions. In Area 6, this comment applies near GL 9, South Wall. Solutions at all other locations are acceptable. However, as indicated in response to RFI T-0626, use of #11@5" for foundation wall vertical reinforcement

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

For this RFI, the combined layers of the water proofing system had being assumed to be 2" thick, which is subject to change this may increase or decrease the number of encroaching piles depending on the thickness of the system used.

WOJV proposal North elevation on gridline A: (See Exhibit - B) Between CDSM piles 82 to 84 and 102 to 105 WOJV is proposing to decrease the specified 36" wall thickness to 33 5/8" to clear the encroaching SP 83 & 103, originally these were WR1 reinforcement area's #11@8"oc EF vertically and would change to #11@6"OC, the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on SE stamped Detail A/Sk.1 (Exhibit - D).

WOJV proposal on the South elevation: (See Exhibit - B & Exhibit - F) Between CDSM piles 680 to 683, WOJV is proposing to decrease the specified 36" wall thickness to 33 5/8" to clear the encroaching SP 681 & 682, originally this was a WR1 reinforcement area #11@8"oc EF vertically and would change to #11@6"OC, the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on SE stamped Detail A/Sk.1 (Exhibit - D).

Between CDSM piles 695 to 697, WOJV is proposing to decrease the specified 36" wall thickness to 33 5/8" to clear the encroaching SP 696. This foundation wall area was originally a WR2 reinforcement area (#11@6"oc EF vertically) and would change to #11@5"OC this reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on SE stamped Detail A/Sk.3 option 2 (Exhibit -E).

In all other areas without CDSM pile encroachment issues the reinforcement will remain unchanged as per the Contract drawings.

See Exhibit-G, H, I & J showing details of transition between modified reinforcement to contract reinforcement. These solutions if approved would be incorporated into the TG06 shop drawings.
Please confirm if these solutions would be acceptable.

can negatively impact constructability.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0627.1	BGP - CDSM Soldier Pile Encroachment Area 6	Closed	08/13/2013	08/23/2013	08/23/2013	Potentially	☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: Exhibits A & D

This RFI addresses the previous comments to RFI T-626 see exhibit - D.

Exhibit - A shows the revised Plan view with modifications made. Exhibit -C depict the degree in which the SP are encroaching in area 6.

Based on the response to the previous RFI the number of encroaching beams in area 6 north elevation has been reduced mainly due to the decreased thickness of the waterproofing system and the contractor willingness to use some of the construction tolerances in an effort to mitigate some of the smaller encroachments. This has resulted in no modifications now required to the contract reinforcement on the north elevation and changes have been made to the south elevation in line with response to the original RFI T-626.

See Exhibit-B & E which shows details of transition between modified reinforcement to contract reinforcement on the south elevations.

Please confirm if this solution is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1-) See our response to RFI T-0622.1.

2-) Revised reinforcement detail near GL 9, South wall is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0627.2	BGP - CDSM Soldier Pile Encroachment: SP696 & SP104 in Area 6	Closed	10/10/2013	10/20/2013	10/18/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

During Shimmick's (SCCI) field layout of the CDSM encroachment in Area 6, the followIng extent of encroachment has been moved:

-For encroachment at SP696, SCCI moved the East extent to SP694, this is due to SP695 encroaching during the buried bar layout. This accounts for 4' additional wall length with 33-5/8" due to CDSM encroachment.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/16/2013
RESPONSE:
The deviations indicated in this RFI from the RFI response T-627.1 are acceptable. Please incorporate these changes into as-built drawings.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

- For encroachment at SP104, the west extent of encroachment was moved to SP102. The rebar option 1 for SK1 with #11 rebar @ 6" OC will be used from SK102 to the West Extent of WR2 at Gridline 11

Please confirm the deviation from RFI response to T-0627.1 is acceptable.

T-0628 **BGP-CDSM Soldier Pile Encroachment in Area 7** **Closed** **07/03/2013** **07/13/2013** **07/11/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Webcor Construction LP Michael Spillane

REQUEST:

Reference Documents: Exhibits A - J

This RFI addresses the impact of the encroaching CDSM soldier piles (SP) on the north & south walls in slab area 7 as well as all levels of the encroachment into the foundation wall between CDSM piles 104 to 134 on the north elevation and 649 to 679 on the south elevation. For Location Plan see Exhibit A.

Exhibit B, & C depict the location and degree in which the SP are encroaching

For this RFI, the combined layers of the water proofing system had being assumed to be 2" thick, which is subject to change this may increase or decrease the number of encroaching piles depending on the thickness of the system used.

WOJV proposal North elevation on gridline A: (See Exhibit B) Between CDSM piles 102 to 105 WOJV is proposing to decrease the specified 36" wall thickness to 33 5/8" to clear the encroaching SP 103 & 104, originally these were WR1 reinforcement area #11@8"OC EF vertically and would change to #11@6"OC, the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on SE stamped Detail A/Sk.1 (Exhibit D).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is not acceptable to transition foundation reinforcement width and/or vertical rebar spacing within sections where specified foundation wall reinforcement is "WR2" or where there is an embedded column per contract documents. Provide uniform reinforcement width and rebar spacing within these regions. The transitions can be acceptable at the ends of (or just outside) these regions. In Area 7, this comment applies near GL 12, South Wall. Solutions at all other locations are acceptable. However, as indicated in response to RFI T-0626, use of #11@5" for foundation wall vertical reinforcement can negatively impact constructability.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

WOJV proposal on the South elevation: (See Exhibit B & Exhibit F) Between CDSM piles 657 to 659 & 677 to 680, WOJV is proposing to decrease the specified 36" wall thickness to 33 1/2" & 33 5/8" respectively to clear the encroaching SP 658 & 678, Originally these were a WR1 reinforcement area #11@8"OC EF vertically and would change to #11@6"OC, the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on SE stamped Detail A/Sk.1 (Exhibit D). Between CDSM piles 665 to 667 & 673 to 677, WOJV is proposing to decrease the specified 36" wall thickness to 32 15/16" & 33 5/8" respectively to clear the encroaching SP 666, 674 & 675. This foundation wall area was originally a WR2 reinforcement area (#11@6"OC EF vertically) and would change to #11@5"OC this reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on SE stamped Detail A/Sk.3 option 2 (Exhibit E).

In all other areas without CDSM pile encroachment issues the reinforcement will remain unchanged as per the Contract drawings.

See Exhibit G, H, I & J showing details of transition between modified reinforcement to contract reinforcement.

These solutions if approved would be incorporated into the TG06 shop drawings.

Please confirm if these solutions would be acceptable.

T-0628.1 **BGP - CDSM Soldier Pile Encroachment Area 7** **Closed** **07/16/2013** **07/26/2013** **07/23/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: Exhibits A & B

This RFI addresses the previous comments to RFI T-628 see exhibit - A.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The proposed revision to the foundation wall reinforcement near Gridline 12 is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Exhibit - B shows the revised Plan views with modifications made.

Please confirm if this solution is acceptable.

T-0629 **BGP - Clear Cover on Concourse Slab** **Closed** **06/28/2013** **07/08/2013** **07/01/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Drawing S1-3500, Spec Section 03 30 20, 03 20 00

Detail 1 on S 1-3500 calls out for 3/4" clear cover on top and bottom of the lower concourse slab. ACI codes 301 and 318 specify 3/4" minimum cover for #11 bars and smaller, in slabs that are not exposed to extreme environment. Even though lower concourse is designed to eventually be enclosed with the rest of the superstructure, it will be exposed to the weather elements during the construction of the project. With that said, inadequate cover over rebar can cause plastic settlement cracking. SCCI is concerned that the 3/4" clear cover in the concourse slab could cause this plastic settlement cracking.
Please confirm that the clear cover on the lower concourse slab is 3/4" minimum?
Please specify what is the maximum clear coverage of the lower concourse reinforcement?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Concrete cover is for protection of reinforcement against weather and other effects. The cover is prescribed for 3 classes of structural members in ACI 318, a) concrete cast against and permanently exposed to earth, and b) concrete exposed to earth or weather, and c) concrete not exposed to weather or in contact with ground. The concrete slab at the lower concourse level, even though will temporarily exposed to weather during construction like any other building structure, is usually categorized as type c condition, which requires a 3/4" minimum cover per ACI 318, Section 7.7.

The statement of "inadequate cover over rebar can cause plastic settlement cracking" is not totally correct, as the ratio of cover to reinforcing bar diameter is only one of many factors that contributes to the plastic settlement cracking. The amount of settlement tends to be proportion to the depth of concrete, i.e., the deeper the section the greater the settlement. Hence, plastic settlement usually occurs in a much thicker slab with much heavier top rebars. With only a 12" thick slab at the lower concourse level, we don't anticipate that plastic settlement cracking becomes a problem, as long as good construction practices are follow. Those practices include, but not limited to the following:

Use mixes with lower bleeding characteristics.

Wet the subgrade or formwork before placing concrete

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

to avoid excessive water loss from the base of the concrete.

Set all formwork accurately and rigidly so that it will not move during concrete placement

Place concrete in the deep sections (beams or columns) first and let it settle prior to placing and compacting the top layers (ensuring two layers blend together)

Fully compact the concrete

Follow the requirements of hot weather concrete placement specified in the Specifications.

Cure the concrete promptly and properly.

The maximum cover should be in accordance with the allowable tolerance per ACI 117 as specified in the Specifications.

We anticipate that SCCI will develop a mix design and employ proper construction technique to ensure that the plastic settlement shrinkage will not occur lower concourse slab and mat.

T-0630 **BGP - Mat Slab Key Way Waterstops Installation** **Closed** **06/28/2013** **07/08/2013** **07/04/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Attached Photos, Spec Section 03 30 20

SCCI is proposing to leave the formed key surface in the mat slab as a formed finish to aid in the bonding of the hydrophilic waterstops to the concrete. With a specified 1/4" amplitude on the concrete surface, the bond between the concrete and the waterstop system decreases. The remainder of the construction joint will have stayform in place which generates a roughened surface. Please see

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Specification section 03 20 00 2.5.C addresses this topic and requires a reasonably smooth finish at surfaces which are to receive waterstops. 2.5.C also requires roughened surface be leveled with 2-part epoxy per manufacturer's recommendations. Leaving the vertical surface indicated in the RFI as a formed finish will be acceptable provided the finish to receive the waterstop is reasonably smooth and meets the installation surface requirements of the hydrophilic

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

attached photos that high light the area which will be formed finish.
Please advise if this is acceptable?

waterstop manufacturer. The hydrophilic waterstop is to be installed on surfaces prepared in accordance with the manufacturer's instructions.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0631	BGP - Mat Slab Reinforcing Conflict with Micropiles	Closed	07/01/2013	07/11/2013	07/12/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Drawing S1-2022 Thru S1-2031

The typical mat slab reinforcing designed to be installed at 8" O.C.E.W. for the bottom and top mats. The micropile layout also consists of a uniformed spacing and at some locations has been adjusted for conflicts or for other purposes, example RFI 490. Should the typical mat slab reinforcing when laid out at 8" O.C.E.W. or some other reinforcing designed within the mat slab conflict with the micropile asbuilt, is it acceptable to displace the reinforcing from the designed spacing layout such that it is repositioned to either side of the micropile? Additionally, please confirm if reinforcing in direct contact with the micropile is acceptable? Should the displacement of the reinforcing to either side of a micropile not be acceptable please provide direction.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Typical and additional mat reinforcing bars (flexural steel) and mat pit reinforcing bars may be shifted in plan up to +/- 4" from the typical spacing of 8" o.c.e.w. where the typical spacing would result in a conflict between the flexural steel and the micropile. Before making such a shift, the contractor shall verify that said shift will not cause unforeseen conflicts that impact the placement of column dowels, mat headed shear reinforcement, or any other mat or wall reinforcement detailing. Where such a shift will impact the placement of other reinforcement, contractor shall not shift the mat bar out of typical spacing, and instead may resolve the conflict by either of the following methods:

a) Treat the micropile obstruction sim to a typical opening per the Typical Slab Opening Detail found on 1/S1-3501 (i.e. add 2 bars of same dia and grade as the bar being interrupted, one to either side of the conflicting micropile).

b) Shift the conflicting bar only locally, up to +/- 4" from the typical as permitted above, splicing back to typical spacing (with non-contact splice either side of micropile) as required to avoid any conflicts with other mat reinforcement that may occur due to the shift.

Mat rebar shall not be in direct contact with the micropile or gage steel boot that functions as part of the waterproofing assembly, but rather achieve min 1.5" clear btwn rebar and micropile steel. Refer to 2/A1-8711 for waterproofing assembly info.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0632	BGP - Geothermal Field 7 & 8 Manifold Riser Layout	Closed	07/02/2013	07/12/2013	07/09/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Attached Photos

The initial geothermal riser/manifold layout for Fields 7 & 8

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is not acceptable to locate the risers for fields 7&8 as suggested between soldier piles 172-173-174. Riser for field 7 can be located between piles 174 and

placed the field 7 & field 8 risers between soldier piles 176-177 and 177-178 respectively. To avoid conflicts with the riser install and the temporary 1st bridge, is it acceptable to move the field 7 riser to the CDSM wall panel between piles 172 and 173 and the field 8 riser to the CDSM wall panel between piles 173 and 174? See attached photos. Additionally, SCCI is looking to relocate the temperature probe to the CDSM wall panel between soldier pile beams 171 and 172.
Is this acceptable? Please advise.

175. Riser for field 8 can be located between piles 175 and 176.

It is not acceptable to re-locate temperature probe pipe between 171 and 172. It is acceptable to locate the probe east of risers 7 and 8 between soldier piles 178 and 179.

T-0633 **BGP - ASI#104 Clarifications** **Closed** **07/03/2013** **07/13/2013** **07/26/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: ASI 104s

SCCI is in receipt of ASI #104 on June 25th, 2013 in CR#T-071. Please clarify the following:

1) Per Sheet S-2202 to S-2211, the additional internal walls at the concourse are shown to be in solid line, for Zone 2-7, 10-11. Note 7 on S1-2022 refers us to the architectural drawings for CMU and concrete partition layout dimensions, joint locations, and CMU thickness. However, the corresponding Architectural drawings issued in ASI #104 for wall at concourse (A-2222 and A-2223), only depicts changes in Zones 2 and 3.

a) A-2222 and A-2223 depicts the revised concourse walls to be RCW- please confirm that the internal concourse walls are not in TG-06 scope and additional scope to TG-06 contract will only be the additional couplers for added wall.

b) Please confirm that there are no internal walls to be constructed in TG06's scope at concours level.

c) Please confirm that the internal concourse walls shown as solid lines in drawing S-2022 to S-2211 are supposed to be shown as 'dotted' or 'ghost' lines in ASI #104.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See below GM/TT comments. WOJV comments included.

1.

a. WOJV to confirm this item.
JT/WOJV - Confirmed.

b. WOJV to confirm this item.
JT/WOJV - Confirmed, same as 1a.

c. We assume the RFI means sheet range starting with S1-2202 and not S-2022. These lower concourse partition walls are supposed to be dashed. WOJV to confirm these are NOT part of the TG06 package.
JT/WOJV - Price all internal walls below the concourse level.

d. WOJV to confirm this item.
JT/WOJV - Provide dowels for all CMU walls shown on the concourse level and below.

e. Sheets A1-2224 through A1-2231 have been issued with 100%CD Phase 1 documentation.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

d) In multiple drawings (e.g: S1-2204), at the middle top of the page, the word "Future" has been deleted. Original drawings show "Future CMU walls, TYP". ASI #104 structural drawings deleted the word "Future" . Please clarify if the CMU walls at the concourse are in TG06's scope.

e) Please issue revised Architectural drawings for Zone 4-Zone 11 (A2224-2231, revised) with the additional RCWs layout for the wall plan at concourse

2) Per S1-2210 revised, a new note states: "Coordinate w/ manufacturer shop drawings for extent of beams". Please clarify which manufacturer SCCI is to coordinate with, or provide dimensions

3) ASI #104 issued new "Slab Edge Plan" A2842, A2843 and A2847 for Zone 2, 3 and 7. The new drawings depict the locations of MEP sleeves that were not shown in previous drawings.

a) SCCI has not received any revisions to concourse plumbing drawings depicting these changes. The original plumbing drawings do not correspond to the location of the sleeves/blackouts shown in the new Architectural drawings A2842, 2843, 2847. Please verify which drawings SCCI needs to utilize to layout the sleeves/openings.

b) Please issue Architectural drawings with sleeves/blackouts locations at the reminders of the zones.

4) ASI #104 issued revised electrical drawings E1-2202 to E1-2204 that changes the layout ofthe electrical rooms. TG06 contract scope includes the installation F15 junction boxes to be terminated in designated electrical rooms.

a) Please provide revised detailed drawings on the electrical room layout (E1-3201, 3202).

2. "manufacturer" refers to cooling tower manufacturer as the support framing is labeled for the cooling tower. JT-WOJV - An MEP subcontractor is projected to awarded in March 2014. Please remit an RFI isolating the details of the cooling tower pier, dimensions, etc.
3.

a. Slab edge plans issued for ASI#104 are coordinated with updated plumbing background drawings.

b. Slab edge plans for the remainder of the Lower Concourse Level have been issued with 100%CD Phase 1 documentation.

4. Please refer to attached sketches SKE-01-3202,SKE-01-3201 and SKE-02-3201 for electrical room layouts.

T-0633.1 **BGP - 100% CD Phase 1 Documentation** **Closed** **08/27/2013** **09/01/2013** **09/11/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please reference CR T-071 - ASI 104 - Below Grade Modifications and RFI T-0633.

As per coordination meeting on 08/26/2013, to discuss discrepancies in ASI #104, the architectural drawings for Zone 4 thru Zone 11 (A1-224-2231, A1-2844-2846, A1-2848-2851) are not included in ASI 104. The architectural drawings are critical for SCCI's coordination and pricing of interior wall layout on the concourse level in conjunction with the corresponding structural drawings released in CR T-071 - ASI #104. Although, the design team provided their response to these discrepancies in RFI T-0633 by referencing "100% CD Phase 1 Documentation," the drawings have yet to be released for construction.

1. As per request by the design team, please release the following most-up-to date drawing sheets via this RFI : A1-2224 - 2231, A1-2844 - 2846, A1-2848 - 2851.
2. Please confirm the aforementioned drawings are to supersede current drawings in trade group package TG06.0.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
9/11/2013
RESPONSE:
The attached SKAs update the Architectural Drawings indicated on RFI T-0633.1

SKAs-2825 to 2830 based on A1-2224 to A1-2231 Wall Plans

SKAs- 2831 to 2834 based on A1-2844 to A1 -2847 Slab Edge Plans

SKA-2835 to 2836 based on A1-2850 to A1-2851 Slab Edge Plans Although requested in the RFI, drawing A1-2848 does not exist in the drawing set.

The information contained in the above noted SKAs supersedes the above noted Wall Plans and Slab Edge plans.

T-0634 **BGP - Mass Concrete Placing Temperature** **Closed** **07/08/2013** **07/18/2013** **07/18/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Spec Section 03 30 20, Attached Letter

Please reference attached CTL Group letter dated 7.3.2013, Mat Slab Mock-Up thermal monitoring graph, Mat Slab Mock-Up thermal monitoring sensor locations sketch, Mat Slab CEMEX concrete tags and BOP spec section 03 30 20.3.5.B. Shimmick proposes the Maximum concrete placing temperature for Mass Concrete be increased to 80 degrees Farenheit.
Is this acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractor-proposed increase in maximum placement temperature is acceptable.

T-0635 **BGP - REBAR - Clarification to Maximum Allowable Rebar Clear Cover** **Closed** **07/09/2013** **07/19/2013** **07/17/2013** **Potentially** ☐

From: Webcor/Obayashi Joint Venture Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Drawing S1-3201, Spec Section 03 30 20

RFI T-0608 shows detail of transition between modified reinforcement to contract reinforcement and shows that the internal wall face location of the concrete wall remains as shown in the contract drawing.

RFI T-0448.5 proposes to decrease the rebar configuration to accomodate the thinnest wall section to be 33-1/8" to clear all the encroaching SPs.

At some locations, the rebar cover on the vertical wall rebar will exceed 2" Typ as shown in detail 1/S 1- 3201.

The worst case scenario in Area 1 & 2 will be at SP 737(lower), where the beam is 3.6" Too Far from the allowable horizontal alignment per TG03's contract Spec 31 56 13-3.3A.
In this case, the rebar cover will be: 2-7/8" (from the difference between 36" and 33-1/8") +2" (allowable rebar cover) +5-3/8" (0.64' offset - 0.1875' allowable waterproofing thickness) = Total cover of 10-1 /4"

Please confirm that the maximum rebar clear cover (unreinforced concrete) of up to 10-1/4" between the CDSM wall and the Vertical Outside Face rebar in Area 1 & 2 is acceptable

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1-) We cannot make a determination based on the clear cover information provided for the worst case location. Information should be provided for each individual pile within an area (or multiple areas). One way to present this information would be in tabular form similar to the wall encroachment information provided in other RFIs.

2-) Provide clear cover information using the foundation wall reinforcement location as indicated in contract drawings, see our response to RFI T-0609.

3-) Provide consistent allowance for waterproofing in clear cover calculations. For example, in RFI T-0609 2" was assumed whereas in RFI T-0635 2 ¼" is assumed.

T-0636 **BGP - Micropile and Mat Slab CJ Conflict** **Closed** **07/09/2013** **07/19/2013** **07/12/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu

To: Turner Construction Compan Gary Krutsch

Answered By: Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Drawing S1-3001, Attached Sketches

See attached sketches of the Mat slab joint between S101 /S103 and S102/S 104. SCCI has discovered conflicts between multiple micro piles and the CJ between noted two mat slab areas. SCCI will not be able to construct the joint as shown Detail 2 on CD S 1-3001 , with the micro piles in the way. SCCI proposes to modify the mat slab construction joint, to clear the conflicting micro piles, as

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It will be acceptable to modify the mat construction joint as proposed in the RFI.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

shown
on the attached sketches.
Is this acceptable?

T-0637 **BGP - CDSM Wall Encroachment Rebar Details at Spandrel and Concourse Neede** **Closed** **07/15/2013** **07/25/2013** **07/26/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please refer to RFI response T-0608 and T-0448.5.

The approved typical CDSM encroachment wall reinforcement detail at the SW corner, West of GL 6 found in RFI T-0608 does not include the concourse level spandrel beam/wall interface.

Please provide a detail depicting an acceptable configuration at the concourse level which includes the spandrel beam/wall interface.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The details provided in RFIs T-608 and T-448.5 were developed by WOJV.

Submit RFIs regarding CDSM encroachment at spandral beam/wall interface for specific locations similar to prior encroachment RFIs. Include detailed backup and proposed solutions.

T-0638 **BGP - Mat Slab U Bars in Modified WR-2 Reinforcement Areas** **Closed** **07/16/2013** **07/26/2013** **07/23/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: Exhibits A - E

The contractor has highlighted a potential conflict with the uses of #11@5"OC vertically at the areas where CDSM piles at encroaching in WR-2 reinforcement areas.

Exhibit - A is a vertical cross section through the modified WR-2 area
Exhibit - B is a cross section showing the potential conflict with verts @ 5"OC
Exhibit - C is a cross section showing the original design with verts @ 6"OC
Exhibit - D & E depicts possible solutions

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Either of the options presented in this RFI are acceptable where the #11@5" rebar is used. The "candy cane shaped bar" should include 180-deg standard hook (refer to detail 4/S1-3001 in contract drawings). Note that this RFI seems to focus on the constructability of the U-bars. However, if the top mat rebar was projected on Exhibits D or E, clashes with the 5" spaced foundation wall vertical rebar (inner face) can also be seen."

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

One of the proposed solutions Exhibit - D is to have the "U" bars at the contract width of 7.41"(6"+#11 bar dia) and the vertically rebar @ 5" OC and the U bars moves horizontally to avoid any conflicts with the mat slab reinforcement.

Another possible solution is to change the "U" bars to a bar with a standard hook "candy cane shaped bar" see Exhibit - E

Please confirm if either of these options would be acceptable

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T-0639 **BGP - Weld Access Hole repair** **Closed** **07/16/2013** **07/26/2013** **07/19/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: S1-3003, Spec Section 05 50 10

Please reference attached Pile Sleeve pictures, shop drawings, and product data/MSDS for Bituthene Liquid Membrane and Sikaflex Ia. Weld access holes (see photos) allow us to weld the penetration
sleeves together in a continuous vertical weld (see shop drawings). SCCI proproses sealing access holes prior to pouring the mat slab.
SCCI suggests sealing access holes on the piezometer lower rings (see Photo #1) with Bituthene Liquid Membrane Coating (see attached data) prior to installing the Preprufe Detail Patch per Option C of Grace substitution. SCCI suggests filling all other access holes (typ. trestle piles & monitoring instruments) in the intermediate rings (see Photos #2 & #3) with Sikaflex Ia Premium Sealant (see attached data & MSDS) prior to mat slab pour.
Please confirm this is an acceptable solution.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

All contractor means and methods holes in all locations of the steel sleeve elements are to be welded watertight closed. The waterproofing details are to follow the waterproofing manufacturer's instructions.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0641	BGP - Level D Internal Bracing Removal	Closed	07/16/2013	07/26/2013	07/19/2013	Potentially	☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Document: Exhibit A

Level D internal bracing removal in areas where walers are not connected together.

Due to the curing requirements of the concrete in the mat slab, the contractor is proposing to have a "hopscotch" sequence to the mat slab pours, as an effort to mitigate delays. The removal of the level D bracing will follow the pour sequence, however as shown in Exhibit A which is a north wall elevation, what is the maximum clear distance horizontal between the construction joint in the mat pours and the next level D internal bracing strut/waler. This becomes an issue when trying to schedule the bracing removal with the mat and wall pours. WOJV understands that this is for areas where the walers are not connected together.

Once the parameters for the bracing removal have been established the contractor will create a plan and sequence for each pour area on the removal of the internal bracing where the walers have being connected together.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This work should be coordinated between the internal bracing designer and the structural engineer.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0642	BSE - Steel Plates at CDSM Piles 167-168	Open	07/17/2013	07/27/2013	07/18/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Stacy Wilson

Co-Author:

REQUEST:

Reference: Spec Section 31 56 13

During leak grouting at level 5 excavation, a section of the CDSM wall panel between soldier piles 167-168 became dislodged, resulting in a high volume leak. In an effort to stabilize the damaged CDSM panel and stop the leak, BBII installed a steel road plate between soldier piles 167-168 and injected grout behind it.

BBII is concerned that removing the plate will likely cause the panel to become destabilized and could reopen the flow of water. BBII surveyed the face of the plate and found that at pile #167, the face of plate is 1/2" out from

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

W/O to resubmit once the encroachment requirement is determined.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

the theoretical face of pile, and at pile #168 the plate is 1-1/2" out from the theoretical face of pile. BBII proposes leaving the steel plate in place to maintain integrity of the CDSM panel. The edges of the plate may be grouted to provide a smooth transition to the CDSM wall for waterproofing.

Please confirm this is acceptable.

T-0643 **BGP - ASI#104 - A1-2122 Added Line** **Closed** **07/17/2013** **07/27/2013** **07/19/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Drawing A1-2122, ASI#104

Please find attached A1-2122 issued in ASI#104. Please clarify what do the highlighted lines represent.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The highlighted line indicated in this RFI, is a 3" concrete topping with slope that will added later. It is not part of the Below Grade Package and should not have been shown on this Wall Plan Drawing. The attached SKA-2771 shows A1-2122 without the topping line.

T-0644 **BGP - Plumbing Scope Clarification ASI 104** **Closed** **07/17/2013** **07/27/2013** **07/26/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Shimmick Construction Comp Ben Gordon **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Drawing P1-6001, Spec Section 22 13 01

See attached marked up Rev 0 and Rev 1 Drawings P 1-6001. Pl-6001 Rev 1 is a revision per AST 104. Rev 1 of the noted drawing does not have any "for reference only" notations in the details.

Is the intent of the Designers to significantly change the scope of TG06 work?

Please clarify the scope of work, i.e. applicable and non

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

As per the attached drawing:

1. Detail 1, 2 and 5 of drawing sheet P1-6001 (ASI #104) depict typical standpipe details. These details are not applicable to the TG06 package.
2. Detail 4/P1-6001 (ASI #104) depicts a change in the floor clean-out cover. This detail is applicable to the TG06 package where the floor drains are either at the concourse and mat slab level and the specific detail is called-out for "floor cleanout detail."
3. Detail 6/P1-6001 is applicable if below the

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

applicable details of the CD P1-6001 for the TG06 package.

concourse slab. Typ.
4. Detail 11 and 12 of sheet P1-6001 show sump pump details titled "Detail At Mech Pump Room B2230 and B2442." The applicable scope to TG06 includes embeded pipe in the mat slab or added pony wall, pony wall and pit opening.

WOJV welcomes a page-turner with SCCI for any future clarifications.

T-0645 **BGP - Door Opening Size at Emergency Electrical Room** **Closed** **07/18/2013** **07/28/2013** **07/19/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: SKA-2748, Spec Section 03 30 20

A new door opening has been added to the Northeast comer of the Emergency Electrical Room B2280 per drawing "SKA-2748" included with the response to RFI # T-0612. There are no dimensions provided for this new door opening on any of the sheets included in RFI # T - 0612.

Please confirm door width to be 3'-5". Reference attached drawing "SKA-2748"

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The door opening is 3'-5" flanked by standard 1'-4" X 1'-4" piers, as shown attached SKA-2774 which supersedes SKA-2748 from RFI T-0612 BGP.

T-0646 **BGP - Wall Pier Thickness - 3'5" + 3'5" Openings - Area 3 & 4** **Closed** **07/19/2013** **07/29/2013** **07/26/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Drawing A1-9215, S1-9050, Spec Section 03 30 20

There appears to be conflicting dimensions for the concrete interior wall pier located near gridlines 3.5/C.3 as shown in the attached drawing Al-9215. Contract drawing Al-9215 details the pier to be 2'0" wide by 1 '4" thick.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The 2 piers identified in the RFI sketch are 1'-6" thick as per schedule on S1-9050. The north side of the piers along the corridor shall remain flush with adjacent walls.

See attached SKA-2783. The pier thickness dimensions have been removed from this architectural

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

However, based on criteria for wall piers as shown on S1-9050, the wall pier should be 2'0" wide by 1 '6" thick.

Please confirm if the two wall piers identified in the attached A 1-9215 should be 1 '4" thick or 1 '6" thick.

If the wall is to be 1 '6" thick, please provide direction as to which side of the wall pier is to be maintained flush with adjacent wall.

drawing as the pier dimensions are obtained from S1-9050 as noted above.

T-0647 **BGP - Area 3 Clear Cover to the Vertical Reinforcement on the Foundation Wall** **Closed** **07/19/2013** **07/29/2013** **07/26/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: Exhibits A - G

Further to response to RFI T-609 (see exhibit - F) this RFI shows the areas of foundation wall in pour area 3, north and west walls which will have greater than 6" of clear cover to the vertical reinforcement for location plan see exhibit - A & C

Exhibit - B & C depict the amount and location of the foundation walls which will have greater than 6" of clear cover to the vertical reinforcement

Area of concern is the west wall along gridline 1 where the alignment of the foundation wall was moved by 3-1/8" per RFI T-576 see exhibit - E due to encroachment issues on CDSM piles see exhibit - G for information on the encroaching piles in this area as a result of this move there are large areas which will have greater than 6" of clear cover.

This RFI assumes that the solution to encroachment on the north wall Area 3 RFI T-621.1 (see exhibit D) is to move the wall 2-3/8" to offset the encroachment is acceptable.

Please confirm that the clear cover between the waterproofing system and the vertical reinforcement

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The clear cover between the waterproofing system and vertical reinforcement as presented in Exhibit B of this RFI is acceptable. We note that the reference to RFI T-0448.5 in Exhibit B in is incorrect. RFI T-0448.5 is not relevant to this zone.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

outlined at these locations is acceptable

T-0648 **BGP - Area 1 Clear Cover to the Vertical Reinforcement on the Foundation Wall** **Closed** **07/19/2013** **07/29/2013** **07/26/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: Exhibits A - G

Further to response to RFI T-609 (see exhibit - F) this RFI shows the areas of foundation wall in pour area 1, south and west walls which will have greater than 6" of clear cover to the vertical reinforcement for location plan see exhibit - A & C

Exhibit - B & C depict the amount and location of the foundation walls which the will have greater than 6" of clear cover to the vertical reinforcement

Areas of concern are the west wall along where the alignment of the foundation wall was moved to per RFI T-576 see exhibit - E due to encroachment issues on CDSM piles, however this has resulted in large areas which will have greater than 6" of clear cover. On the south elevation see Exhibit - D (RFI T - 448.5) which shows the thinning of the wall with the revised reinforcement spacing due to CDSM pile encroachment.

Exhibit - G shows the information on encroaching CDSM pile in this area for your review.

Please confirm that the clear cover between the waterproofing system and the vertical reinforcement outlined at these locations is acceptable

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The clear cover between the waterproofing system and vertical reinforcement as presented in Exhibit B of this RFI is acceptable.

T-0649 **BGP -Area 2 Clear Cover to the Vertical Reinforcement on the Foundation Wall** **Closed** **07/22/2013** **08/01/2013** **07/31/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference Documents: Exhibits A - G

Further to response to RFI T-609 (see exhibit - F) this RFI shows the areas of foundation wall in pour area 2, south wall which will have greater than 6" of clear cover to the vertical reinforcement for location plan see exhibit - A & C

Exhibit - B & C depict the amount and location of the foundation walls which the will have greater than 6" of clear cover to the vertical reinforcement

Exhibit - D & E (RFI T-448.5 and RFI T-608) which shows the thinning of the wall with the revised reinforcement spacing due to CDSM pile encroachment in area 2.

Exhibit - G shows the information on encroaching CDSM pile in this area for your review.

Please confirm that the clear cover between the waterproofing system and the vertical reinforcement outlined at these locations is acceptable

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The clear cover between the waterproofing system and vertical reinforcement as presented in Exhibit B of this RFI is acceptable.

T-0650 **BGP - Fire Management System Layout Conflicts with Class A Design** **Closed** **07/19/2013** **07/29/2013** **07/24/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Drawing E1-2026, Spec Section 28 30 01, Attached Drawing

Review of the fire management system device layout appears to not meet the minimum candela rating of the NFPA code; refer to the attached drawing (dwg. #1, shaded) showing the areas of the platform that are deficient. Please confirm the candela rating set forth in the NFPA code are met with the current layout on drawing E1-2026 or provide a new layout that comply with NFPA candela rating requirements.

SUGGESTION:

The revised device layout shown in drawing #2 will greatly decrease the candela rating to meet the NFPA requirements. This layout would require additional devices.

ANSWER: **Accept Suggestion:** ☐

The fire management system design is a performance based design as per Section 28 30 01-1.1C of the contract documents. The Contractor is responsible for the design of the system as required to meet NFPA 72 and provide additional visual alarm strobes in addition to those shown on the drawings to meet NFPA 72 (Section 28 30 01-2.6P).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0651	BGP - Area 3 Partition Wall Clarification	Closed	07/19/2013	07/29/2013	07/25/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Drawing A1-2122,S1-9050, Spec Section 03 20 00, Gerdau's RFI#58

Please clarify if the highlighted portions within the outline of the Partition Walls should be denoted as a different structural element i.e: a column, pilaster ,or a thickened wall that is different than the typical 12" thick partition wall per detail 3/S19050.

If the answer is yes, please reference or provide the correct reinforcing detail that is to be applied at each location.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The intent for the partition wall at gridline C.3 to the right of gridline 1.4 is to apply the 9/S1-9050 pier reinforcement & pier thickness required for the door width and pier height at each end of the partition wall and extend to result in a uniform thickness wall to simplify construction.

The intent for the partition wall at gridline E to the left of gridline 2 is to apply the 9/S1-9050 reinforcement & pier thickness required for the elevator door width and pier height and apply along the full length of this wall.

The intent for the partition wall at gridline E.6 to the left of column at gridline 2 is to apply the 9/S1-9050 pier reinforcement for the 12" thick pier.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0652	BSE - Zone 4 Excavation Sequence	Closed	07/22/2013	08/01/2013	07/25/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Based on the 7/18/2013 OAC Meeting please confirm it is acceptable to excavate level 2 West of Gridline 31 once level A cross lot bracing has been stressed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Confirmed. Excavation east of gridline 31 is contigent on connection of the level A walers on the east end and prestressing of the diagonal braces on the east end. A 3:1 slope for the excavated face is required per the specifications 31 00 00 Section 3.8 D. The top of this slope should be at grideline 31.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0653	BSE - Fremont Bridge Pier 6 Near Mat Depression	Closed	07/22/2013	08/01/2013	07/23/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Stacy Wilson

Co-Author: Balfour Beatty Infrastructure, Inc. Brandon Miller

REQUEST:

Reference: Attached Autocad Drawing

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Correction: This location is at the First Street Bridge,

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Fremont Street Bridge Pier #6 appears to conflict with the mat depression at GL 18-C in a similar way to the slab penetrations addressed in RFI T-0479.1.

Please confirm that RFI T-0479.1 applies to Fremont Bridge Pier #6 and that it is to be included in the applicable CR T-067 revision.

not Fremont.

CMGC is to follow response to RFI T-0479.2 and waterproofing manufacturers recommendations for this issue.

Upcoming CR T-067R2 will include all locations where excavation modifications are required due to waterproofing configuration requirements at the TJPA's approval.

T-0654 **BGP - Mat Slab Control Joints** **Closed** **07/22/2013** **08/01/2013** **07/25/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Attached Drawing

Please reference attached CJ Layout for Mat Slab in Zone 1. SCCI requests acceptance to move Mat Slab Control Joints to have a 2' clearance of any pit. Control joints will be returned to their original
layout and will tie to Foundation Wall at the submitted CJ locations.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

We assume the 2'-0" proposed clearance of pit means clear of the thickened extent of mat for the pit as graphically implied in the RFI sketch.

It will be acceptable to modify the CJ layout in the mat for the 3 clouded locations identified in the RFI, however, Contractor to coordinate installation of and/or verify that headed shear reinforcement at columns (where applicable) can be installed at CJ's.

T-0655 **BGP - Revised Attached Method of Nelson Studs to the Elevator Pit Embedded An** **Closed** **07/24/2013** **08/03/2013** **08/05/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Spec Section 05 50 10

While attaching the 3/4" diameter by 8" Nelson Studs to the 8" X 4" X 1/2" angle it was determined the studs were not fusing to the base metal (angle). To maintain the procurement schedule of this fabrication needed for the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The angled stud in the interior of the angle requires a different type of ferrule (heel) to address the angled condition. The alternate means used to attach Nelson studs for angles in this RFI is acceptable provided that at least 2 studs per angle have been verified by bend test per specification section 03 20 00 2.2.C.2, which

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Zone 1 - Area 03 Mat Slab placement, our fabricator (Gerlinger Steel) used the fillet weld method performed under the attached Welding Procedure Specifications (WPS) to attach studs to the angle(s). The welding was witnessed by the dispatched (IR #001459) ISI Shop CWI. Attached for the readers information and use are the shop fabrication drawing, the employed WPS, and photographs of the finished fabrication.

Is the alternate means of attaching the Nelson Studs to the angle, using the fillet weld method in lieu of the fusing method, acceptable?

references AWS D1.1-2010 (Paragraph 7.8 for testing requirements).

T-0656 **BGP - Shear Wall Dowel and Shoring Pipe Bracing Conflict** **Closed** **07/24/2013** **08/03/2013** **08/07/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Drawing S1-3001, Spec Section 03 30 20

A few potential conflicts exist between the typical shear wall vertical dowels and the 36" OD shoring Pipe Struts in Area 1. See attachement for locations of conflict.

Based on Detail A shown in S1-3260, the typical shear wall verts will be lap spliced.

Per the schedule in Detail 1-S1-3001, the #9 vertical shear wall reinforcement requires a 63" lap splice, which places the top of dowel at elevation -30'-5".

The centerline of Level D diagonal bracing atop Area 1 is shown to be at EL -29'-0" and the bottom of the 36" OD pipe strut at level D is at EL -30'-6".

The pipe strut will potenially encroach on the shear wall dowels since the vertical spacing is #9 at 10" OC.

Please confirm that a 60" lap splice is acceptable at locations where conflicts exist, if not please provide soultions.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The contractor proposed lap splice length is acceptable only at locations where the conflict exists.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0658	BGP - Embedded Conduits in Mat Slab for the Light Column	Closed	07/25/2013	08/03/2013	08/02/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please reference attached drawing E1-2205 and E1-4105.

Per the attached lighting plan drawings, there are no electrical conduits shown to be embedded exclusively for the Light Column on drawing S1-6005.

Please confirm that there are no conduits required for the light column in both the concourse slab and mat slab or provide the location, route and size of the conduit at each level.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

No, there are no embedded conduits required in lower concourse slab or mat slab.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0659	BGP - Mat Slab Conduits	Closed	07/30/2013	08/09/2013	08/13/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: A1-9204, E1-6001

The electrical conduit details on sheet A1-9204/Detail 1 and Detail 5 on E1-6001 regarding the electrical conduits on the columns are in conflict. Detail 1 on A1 -9204 indicates an embedded junction box in the long portions of the columns at Line D.8 above the Train Platform Level. Detail 5 on E1- 6001 indicates all conduits are to be stubbed up 12" at the face of the column. This Detail 5 shows all conduits (shown dashed) above the 12" stub up in the Mat Slab are to be installed in future phases outside of the TG06.0 contract. The columns are part of the TG06.0 scope.

1. Please clarify if these junction boxes and conduit are to be embedded in the columns or stubbed up through the slab at the face of each column at all four (4) locations..

2. If the conduits and boxes are to be embedded in the columns please provide a revised embedded conduit detail indicating conduits as part of TG06 Below Grade Scope.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The embedded junction box details on A1-9204 applies only to the flat surfaces (north and south sides) of the columns along GL D.8 of Platform 2 (refer to note on details 1 & 2 on A1-9204) and shall have embedded boxes and conduits. Locate the conduit and boxes such that the device faceplates will be finished flush to the finished column cladding.

The east and west sides of the columns indicated on the note shall have surface mounted junction boxes and conduits (refer to detail 1 on A1-9204).

For all other columns in the BGP, the junction boxes and conduits are typically surface mounted (refer to detail 5 of E1-6001).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0660	BGP - Clear Cover to Mat Reinforcing at CDSM Pile Encroachment	Closed	07/30/2013	08/09/2013	08/07/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Drawing S1-3201, Spec Section 03 30 20

Per Section 1 on S1-3201, the mat slab reinforcing is shown with 6" of clear cover from the outside face of the concrete wall. When the outside face wall and mat foundation step in and out due to CDSM encroachment, the 6" clear dimension shown on 1/S1-3201 will be encroached upon.

Please confirm this is acceptable. This would apply in any area where the wall thickness is being reduced due to encroaching CDSM Pile.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Encroachment into the 6" clear dimension is acceptable as long as mat rebar does not conflict with the foundation wall vertical reinforcement at the outer face. To avoid this conflict, clear dimension between the mat slab reinforcing and outer face of the concrete wall shall not be less than 4". For future reference, note that the condition at the embedded columns within the foundation walls is different. That condition is illustrated in detail 1/S1-3302 of the construction drawings and the question included in this RFI does not cover that condition.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0661	BSE - Access trestle penetration sleeve	Closed	07/30/2013	08/09/2013	08/26/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawings: 4/A1-8711, Attached Sketch

2 bump outs have been installed onto the South side of the access trestle in Zone 2 (see attached sketch). Each bump out has 4 trestle piles identical to the trestle piles supporting the rest of the access trestle. Please confirm it is acceptable sleeve and waterproof the 8 piles (2 bump outs - 4 trestle piles ea.) per detail 4/A1-8711. The bump outs will be removed prior to the concourse slab.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is acceptable to sleeve the 8 piles for the access trestle extensions (bump outs) as shown in detail 4/A1-8711.

Part of this RFI is for a waterproofing system proposed by the Contractors, not the system designed by the Architect. The Contractors should have their engineer who prepared this waterproofing system design respond to this RFI. Until that is done, the Contractor should confirm all waterproofing system questions and details with the waterproofing manufacturer (with copies to the TJPA and its consultants and the Architect).

Contractor shall submit dimensioned locations of bump out piers and size for review of introducing sleeved penetrations into the mat.

Prior to submitting dimensioned locations, Contractor shall review for, including but not limited to, mat conflicts with other work and mat exclusion zones.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0662	BGP - Clarification for the Response to RFI T-0631 Micropile Conflict	Closed	08/01/2013	08/11/2013	08/05/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Spec Section 03 30 20, Attached sketches

Per discussions on 7/31/13 between members of TT, Webcor, Shimmick and Gerdau please confirm the following clarifications and intent of method "B" as it relates to the response issued for RFI 631 reviewed via teleconfrence.

1. The clear cover of 1 1 /2" as described in the response to RFI 631 has been eliminated. The reinforcing bars may come into contact with the micropile and the waterproofing wrapped around the lower portion of the micropile.

2. At the contractor's discretion, he/she may displace the typical contract bar +/- 4" from the called out spacing as required to avoid clashes with the installed micropile. The displacment of the typical reinforcing may be either for the full length of the bar or weaved around the clashes depending on the specific condition. If this solution is incorporated and results in the typical reinforcing being displaced such that the end of the bar is not in the typical alignment a non-contact lap splice with the next adjacent designed/detailed bar is acceptable. Should the displacement of the typical contract bar to resolve the clash with the micropile result in another clash with another element of the reinforcing design this condition will be addressed through the RFI process upon recognition. See attached sketch #1 for reference.

3. At the contractor's discretion, he/she may cut the typical contract bar creating a gap in the bar to allow for the clashing micropile. Should this be the selected method to resolve the clash a lap splice bar of the same grade and bar size will be required at either side of the gap. The splice bar may be a non-contact lap splice. See attached sketch #2 for reference.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Confirmed.

2. Confirmed.

3. Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0663	BSE - Micropile Tie-Down detail	Closed	08/05/2013	08/15/2013	08/09/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Reference Drawing: S1-3003
Reference Submittal: TG0300-620.1

Detail 1 on S1-3003 shows a 12"x12"x2" plate under the domed nut on top of the micropile. Note 1 on S1-3003 states that "the contractor is responsible for the design of the pile to meet the design load requirements ... as stated in the project specifications." Submittal No. TG0300-620.1 was returned "No Exceptions Taken" and did not include the plate under the domed nut as it was not a part of BBII's micropile design. Please confirm that it is acceptable to move forward with approved Submittal No. TG0300-620.1 without the 12"x12"x2" plate.

Confirmed that contractor-designed micropile without the plate is acceptable.

T-0664 **BGP - Conflict Between Pit Reinforcing & Trestle/Pin Piles** **Closed** **08/05/2013** **08/15/2013** **08/07/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: Drawing S1-2022, Attached Photos

During the installation of the pit reinforcing between GL 1.4-2.3 and D.4-F a conflict was discovered between trestle/pile and the tail of the #11 pit reinforcing that extends beyond the limit of the pit out and into the main mat slab. Gerdau proposes to trim the tails of the conflicting rebar (Flame Cut) such that clearance can be maintained to the sleeve around the piles.

Please confirm this is acceptable or provide direction on how to proceed. This conflict is expected to occur at future pits too.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The tails of pit reinforcement that are extending beyond limits of pits and are in conflict with trestle/pin piles may be trimmed for only the 4 of the 5 locations identified in the RFI.

For the 5th location at trestle pile located at D.4-4.4 (which is within the pit depression), see attached SKS-0281.

Note that flame-cutting that has been allowed is limited to applications of this RFI only.

For future pits within the remainder of the Project, when the tails of pit reinforcement that extend beyond the limits of the pits that conflict with trestle/pin piles/bridge piers, Contractor shall coordinate with as-built locations and apply detail similar to 1/S1-3007 (where bars interrupted by trestle/pin/bridge pier shall turn up).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0665	BGP - Locations of Electrical Outlets, Equipment, and Fixtures	Closed	08/05/2013	08/10/2013	08/07/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Spec Section, 26 05 34

Per Specification Section 26 05 34, 3.2 B., the dimensions of the equipment fixtures and outlets are to be submitted via RFI for clarification pre pour. Attached is the layout for Electrical Room B2221 in the first Mat Slab pour.

Please confirm that these dimensions are acceptable so that the conduit can be laid out correctly.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Layout does not match architectural wall dimensions. Contractor to revise and resubmit layout as coordinated with ASI-102, dated 04/29/2013. Refer to sheet A1-9215 markup attached and coordinate with architectural wall dimensions.

Submitted sketch does not show wall details. Future layouts to be submitted on current CAD backgrounds and all dimensions must be based on interior clearances.

All electrical rooms will be lined with 3/4" plywood backboard. Contractor to coordinate layouts to accommodate.

Due to potential conflict with door, FATC to be relocated to south wall, 9" from west wall, as shown in sheet E1-3101 markup attached. Dimensions added for clarity.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0665.1	BGP - Electrical Locations of Outlets, Equipment, and Fixtures in Electrical Room	Closed	08/23/2013	09/03/2013	08/27/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Please refer to drawing A1-9215, 1/E1-3101 and attached sketch SK-SCCI-0204.2.

Please find a revised electrical conduit layout for Electrical Room B2221 as requested in RFI T-0665. Please confirm the conduit layout and outlet, equipment and fixture locations shown in the attached sketch SK-.SCCI-0204.2 is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

WSP notes revised location of FATC per original RFI response; however, the following items are still outstanding:
Layout does not match architectural wall dimensions. Contractor to revise and resubmit layout as coordinated with ASI-102, dated 04/29/2013.
Submitted sketch does not show wall details. Future layouts to be submitted on current Contract Document backgrounds and all dimensions must be based on interior clearances.
All electrical rooms will be lined with 3/4" plywood backboard. Contractor to coordinate layouts to accommodate.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0665.2	BGP - Locations of Electrical Outlets, Equipment and Fixtures in Electrical Room E	Closed	09/12/2013	09/22/2013	09/19/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please refer to drawing A1-9215 dated 04/29/2013, E1-3101 dated 05/31/2013 (RFI T-0665) and attached shimmick sketch SK-RFI204.4.

The attached layout for Electrical Room B2221 shows the dimensions of the conduit locations in respect to the interior walls which are lined with 3/4" plywood per RFI T-0665. In addition, the room is located from grid lines, respectively..

Please confirm the layout as shown in the attached Shimmick sketch is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
9/19/2013
RESPONSE:
Layout as shown is acceptable. Conduit provisions for pumps connected to LPH-B2-A-12 are not shown. Please submit for review.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0665.3	BGP - Locations of Electrical Outlets, Equipment and Fixtures in Electrical Room E	Closed	09/23/2013	10/03/2013	09/25/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference E1-3101

Confirm that the conduits for circuits to panelboard LPH-B2-A-12 are not included in the TG06 scope of work.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
9/24/2013
RESPONSE:
WSP Response: This statement is correct. The circuits to this panelboard are in the main project package and are not applicable for this phase.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0666	BSE - Elevator Pit Dimensions between GL 1.4 and GL 2	Closed	08/05/2013	08/15/2013	08/08/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawings: ASI #104, A1-9214 / A1-2122

Since the elevator manufacturer has not been selected, please confirm that the size of the elevator pit located between GL 1.4 and GL 2 is to be 10'-8" by 8'-10" as depicted in ASI #104 sheet A1-9214.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

CMGC shall confirm the pit dimensions noted on the contract documents are acceptable to all the elevator subcontractors on the CMGC approved bidder shortlist. CMGC shall schedule hiring of sub-contractors as required to allow CMGC coordination between the trades.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0666.1	BGP - Mat Slab Clarification to Elevator Pit and Slab Opening Dimensions	Closed	08/21/2013	09/03/2013	08/28/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Webcor/Obayashi (W/O) is in receipt of attached Adamson Associates, Inc. (AAI) response to RFI T-0666 - BSE - Elevator Pit Dimensions Between GL1.4 and GL 2.

This response is unacceptable. The Architect has sole responsibility for confirming that the pit dimensions of all elevators and escalators will accommodate the Architect's proposed elevator and escalator systems.

Until a 100% IFC set is completed by the Architect, W/O has no definite knowledge of the Architect's proposed elevator and escalator systems. This issue has been discussed verbally for over 2 years, during which the Architect has maintained that they have full responsibility for designing all pits and openings to fit their proposed elevator and escalator systems. W/O is unable to even start the RFQ/Bidding process for hiring sub-contractors until the 100% IFC Contract Drawings are finalized by the Architect and approved by the owner; therefore, it is impossible for W/O to hire/coordinate sub-contractors prior to pouring of the elevator pit in the mat slab.

The same applies to all pits and openings throughout the design documents, only the Architect is capable of confirming that these dimensions are acceptable for all of the Architect's proposed elevator/escalator systems.

Please confirm all elvator pits and slab openings are acceptable as currently shown on the contract documents.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The design team believes the elevator pit dimensions noted in the contract documents are coordinated with the requirements of the alternate elevator manufacturers noted in the specification. The CMGC shall confirm the work of adjacent trades have been coordinated between shop drawings and existing field conditions. The CMGC shall coordinate with the TJPA to hire Sub-contractors at the required times to ensure that construction work and shop drawings of adjacent trades are completed in time to coordinate between trades.

T-0667	BGP - Geothermal Loop Excavation in Zone 4	Closed	08/05/2013	08/09/2013	08/07/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Spec Section 31 23 34.

Please refer to attached WOJV and SCCI internal correspondence in RFI #SHIMM000-0038.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:
The question asked is Contractor's means and methods.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

SCCi is aware of the CDSM wall excavation required for the geothermal field risers, but is not aware of a geothermal specification requiring buttress shaft demolition for the geothermal loop trenches. Specification 31 23 34, Section 3.2 is very clear in the full scope of the ground excavation in soil and wall riser excavation in the CDSM, but it does not cover trenching in buttress shaft concrete.

Please provide a design defining the geothermal fields within the buttress shafts. Please include slot excavation, back-fill and compaction requirements in the the affected buttress'.

T-0668 **BGP - CIDH Temporary Bridge Pier Sleeve Detail** **Closed** **08/05/2013** **08/04/2013** **08/08/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please refer to drawing S1-3003, A1-8711, SCCI RFI #269 with asbuilt information of CIDH Piles at First Street, and ACI 117-90 section 3.4.1.2

The typical 48" diameter bridge pier detail (6/S1-3003) and waterproofing detail (4/A1-8711, 5/A1-8711 and 6//A1-8711) are designed for a steel assembly i.e. bridge pier, piles for shoring, bracing and trestle columns, pin piles and dewatering wells. As a result, the means of achieving the shown steel pipe sleeve is attainable.

As per submittal package TG0300-201.3, the 48" temporary bridge piers are designed as CIDH (cast-in-drilled piles) piles and not steel. Specifications for concrete construction tolerances in ACI 117, section 3.4.1.2 allow for horizontal dimension of unformed members cast against soil for greater than 2 ft. but less than 6 ft. allow for +6" and -1/2".

The penetration sleeves for these piles have been fabricated.

Proposed Solutions:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Utilization of concrete piles for the bridge piers was chosen by the contractor to suit their means and methods. The sleeve shown on the architectural and structural drawings provide details of sleeving penetrations to permit expected movement and provide a waterproofing interface. Sleeves at bridge piers were indicated on the Bridge shop drawings and the requirements for field measurements before fabrication were indicated on the metal sleeve shop drawings.

New details will not be provided. CM/CG to provide means and methods of adapting concrete pier to suit mat slab waterproofing metal sleeve details.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

1. Remove extra concrete from the outside diameter of the CIDH pile to allow the fabricated 48" penetrations to fit through means of bushing or grinding the concrete as necessary and utilize sleeves as originally intended.

2. Please provide a detail drawing with the 48" temporary bridge pier condition as CIDH pile. Please include a sleeve detail allowing for the aforementioned tolerances and waterproofing. Please note, as typical of CIDH piles, the surface profile varies much greater than the 1/2" gap tolerance required for steel assemblies shown in 6/S1-3003.

T-0669 **BGP - Foundation Wall Vertical CJ** **Closed** **08/06/2013** **08/16/2013** **08/09/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

Reference: Spec Section 033020, Attached Drawings

See attached sketch of the vertical foundation wall CJ.

During construction of the high congestion mockup SCCI has discovered a constructibility issue with the construction of the foundation walls, more particularly, the vertical construction joints. Vertical construction joints are to be constructed as prescribed on Detail 2 of the S 1-3001 CD.

The designed vertical reinforcement consists of the following:
a. WR-1 with #11 vertical bars 8" OC, haunch #10 bars 8" OC, and #4 cross ties 6" or 12" OC.
b. WR-2 with #11 vertical bars 8" OC, haunch #10 bars 8" OC, and #4 cross ties 6" or 12" OC.
c. WR-2MOD (CDSM Encroachments) with #11 vertical bars 5" OC, haunch #10 bars 8" OC, and #4 cross ties 5".

When rebar configurations noted above are implemented, even with ACI allowed tolerances included, it will conflict

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Option 2 will be acceptable (reduce the depth of the foundation wall vertical construction joint to 1.5").

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

with construction ofthe waterstops, hydrophilic hoses and forming of the vertical CJ.

As a possible solution to this issue SCCI suggests the following:
1. Eliminate a column of cross ties at the construction joints to allow constuction of the vertical CJs per Det. 2 on SI-3001
2. Reduce the depth of the vertical construction joint to 1.5" (similar to horizontal CJ).

Please advise.

T-0670 **BGP - Mat Slab Control Joints 2** **Closed** **08/06/2013** **08/16/2013** **08/20/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Stacy Wilson

Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

Reference: Attached Drawing

Please see attached drawing of Zone 1 control joints. SCCI would like to move the green clouded control joint around the pit with a typical 2' offest.

Please verify this change to be acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Reference RFI T-0670.1 for response. Contractor submitted RFI T-0670.1 while RFI T-0670.0 was still in review and the Rev 1 RFI contains the same request included in Rev 0 along with an additional location.

T-0670.1 **BGP - Mat Slab Construction Joint Conflicts** **Closed** **08/19/2013** **08/29/2013** **08/30/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Spec Section 03 30 20, Attached Sketches

Please see attached sketches of mat slab CJ layout. SCCI has discovered conflicts between the CJ formwork and reinforcing steel, pin pile.
SCCI proposes to modify the mat slab construction joint to clear the conflicting reinforcing steel and pin pile, as shown on the attached sketches.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractor-proposed CJ layout as presented in the RFI is acceptable.

Although the contractor has not inquired yet, one N-S line of shear reinforcement for the column at F-4 will conflict with the joint key. Contractor may shift this one conflicting line of shear reinforcement max of 3" to clear the key.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Is this acceptable?

T-0671 **BGP - Control Joint Amplitude** **Closed** **08/08/2013** **08/18/2013** **08/12/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Drawing S1-3001

See attached contract drawing S1-3001 regarding vertical and horizontal control joints of the foundation walls. SCCI is requesting acceptance to eliminate amplitude on the face of the control joint keyway where hydrophilic waterstop and injection hose is to be installed. Amplitude will remain on the diagonal portions of the CJ. This RFI is intended to clarify the use of this procedure for foundation walls only.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For vertical and horizontal control joints at the foundation wall, see response to RFI T-0630.

T-0672 **BGP - Fire Management Device Layout** **Closed** **08/08/2013** **08/18/2013** **08/14/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

As discussed in the fire management coordination meeting on Monday 8/5, the contract plan device layout does not meet code for current draw. The stub ups from the mat slab to the devices shown on the contract plans at every other column will not be sufficient enough to meet code requirements for the future fully occupied space. If stubbed up at every other column, the consequences are having circuit runs that will end up doubling when the devices are added in the future. Siemens recommends that the stub ups are made at every column which will reduce the total current draw when devices are added in the future.

Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The fire management system of design is a performance based design as per Section 28 30 01-1.1C of the contract documents. The contractor is responsible for the design of the system, including stub ups and device layout, as required to adhere to all applicable code requirements.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0673	BGP - Displacement of Cap Bar for Support	Closed	08/12/2013	08/22/2013	08/13/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: S1-3600, Attached RFI 069

See attached Gerdau's RFI#069

At the contractors option, Gerdau is requesting to displace one top cap bar every 5' OC within the moment frame beams for support. Allowing the displacement of one top cap bar would reduce congestion near the top of the beam.

Please confirm that this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

RFI was retracted in Constructware. This RFI will be responded to internally. Per meeting between TT, WOJV and SCCI on 08/08/2013, TT rejected the proposed alternative.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0675	BGP - 400 Series HRC Couplers Assembly Procedure	Closed	08/12/2013	08/22/2013	08/16/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Spec Section 03 30 20

SCCI is in receipt of the approval to SCCI's Request for Substitution TG0600-077 .1 to approve the use of HRC 400 Series Couplers at Vertical Walls. The comment on the approved Request for Substitution noted that assembly of the couplers is to be completed using strict adherence to the manufacturer's installation procedures.

HRC, the manufacturer of the couplers has provided installation instructions, video footage of performance testing, test result and an operator qualification procedure, all supporting the assembly of the of the 400 serious couplers installation is acceptable with "hand tightened" procedure.

Please confirm that the assembly of the 410/420 couplers "hand tight" is acceptable based on this manufacturer's recommendation as it was not directy addressed in the returned submittal comments.

Video of the performance testing can be viewed : http://youtu.be/M5pFkjOgdN8

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

As previously stated in response to the Request for Substitution, the assembly of the couplers shall be per manufacturer's installation procedures.

The manufacturer has stated that hand tightening is allowed with the use of qualified operators, therefore it is confirmed that hand tightened procedure is acceptable. Contractor shall submit operator qualifications for personnel that will be performing the hand tightened procedure.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0676	BGP - Mat Slab Construction Joint at 3ft Chamfer	Closed	08/13/2013	08/23/2013	08/22/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Drawing S1-3201, Spec Section 03 30 20

See attached sketch of the mat slab wall CJ interface, reference Contract Drawing S 1-3201 , and RFI T- 0669. During layout of the bulkhead for the mat slab SCCI has discovered a constructibility issue with the construction ofthe mat slab CJ keyway as depicted on Detail 3 on Sl-3001 , at the mat slab interface with the foundation walls.

Reinforcement bars that are in conflict with the 10" deep keyway are:
a.# 4 U-bars as depicted on detail3 on Sl-3201. These bars are spaced 6" OC vertically and 5", 6" or 8" OC horizontally with the respect of the type of wall (i.e. WR-1, WR-2, or WR-2MOD)
b. 3ft chamfer face bars- #10 at 8" OC per detail 1 on Sl-3201

When rebar configurations noted above are implemented, even with ACI allowed tolerances included, it will conflict with construction of the waterstops, hydrophilic hoses and forming of the mat slab CJ.

As a possible solution to this issue SCCI suggests the following:
1. Eliminate a section of#4 U-bars and 3' chamfer face bars to allow constuction of the vertical CJs per Det. 3 on Sl-3001
2. Transition mat slab keyway to match the foundation wall vertical keyway at 1 1/2" depth (reference RFI T-0669).

Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractor-proposed Option 2 is acceptable (transition mat keyway depth for extent shown on RFI sketch).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0677	BGP - Sand Oil Interceptor and Baffle	Closed	08/13/2013	08/23/2013	08/23/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference specification section 22 13 01 2.5, CD Pl-6001 Rev 1 (ASI 104), and SCCI's RFI 255. Drawings do not call out nor provide details for the sand oil interceptor and baffle wall that is called out

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The pit baffles are post-installed and will be part of the TG07.2 Superstructure Concrete Package.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

in SP 22 13 01 2.5.

Please provide details for the sand oil interceptor and baffle wall.

The baffles are to be 6" thick concrete walls with #5@8" OC EA WAY, bars centered in wall. Post-installed epoxy dowel embedment depths per structural General Notes.

T-0678 **BGP - Stair 203 Embed Conflict** **Closed** **08/13/2013** **08/23/2013** **08/27/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please see attached Sl-2022, Sl-7004 and Sl-7602. Please confirm full length L8x4xl/2 embed, as shown on detail 2 of S 1-7004 is required. This embed may conflict with future walls as shown on detail 2 of S 1-7004.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The inquired embeds L8x4x1/2 that is called out in detail 12/S1-7602 are not required at this location as the stair landing framing shall attach directly to the TG07.2 concrete walls.

T-0679 **BGP - CDSM Wall leaks** **Closed** **08/13/2013** **08/23/2013** **08/27/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: Attached Photo, Spec Section 07 12 10

Please reference the attached photo. CDSM wall leaks above Level D bracing have created standing water on top of the Area 3 protection slab in multiple areas. The ponding water is triggering the Ad cor
ES Waterstop (see photo) along the perimeter of the excavation. SCCI has had minimal success shimming the areas of high leakage to help mitigate the water. Please review and provide direction as to
how the leaks will be mitigated. As for the repair of the Adcor Waterstop, SCCI suggests cutting and removing the activated waterstop and installing a new strip with a 4" overlap on both sides. Is this
acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The suggested remedial work by SCCI is recommended as to adhere to Article 3.07, Section D of the general conditions; SCCI to protect installed materials to prevent damage. As per the approved product data, proper confinement time restrictions are required for any premature swelling or remove and replace damaged material.

Please coordinate accordingly with WOJV for specific locations where areas of high leakage occur. As currently coordinated, SCCI is performing mitigation efforts on force account where applicable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0680	BGP -Area 7 Clear Cover to the Vertical Reinforcement on the Foundation Wall	Closed	08/14/2013	08/24/2013	08/22/2013	Potentially	☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: Exhibits A - D

Further to response to RFI T-609 (see exhibit - D) this RFI shows the areas of foundation wall in pour area 7, on the north & south wall elevations which will have greater than 6" of clear cover to the vertical reinforcement for location plan see exhibit - A

Exhibit - B & C depict the amount and location of the foundation walls which the will have greater than 6" of clear cover to the vertical reinforcement

RFI T - 628.1 which shows the thinning of the wall with the revised reinforcement spacing due to CDSM pile encroachment in Area 7.

Please confirm that the clear cover between the waterproofing system and the vertical reinforcement as outlined at these locations is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The clear cover between the waterproofing system and vertical reinforcement as presented in Exhibit C of this RFI is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0681	BGP - Area 6 Clear Cover to the Vertical Reinforcement on the Foundation Wall	Closed	08/16/2013	08/26/2013	08/22/2013	Potentially	☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: Exhibits A - D

Further to response to RFI T-609 (see exhibit - D) this RFI shows the areas of foundation wall in pour area 6, on the north & south wall elevations which will have greater than 6" of clear cover to the vertical reinforcement for location plan see exhibit - A

Exhibit - B & C depict the amount and location of the foundation walls which the will have greater than 6" of clear cover to the vertical reinforcement

RFI T - 627.1 shows the thinning of the wall with the revised reinforcement spacing due to CDSM pile encroachment in Area 6.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The clear cover between the waterproofing system and vertical reinforcement as presented in Exhibit C of this RFI is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please confirm that the clear cover between the waterproofing system and the vertical reinforcement as outlined at these locations is acceptable.

T-0682 **BGP -Area 5 Clear Cover to the Vertical Reinforcement on the Foundation Wall** **Closed** **08/16/2013** **08/26/2013** **08/22/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: Exhibits A - D

Further to response to RFI T-609 (see exhibit - D) this RFI shows the areas of foundation wall in pour area 5, on the north & south wall elevations which will have greater than 6" of clear cover to the vertical reinforcement for location plan see exhibit - A

Exhibit - B & C depict the amount and location of the foundation walls which the will have greater than 6" of clear cover to the vertical reinforcement

RFI T - 626.1 shows the thinning of the wall with the revised reinforcement spacing due to CDSM pile encroachment in Area 5.

Please confirm that the clear cover between the waterproofing system and the vertical reinforcement as outlined at these locations is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The clear cover between the waterproofing system and vertical reinforcement as presented in Exhibit C of this RFI is acceptable.

T-0683 **BGP -Area 4 clear cover to the vertical reinforcement on the foundation wall** **Closed** **08/16/2013** **08/26/2013** **08/22/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: Exhibits A - C

Further to response to RFI T-609 (see exhibit - C) this RFI

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Information noted. See the response to RFI T-0609.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

shows the clear cover to the vertical reinforcement on the foundation wall in pour area 4 for location plan see exhibit - A

Exhibit - B depict the amount of clear cover to the vertical reinforcement on the foundation wall in area 4, however there are no areas which will have greater than 6" of clear cover so this RFI is for information only.

RFI T - 622.1 shows the thinning of the wall with the revised reinforcement spacing due to CDSM pile encroachment in Area 4.

Please confirm that the clear cover between the waterproofing system and the vertical reinforcement as outlined at these locations is acceptable.

T-0684 **BGP - Couplers for Future Construction** **Closed** **08/19/2013** **08/29/2013** **08/28/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

Reference: Drawing S1-3206, Spec Section 03 30 20

See attached photo of the form savers that are going to be used for the coupler for future construction as depicted on Detail 4 of S1-3206, and Detail 6 of S1-3001.

SCCI believes that Detail 6 on S1-3001 is not applicable due to the following:
1. As shown on the attached photo, epoxy coated form savers have tin cap incorporated into the coupler body. This tin cap will protect the rebar until the future construction.
2. Whatever tar is intended to be used with form savers in not compatible with the Grace waterproofing.
3. Detail 6 on S1-3001 is a detail for the slabs, where future walls are to be constructed.

SCCI proposed to install the coupler for future construction as shown on Detail 4 S1-3206 with form savers set

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Thornton Tomasetti does not object to the contractor's proposal, contained in RFI T-0684 BGP, regarding couplers for future construction.
The proposal contained in this RFI also concerns a waterproofing system proposed by the Contractors, not the system designed by the Architect. The Contractors should have their engineer who prepared this waterproofing system design respond to this RFI. Until that is done, the Contractor should confirm all waterproofing system questions and details with the waterproofing manufacturer (with copies to the TJPA and its consultants and the Architect).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

against the waterproofing membrane. Care shall be taken to ensure that waterproofing is not damaged.

Is this acceptable?

T-0685 **BGP - North Shear Wall Concrete Mix** **Open** **08/09/2013** **08/23/2013** **08/29/2013** **Potentially** ☐

From: Webcor Construction LP Marina Rosso **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

See attached drawing regarding the North shear wall.

Due to the monolithic pours at the intersection of the shear wall, foundation wall and mat slab chamfer, there will be differentiating concrete mix uses. The attached drawing assigns the portions of this intersection with its corresponding concrete mix.

Please verify the use of these concrete mixes at this location as acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractor-proposed concrete mix use at north shearwall is acceptable.

T-0686 **BGP - Drain Line Conflict with Micro Piles** **Closed** **08/22/2013** **09/01/2013** **09/04/2013** **Potentially** ☐

From: Webcor Construction LP Marina Rosso **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

See attached photo and CD PI-2030.

After performed layout of the drainage line system around GL K5 SCCI has discovered that a row of micro piles is in conflict with the 4" cast iron pipe drain line. SCCI suggest shifting the drain line run to clear the micro piles.

Is this acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

In order to avoid the conflict between micropiles and drainage piping, the catch basin indicated in RFI T-0686 BGP has been relocated slightly north. The drainage piping will run straight from the catch based as it did before. Refer to the attached PSK-2030 and SKA-2822.

T-0687 **BGP - Drain Line Conflict with Reinforcement** **Closed** **08/22/2013** **09/01/2013** **09/03/2013** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Marina Rosso **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

See attached photos and CD P 1-2030.

Tails of the bottom rebar mat at the drainage pit are interfering with the construction of drainage lines and catch basin.

SCCI proposes following:
1. Shift the catch basin to where it clears the reinforcement tails.
2. Cut the rebar tails to allow installation of the drainage lines and the catch basin.

Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Option 2 will be allowed. Rebar tail ends that conflict with the catch basin for this location may be cut to clear the catch basin. 12" max may be cut off.

T-0688 **BGP - Pin Pile No 6 Conflict with Future Walls** **Closed** **08/23/2013** **09/02/2013** **09/04/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

Please refer to attached drawing S1-2052 (ASI 102), S1-3205 (ASI 100) and attached photos.

Drawing S1-2052, shows pin pile No. 6 (43"x43 block-out) at GL D.8/4 encroaching the future reinforced concrete wall (RCW). As a result, the couplers shown in detail drawing 5/S1-3205 cannot be installed in the area where the pin pile 43'x43" block-out is located.

Please confirm it is acceptable to reduce the distance between the mechanical coupler for the future 12" RCW from 8" O.C. to 4" O.C. as shown in detail drawing 5/S1-3205, The revised coupler spacing would only span a distance of three feet on either side of the block-out to compensate for the coupler that cannot be installed due to the block-out/pin pile location.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Note that the wall reinforcement for this RFI is #7@12" OC each face per S1-9050 as it is labeled as a partition wall on plan as well as reflected in rebar submittal TG0600-301.2.

The OC spacing of the vertical dowels shall be 6" OC each face for a distance of 3'-0" on either side of the inquired block-out. For vertical bars within the block-out embed min 4" into concrete.

T-0689 **BSE - Micropiles in Depressions** **Open** **08/23/2013** **09/02/2013** **08/30/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference Sketch: attached
Reference Email: attached

The micropile designer has confirmed that it is not necessary to extend the micropile to within 6" of the top of concrete and that the 5' embedment in the sump pit is adequate. Please confirm that this is acceptable to the design team.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is acceptable with the design team.

T-0690 **SSS - Stainless steel welded to cast iron** **Closed** **08/23/2013** **09/02/2013** **09/05/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawing: 1/S1-6056

A number of details throughout structural steel drawings indicate stainless steel welded to cast iron or mild steel, see detail 1, 2/S1-6056 as one example. If two metals are fused, cast iron welded to stainless steel results in carbon migration. The chromium in the stainless and carbon in the steel have affinity for each other at elevated temperatures that results in carbon and chromium combining to form chromium carbide. This turns the welded area into hard and brittle material with a potential for rust that overtime has a high possibility to crack and fail.

For Det. 1 and 2 on S1-6056 the added tension from cables may contribute to failure. The proposed solutions include:

1.Use stainless steel instead of mild steel for the bottom connection plate thus welding stainless steel to stainless steel. Where the bottom plate has to connect to structural steel use bolted connection with thin dielectric isolator between two surfaces.

2.Replace welded connection to bolted connection with an isolator.

3.Use galvanized and painted plate instead of stainless

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The inquired connection can be executed in the way shown. Welding stainless steel to carbon steel is an established method, which can be done using an appropriate welding method. As with all welding methods, there are certain points to be considered, such as:

- The fabricator to be approved for welding stainless steel to carbon steel and/or cast steel (qualification submittals)

- The welder to be approved for welding stainless steel to carbon steel and/or cast steel (qualification submittals)

- Surface preparation before welding necessary (welding procedure submittals)

- Selection of weld filler material (welding procedure submittals in combination with structural design verification)

- Surface preparation after welding (welding procedure submittals)

- Coating of weld and stainless steel member 30mm beyond weld (welding procedure submittals)

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

steel plate.

Please advise.

- etc.

However, the contractor in collaboration with his engineer and fabricator are free to propose alternative solutions. Since that specific connection is a design-built detail, the contractor can submit an alternative detail with supporting documentation (structural analysis, etc.) for review by the design team.

T-0691 **BGP - FF&FL Values for Mat Slab and Concourse Slab** **Closed** **08/23/2013** **09/03/2013** **09/03/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Don Muns

REQUEST:

1. Please confirm the contract documetns (TG06.0) do not specify a FF value for the Mat Slab.

2. Also, please reference ACI 302.1R and contract specification 033020.3.6.B. ACI 302.1R does not provide any recommendations on F-numbers for broomed surfaces. Furthermore, table 8.15.3.b of ACI 302.1R (page 46) demonstrates to achieve FF value of 20 for a slab on grade, it must be a smooth, floated surface.

Please clarify if the designer intends to have a rough broom/rake finish, or intends to have the concourse slab finished to a value of 20.

3. Please confirm the concrete finish within the train box.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Confirmed.

2. (Due to the impending first mat pour, only the mat slab is addressed in this RFI response. For this particular RFI, please separate the Mat and Lower Concourse topics.)

3. See responses to 1 & 2 or identify other specific surfaces of inquiry.

T-0692 **BGP - Rebar Configuration at Moment Beam with Incorporation of S-3 vs T-9 Ties** **Closed** **08/23/2013** **09/03/2013** **08/30/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please refer to attached detail 3 on drawing S1-3603 and attached Gerdau Sketch SK-Gerdau RFI 070.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractor proposed reinforcement configuration for the lower concourse moment frame beam transverse reinforcement is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please confirm it is acceptable to install S-3 stirrups and one T-9 tie as shown in the attached sketch for the vertical ties in the moment frame beam in lieu of installing all T-9 ties as depicted in detail 3/S1-3603. The proposed concrete reinforcement configuration is needed to avoid the constructability issues associated with alternating the hooks under the 1.5" of clear cover beneath the bottom beam bars.

T-0693 **BGP - Conduits in Columns** **Closed** **08/23/2013** **09/02/2013** **08/27/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

From discussions with the Design Team, we have been informed that a number of columns will have post installed steel jackets. Columns with Fire Management and steel jackets will require the conduits and j-boxes to be embedded. It is noted that the jackets will not be full height, so the j-boxes will be flush with the concrete face.

Please provide the locations of the affected columns and a height for the boxes.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

AAI response: Refer to the attached sketches SKA-2808R1, SKA-2809R1, SKA-2811R1 showing the locations of the West End B2 level concrete columns which will receive post installed steel jackets and embedded conduits. The attached SKA-2817R2 shows the mounting height of the surface mounted electrical boxes for these columns.

WSP response: On the steel jacketed columns, backboxes will be surface mounted with conduit routed within the column. Conduit will exit the column terminating into the back of the surface mounted box. Contractor shall lay out and route the embedded conduits such that the number of bends between boxes does not exceed code (360 degrees between boxes). These embedded conduits shall not be required to follow building column lines, and direct runs between devices shall be acceptable to avoid intermediate junction boxes.

T-0693.1 **BGP - Embedded Conduits in Columns** **Closed** **09/04/2013** **09/14/2013** **09/05/2013** **Potentially** ☐

From: Webcor Construction LP Marina Rosso **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

In the MEP meeting on 9/4/13, the response to RFI T-0693 was clarified. To confirm conversations with the WSP Electrical Design representative, the only conduits to be embedded in columns per the RFI T-0693 response are to be fire management conduits per the locations depicted in the response. All other conduits (power recepticals etc) are to be stubbed up on the face of the columns and are not to be embedded in the column.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

With reference to RFI T-0693, all other conduits (power receptacles etc.) are to be stubbed up adjacent to the face of the columns and are not to be embedded in the columns. The conduits and receptacles will be surface mounted on the post-installed steel jackets.
Note that the conduits are to be stubbed up with 5" between the conduit face and the concrete column face, to allow for the post-installation of the steel jackets. There are also plumbing risers on a number of the steel jacketed columns. The pipe risers should be positioned relative to the columns in accordance with the plumbing documents, but should not be closer than 5" to the concrete column, to permit post installation of the steel jackets.

T-0694 **Additional Rebar Conflict for Plumbing Trim at GL2/D.4** **Closed** **08/26/2013** **09/03/2013** **08/27/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please refer to drawings 1/A1-2122, 1/S1-3501 and attached Gerdau sketch SKS-1

Due to the density or the typical N-S top mat bars (#10) and additional bars (#11) near the elevator pit at Gridlines 2 and D.4, the additional trim rebar per 1/S1-3501 for interrupting the bars over the plumbing opening cannot be installed to the East of the plumbing opening within 3" of the opening. The alternative solution would be to install the additional steel in a new layer below the top mat; however, due to proximity of the piping to the steel the bars cannot be placed below the top mat. Gerdau proposes the folloing options:

A. Omit the additional trim bars to the East of the trimmed opening.
B. Relocate the additional trim bars approximately 3'-0" East of the opening where the rebar spacing would allow for additional steel.

Please advise if proposed options are acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractor-proposed option to omit additional trim bars to the east of the trimmed opening is acceptable for the cut plumbing opening at Grid 2/D.4. Added trim bars to the west of the opening will remain as placed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

(see attached SKS-1)

T-0695 **BGP - Additional Rebar Conflict for Floor Sink Trim GL B.7/2.7** **Closed** **08/26/2013** **09/02/2013** **08/27/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

See attached Gerdau's RFI #72, 1/S1-3501, A1-2122, attached Gerdau sketch SKS-1

Due to the density of the typical N-S top mat bars (#10), additional N-S top mat bars (#11) and pin pile trim steel (#11 with lap splices directly over floor sink) near the floor sink at Gridlines 2.7 and B.7, the additional trim rebar per 1/S1-3501 for interrupting the bars over the plumbing opening cannot be installed on either side of the plumbing opening. The alternative solution would be to install the additional steel in a new layer below the top mat; however, due to the proximity of the plumbing piping to the steel the additional bars cannot be placed below the top mat. Also, the additional bar to the East of the opening would conflict with the pin pile. Gerdau proposes to cut top mat bars to allow for the floor sink installation and omit the additional trim bars.

Please advise if the proposed solution is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per SKS-0282 (attached),

Pin pile add bars will be calculated as ½ the number of interrupted bars each side in lieu of ½+1 bars. This eliminates (2) pin-pile add bars being interrupted by the drain.

One wall add bar interrupted by the drain will be cut short at the northern limit of the drain and not be considered interrupted by the drain.

Reinforcing west of the drain centerline, but within the cut zone, will be jockeyed west so that no bars are required to be cut.

Reinforcing east of the drain centerline, but within the cut zone, will be jockeyed east so that no bars are required to be cut.

A single typical mat bar will remain within the cut zone and may be cut.

Congested reinforcing east of the cut zone will be jockeyed east aided by the partial (or complete) removal of a plumbing add bar.

Clear spacing of 1db to be maintained between all bars except where lap spliced.

In displacing bars to achieve the configuration shown in the SKS, resulting non-contact lap splices will be tolerated up to 6".

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0696	SSS - Type 1 Drag Connection Angles	Closed	08/26/2013	09/05/2013	08/29/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawings: S1-2502, S1-2503, S1-2504, S1-2505, S1-2506, S1-2507

The angles shown in the bus deck plan views (drawings S1-2502 through S1-2507) for the Type 1 drag connections to the bus deck cast nodes do not appear to match with the corresponding angles shown on the casting drawings (drawings S1-5121 throughS1-5125).

The attached mark-ups show our fabricator¿s (Oregon Iron Works) attempt to calculate the angles on the bus deck plan views and compare them to the corresponding angles of the castings.

Please clarify.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Beam plan angles (Sheets S1-2502 through S1-2507) and Bus Deck casting angles (S1-5121 through S1-5125) will not match in all cases because some casting types are used at multiple locations as indicated in Sheet S1-5120. The design intent was to minimize the number of unique castings in the structure which is more cost effective than developing unique casting geometry for every joint. For example, as indicated Sheet S1-5120, Casting 21A is used at various different joints at which joining beam angles vary in a certain range. The pad widths on the castings have been designed to be wide enough so that beams with different plan angles can be connected to the casting.

In some other cases, the casting angles were revised during cast node shop drawing review. For example, for Casting 35B one of the plan angles was changed from 42.25 to 26.14 degrees to match the beam angle. Contractor shall coordinate the information in the drawings with those in cast node shop drawings.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0697	BGP - Moment and Spandrel Beams 180 Degree Hooks Versus 135 Degree Hooks	Closed	08/26/2013	09/06/2013	08/30/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

See attached Gerdau's RFI#068, S1-3600, S1-3410

At the contractor's option, Gerdau is requesting to change the 135 degree hooks on the Moment Frame and the Sprandrel Beam stirrups to 180 degree hooks.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractors proposal to replace the 135 degree hooks with 180 degree hooks on the Lower Concourse Moment Frame and Spandrel Beam Perimeter Stirrups is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0698	SSS - Clash Between Slab on Deck and Transfer Girder	Closed	08/26/2013	09/05/2013	08/28/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference Drawings: A1-2863, S1-2303, S1-5000
Reference Sketch: attached

There are many conflicts in the plans where the top of concrete and the top of the transfer girder in that given area does not leave the amount of space required under the Metal Deck Schedule on 2/S1-5000.

For Example: Using the Top Of Concrete (TOC) and Top Of Steel (TOS) elevation from sheet S1-2303 a clash occurs between the slab (S3 - TOC: 19.00') and Transfer Girder TR9 (TR9 - TOS: 18.37'). The 10" that the S3 deck requires in the Metal Deck Schedule on 2/S1-5000 cannot be maintained over the Transfer Girder. Please clarify.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to details that have been cut on plan across the transfer girders as applicable in the Superstructure IFC/ASI 105 issue.

Example: See section detail 8/S1-3705 that is cut at gridline 9 & D.4 on S1-2303 (included in the RFI).

T-0699 **BGP - Catch Basin Requirements** **Closed** **08/27/2013** **09/06/2013** **09/30/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu
To: Turner Construction Compan Gary Krutsch
Answered By: Adamson Associates, Inc George Metzger
Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

See attached page from DBI's standard catch basin detail, and reference drawings P1-6001 and P1-2022 thru 2030.

On 08/26/2013 during pressure testing inspection of the drainage lines in mat slab areas 1 and 2, the SFDBI Plumbing Inspector pointed out that all catch basins in the mat slab should be constructed per city standard catch basin details. However, the contract drawings do not show catch basins details with cleanouts, vents and trap primer connections per the City Standard details.

Please confirm the attached SFDBI city standard catch basin detail is to supersede all catch basin details currently shown in trade group package TG06.0 drawing set. Please include revised plumbing drawings incorporating the CIty Standard details.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

As discussed in our review meeting with the SFDBI Plumbing Inspectors, the catch basin which are actually points of collection, will be installed as shown on contract documents.

T-0700 **BGP - Vehicle/Bike Beam End Support Embed** **Open** **08/27/2013** **09/09/2013** **08/28/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu
To: Turner Construction Compan Gary Krutsch
Answered By: Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please reference attached drawing S1-3411 .

The corbel section detail I of sheet S1-3411 calls for a 3/4"x4"x 18" embed plate at the toe of the corbel. However, the embed detail in 1D/S1-3411 shows the embed width at 24".

Please clarify the embed width dimensional discrepancy: 3/4"x4"x18" or 3/4"x4"x24". Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The inquired embed width is 24" as shown in detail 1D.

T-0702 **BGP - Chamfer Bar Top Hook** **Open** **08/29/2013** **09/08/2013** **08/29/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

See attached Gerdau's RFI#74.
See attached SKS-74

In an effor to prevent the chamfer bar from encroaching on the existing shoring waler beams, Gerdau would like to propose over bending the top hook and turning it into a standard 180 degree hook as shown on the attached sketch.

Please advise if this is acceptable

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractor-proposed 180 degree hook for the chamfer bars that are in conflict with double shoring walers is acceptable for bars that have not been fabricated. The radius point for the bend shall remain located as originally detailed on 1/S1-3201.

T-0703 **BGP - Drainage Conflicts with Reinforcement** **Closed** **08/29/2013** **09/08/2013** **09/05/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

See attached marked up contract drawings PSK-2022 and S1-3005

Some of the drainage lines and fixtures are designed to be constructed in close proximity of the concrete columns, similarly S1-3005 depicts typicall mat shar reinforcement schedule and details. Some of these shear reinforcement bars will be interfering with the drainage lines and fixtures.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

General guidelines for displacement of headed reinforcing at plumbing conflicts are as follows:

Lines refer to heads that are perpendicular to a column face.

1) Any head in line can be displaced 4" in any direction provided that it is not the first head. First

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

SCCI suggest to displace these shear reinforcement bars where conflicts occur. Displacement would occur lateraly, in 8'' increments, governed by the grid of the mat slab main reinforcement bars.

Please advise.

heads can only be displaced away from the column or parallel to the column face.

2) The maximum spacing of heads in a line shall be 12".

3) The minimum spacing of heads in a line shall be 4".

4) Any line can be started 8" along that line from the previously intended starting position provided the displacement is away from the column.

5) Any line or group of lines can be displaced laterally such that all lines are within the projection of the column face and the centroid of the resulting group is within the middle third of the projection of the column face.

6) The minimum spacing between adjacent lines shall be 4"

7) The maximum spacing between adjacent lines shall be 24".

All locations with displaced heads shall be observed by Thornton Tomasetti's field engineer prior to inspection.

T-0704 **SSS - Domestic Manufactured W40x503** **Closed** **08/29/2013** **09/08/2013** **09/03/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawings: S1-2505, S1-2506, S1-2507, S1-5050

We have determined that W40x503 is not produced Domestic melted and manufactured. This size girder occurs in 12 locations at the Perimeter Bus Deck Level between grid lines 21 and 33.

This beam is available from import sources, or it can be

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

W40x503 may be replaced by a built-up wide flange with steel plates. The plates shall match the dimensions of the rolled shape.

Please be noted that the W40x503 are not only used at Bus Deck between Grid 31 and 33. They are also used at the ground level drag beam along Grid C & G.

Skanska and W/O please provide information on how

built up from domestic plate.

6/S1-5050 gives an option for W14 built up columns but does not give an option for W40 columns.

please advise

the bid was certified to conform to the Buy America clause.

T-0704.1 **SSS - Built Up Plate Fabrication for W40x503** **Closed** **09/16/2013** **09/26/2013** **09/26/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference RFI: T-0704

The built up beam will consist of 1 9/16" webs and 2 3/4" flanges. Please confirm that these plate sizes are appropriate.

The web to flange weld was not addressed on returned RFI T-0704. We would suggest a 3/8" double fillet weld to join the web and flanges.

Please confirm or provide an alternate detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Flange and web thicknesses are confirmed. The beams shall be 42" deep, the flanges shall be 16-3/8" wide. The plates shall be ASTM A572, GR 50 per General Notes SS-1. Web to flange welding shall be with double 5/8" fillet welds for 4 ft from each end of each flange plate and double 3/8" fillet welds in between.
W40X503 are also used at Roof and Ground Levels.
W/O to coordinate RFI T-0704-SSS and T-0704.1-SSS responses with other sub-contractors, as needed.

T-0705 **BGP - Haunch Reinforcement at Double Waler Condition** **Closed** **08/29/2013** **09/08/2013** **09/02/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc John Berggren

REQUEST:

Please refer to attached drawing 1/S1-3201 attached Photo SCCI-RFI 305.

As per field coordination, the double shoring waler condition, where the waler web is lower than that of a single waler, the tail of the #10@8" (reference attached excerpt drawing BM-3t of submittal package TG0600-301.1) haunch reinforcement interferes with the web of the shoring waler.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The revised haunch reinforcement clear cover as described in the RFI per field coordination is confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

The condition was observed at Grid 2/ A and will likely repeat at other double waler locations. The typical resolution to the condition shall be to adjust the position, where required, so that the interfering tail clears the double waler web. As a result
the 1-1/2" clear cover will deviate up to 4-112" of clear cover. The plan location of the tail shall remain as close as possible per the placement drawings. See the attached Photo for further details.

The 1-1/2" clear spacing shall remain at locations unaffected by the reduced clearance of the double-wlaer. For pieces not yet fabricated and delivered, please refer to RFI T-0603 as the proposed solution to conform to the 1-1/2" clear cover.

Pleases confirm the revised haunch reinforcement clear clover as coordinated in the field is acceptable.

T-0706 **BGP - Locations of Electrical Outlets, Equipment, and Fixtures** **Closed** **08/30/2013** **09/09/2013** **09/13/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Per the RFI response, please find attached the revised layout for the Electrical Room B2221. This revised layout shows the dimensions off of the interior walls as requested.

Please advise if it is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per the Pour #1 RFI coordination meeting on 9/5/13, W/O is to resubmit RFI with revised sketch. Refer to RFI T-0665.2 submitted on 9/12/13.

T-0707 **BGP - Spandrel beam modifications in Area 1 & 2** **Closed** **08/30/2013** **09/09/2013** **09/10/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: Exhibits A - C

Further to response to RFI T-637 please find attached

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
9/9/2013
RESPONSE:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

proposed changes and details to the spandrel beams in pour area 1 & 2 for location plan see Exhibit - A and B

Exhibit - B shows the extent of the modifications necessary due to the foundation wall offset and changes made to wall reinforcement due to CDSM encroachment.

Exhibit - C shows the transition between modified reinforcement to contract reinforcement at spandrel beam as well as cross sections of the original design and the proposed modified beam detail.

RFI T-448.5 and T-608 shows the thinning of the wall with the revised reinforcement spacing due to CDSM pile encroachment in Area 1 and 2.

RFI T-576 shows the revised location of the foundation wall on the west elevation of area 1.

Please confirm that these modification as outlined at these locations are acceptable.

Contractor proposed modifications to the Lower Concourse spandrel beams within Area 1 and 2 are acceptable.

T-0708 **BGP - Spandrel Beam Modification in Area 3** **Closed** **09/03/2013** **09/13/2013** **09/11/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: Exhibits A & B

Further to response to RFI T-637 please find attached proposed changes to the spandrel beams in pour area 3 for location plan see Exhibit - A

Exhibit - B shows the extent of the modifications necessary due to the foundation wall offset due to CDSM encroachment.

RFI T - 621.1 shows the revised location of the foundation wall on the north elevation of area 3 due CDSM pile encroachment.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
9/11/2013
RESPONSE:
Contractor proposed modifications to the Lower Concourse spandrel beams within Area 3 are acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

RFI T - 576 shows the revised location of the foundation wall on the west elevation of area 3 again due CDSM pile encroachment.

Please confirm that this modification as outlined at these locations is acceptable.

T-0709 **BGP - Mat Slab Added Steel Interference** **Closed** **09/03/2013** **09/16/2013** **09/04/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

Reference Drawing S1-3003 and Spec Section 03 20 00
See attached Gerdau Sketch SK-77, BM-3b, BM-3t

Due to the location of select trestle and pin piles, the #9@16" (bottom mat) and #11@16" (top mat) added North-South layer reinforcement cannot be installed at the desired spacing. The proposed solution is to cut the added #9 or #11 bars, where interrupted by a pile, and add a hook of equal size or greater (#11 hook max) with a lap splice similar to the hooks used for the trestle and pin pile trim steel.

Please confirm if this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The rebar conditions for bars at pin/trestle piles are addressed in typical details 2 & 3 on S1-3003 as well as details 4 & 7 on S1-3009 - these also apply to the inquired add bars in the RFI. The contractor-proposed use of spliced hook at these locations is acceptable.

T-0710 **BGP - Haunch Reinforcement Alternative Detail at Dewatering Well in Area 3** **Closed** **09/03/2013** **09/16/2013** **09/04/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

Reference Drawing: S1 -3201
Reference Spec: 03 20 00
Attached Gerdau Sketch: SKS-76.1, SKS-76.2, SKS-76.3

A portion of the #10 @ 8" haunch bars cannot be installed

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

At conflicts with dewatering wells, the tail of the haunch bar may be terminated as shown in Gerdau SKS-76.3 contained in the RFI. The embedment length for #10 headed bar shall be 18¿. Alternatively, the embedment may be a straight development, either

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

as fabricated due to conflicts with overhead obstructions (shoring walers and struts) and the dewatering well sleeves. Per discussions with Sean McNeil where bars cannot be installed due to the obstructions, a modified #1 0 haunch bar with an HRC 555 head can be installed in place ofthe typical haunch bar. The attached sketches (SKS-76.1 and SKS-76.2) depict the magnitude ofthe obstructions at the dewatering wells in Area 3.

Please confirm if this is acceptable.

Additionally, please provide the required embedment length for the headed tail of the modified haunch bar.

inclined or vertical, of 42¿. The 180 degree hook at the top of the bar shall comply with the RFI T-702 BGP response regarding the location of the radius point.

T-0711 **SSS - Radius Change Request for LC301** **Closed** **09/03/2013** **09/13/2013** **09/04/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

A design change on the light column critical type LC301 (CN0058) node has changed the radius between the body and the lifting bracket from the original two inches to one inch. We would like to formally request a change to a minimum of a two inch radius in this location. A one inch radius on the 301 bracket creates the following manufacturing challenges:

A. The sand in the 1 inch radius in the mold will superheat and cause burn in/on sand adherence to the casting causing additional grinding and work in the finishing department to meet visual acceptance criteria.

B. The sharper radius will create a hot spot and solidification challenges - liquid metal contracts % inch per foot and silica sand expands 1.2% during solidification and as cast hot tear potential in the radius may occur causing welding, grinding and blending. This again will be to meet the visual acceptance criteria.

C. With a 2 inch radius the appendage (lifting bracket) will be much closer to thermally neutral reducing solidification stresses and potential shrinkage in the section radius.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Proposed 2" fillet radius between the main body of casting LC301 and its side fin is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

D. Cosmetically a 2 inch radius will look much more presentable in the as cast state.

E. The 1 inch radius will require either chill sand in the radius, a metal chill made in the mold, or solidification cracking brackets as heat sinks to equalize the solidification temperatures and add strength to prevent hot tearing during solidification. Additional grinding of these areas will be necessary to meet visual acceptance criteria.

F. Items A, B, and E will add costs to the manufacturing process of the casting.

Our purpose is to point out the effects of the 1 inch radius design request and make sure that the designers are aware of the potential impact of having the smaller radius versus the 2 inch radius in the original designs that were reviewed. Bradken Atchison can certainly produce the 1 inch radius and manage the effects the 1 inch radius causes, but producing that design will have cost impacts to the casting process.

T-0712 **BGP - Jitter Bug Finish on Mat Slab Surface** **Open** **09/03/2013** **09/13/2013** **09/04/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference Spec Section 033020.3.6.B.l.c.
See attached photos for a visual reference.

Please reference TG06.0, BGP contract specifications 033020.3.6.B.l.c. SCCI is proposing to finish the top surface of the Mat foundation Slab, as a "Jitter Bug" finish. All other finishing requirements will remain the same.

Is this acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The proposed ¿Jitter Bug¿ finish is not acceptable. Future requirements for the train bed are unknown and the proposed finish may not be acceptable in some instances. Use the stiff broom finish per specification section: 03 30 20.3.6.B.1.c

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T-0713 **BGP - Spandrel Beam Modifications in Area 4** **Closed** **09/05/2013** **09/15/2013** **09/16/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Reference Documents: Exhibits A - B

Further to response to RFI T-637 please find attached proposed changes to the spandrel beams in pour Area 4 for location plan see exhibit - A.

Exhibit - B shows the plan view of the modification necessary to the spandrel beam due to the revised reinforcement width of the foundation wall as well as typical cross sections.

RFI T - 622.1 shows the extent of the modification to the foundation wall on the north elevation of area 4.

Please confirm that this modification as outlined at this location is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
9/13/2013
RESPONSE:
Contractor proposed modification to the Lower Concourse spandrel beam within Area 4 is acceptable. Proper lap splices shall be provided where the beam rebar is transitioned from 7-1/16 inch spacing to 6-1/2 inch at each side of the encroached wall region.

T-0714 **BGP - Area 3- Partition Wall Pier Rebar Conflict With Plumbing Near GL3/C.3** **Closed** **09/03/2013** **09/13/2013** **09/04/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

See attached Gerdau's RFI #078.

Near Gridlines 3/C.3, there is a conflict between the partition wall pier dowels and the installed 6" pluming pipe (8" with insulation). The wall pier currently overlaps with the plumbing pipe by approximately 6". Gerdau proposes to move the wall pier to the East, or West to allow the dowels to clear the pipe.

Please provide the acceptable direction (East or West) to shift the wall pier.

Please note that there are conduits stub up on the East side that would need to be moved, should the opening is shifted towards the East.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The 2 corner bar dowels of the pier that are in conflict with the pipe may be minimally bent to clear the pipe.

Non-corner vertical bar dowels within the pier that are in conflict with the pipe may be shifted to clear the pipe.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0715	BGP - Adjustment to CB location	Closed	09/03/2013	09/13/2013	09/04/2013	Potentially	☐

From: Webcor Construction LP Joanne Filipas **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

We understand from Design Team small adjustment to the locations of CBs at GL 1.8, J ; GL 7.2, C.3 and GL 10.2, B.5 are required.

Please provide dimensions for the modified locations.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to the attached SKA-2820 and SKA-2821 for the modified locations of the CBs indicated in RFI T-0715 BGP.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0715.1	BGP - Adjustment to CB location	Closed	09/04/2013	09/14/2013	09/05/2013	Potentially	☐

From: Webcor Construction LP Spencer Sayles **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please refer to attached drawing SKA-2820 and A1-2812 dated 04/29/2013.

As per design coordination meeting between SCCI, WOJV, AAI and TT, please confirm it is acceptable to omit SKA-2820 provided in RFI T-0715. Due to the timing of the issuance of this change, the Area 3 mat slab pour would be delayed by at least a week because the catch basin is already installed per drawing A1-2812, tested and inspected by DBI.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is acceptable to omit SKA-2820 provided in RFI T-0715.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0716	BGP - Haunch Reinforcement Alternative Detail	Closed	09/03/2013	09/13/2013	09/03/2013	Potentially	☐

From: Webcor Construction LP Marina Rosso **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Webcor Construction LP Jackson Tukuafu

REQUEST:

See attached Gerdau's RFI #79.

The RFI Response to RFI T -0702 stated that the 180 degree hook chamfer bars are acceptable where the bars conflict with the double shoring walers. The intent of the RFI was to request the use of the 180- degree hook for the chamfer bars throughout the structure regardless of whether or not the bars were below a double or single walers.

Please confirm that this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per RFI 702 response, contractor-proposed 180 degree hook for the chamfer bars that are in conflict with double shoring walers is acceptable for bars that have not been fabricated. The radius point for the bend shall remain located as originally detailed on 1/S1-3201.

At contractor's option, the same bars may be used at any haunch location and are not restricted to the double walers.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0716.1	BGP - Haunch Hook Embedment Clarification	Closed	10/08/2013	10/18/2013	10/10/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please refer to RFI T-0716 and drawing detail 1/S1-3201.

As per field review by SCCI, Gerdau and TT Field Engineer, the embedment lengths of the haunch hooks (see RFI T-716) provided average 35" but are no less than 29". The embedment lengths are measured from their intersection with the wall interior reinforcing curtain as shown in the attached Gerdau sketch SK-094. Please confirm the embedment lengths are acceptable as discussed with TT field engineer.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/9/2013
RESPONSE:
The haunch hooked embedment lengths as described in the RFI are acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0717	BGP - Spandrel Beam Modifications in Area 5	Closed	09/09/2013	09/19/2013	09/17/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Webcor Construction LP Michael Spillane

REQUEST:

Reference Documents: Exhibits A - B

Further to response to RFI T-637, please find attached proposed changes to the spandrel beams in pour Area 5 for location plan see Exhibit- A

Exhibit - B shows the plan view of the modification necessary to the spandrel beam on the north elevation due to the revised reinforcement width of the foundation wall as well as typical cross sections. The spandrel beam on the south elevation will be installed as per contract drawing with no modifications necessary.

RFI T-626.1 shows the extent of the modification to the foundation wall on the north and south elevations of area 5.

Please confirm that this modification as outlined at this location is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
9/17/2013
RESPONSE:
Contractor proposed modification to the Lower Concourse spandrel beam within Area 5 is acceptable. Proper lap splices shall be provided where the beam rebar is transitioned from 7-1/16 inch spacing to 6-1/2 inch at each side of the encroached wall region.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0718	BGP-Spandrel Beam Modifications in Area 6	Open	09/11/2013	09/21/2013	09/19/2013	Potentially	☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Reference Documents: Exhibits A - B

Further to response to RFI T-637 please find attached proposed changes to the spandrel beams in pour Area 6 for location plan see exhibit - A

Exhibit - B shows the plan view of the modification necessary to the spandrel beam on the north and south elevations due to the revised reinforcement width of the foundation wall due to encroachment of the CDSM beams as well as typical cross sections of the spandrel beam. RFI T - 627.1 shows the extent of the modification to the foundation wall on the north and south elevations of Area 6.

Please confirm that this modification as outlined at this location is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
9/18/2013
RESPONSE:
Contractor proposed modification to the Lower Concourse spandrel beam within Area 6 is acceptable. Proper lap splices shall be provided where the beam rebar is transitioned from 7-1/16 inch spacing to 6-1/2 inch at each side of the modified cross-section.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0719	BGP - Spandrel Beam Modifications in Area 7	Open	09/16/2013	09/26/2013	09/19/2013	Potentially	☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Webcor Construction LP Michael Spillane

REQUEST:

Reference Documents: Exhibits A - B

Further to response to RFI T-637 please find attached proposed changes to the spandrel beams in pour Area 7 for location plan see exhibit - A

Exhibit - B shows the plan view of the modification necessary to the spandrel beam on the north and south elevations due to the revised reinforcement width of the foundation wall due to encroachment of the CDSM beams as well as typical cross sections of the revised spandrel beams.
RFI T - 628.1 shows the extent of the modification to the foundation wall on the north and south elevations of Area 7.

Please confirm that this modification as outlined at this location is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
9/18/2013
RESPONSE:
Contractor proposed modification to the Lower Concourse spandrel beam within Area 7 is acceptable. Proper lap splices shall be provided where the beam rebar is transitioned from the spacing in the construction drawings to the modified spacing at each side of the modified cross-section.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0720	BGP - Electrical Design Intent for Typical Train Platform Drawings	Void	09/04/2013	09/14/2013	09/05/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author:

REQUEST:

The electrical plan drawings that are noted for reference only in the For Construction - Below Grade Package drawing set dated 08/30/2012 include, but not limited to: E1-2102, E1-2103, E1-2104, E1-2105, E1-2106, E1-2107, E1-2110, E1-2204, E1-2206, E1-2207, E1-2210, E1-3101, E1-3102, E1-3201, E1-3202, E1-3203, and E1-5201. As discussed between F&K, SCCI and WOJV on Wednesday, September 04, 2013, SCCI has not installed or accomodated for any electrical conduits that may be required for devices shown in the aforementioned drawings due to the note "For Reference Only." As requested by F&K, this RFI is being submitted to review design intent.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

As discussed internally, F&K to pursue FCR process.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0721	BGP - NW Corner Wall Intersection Horizontal and Haunch - Area 3	Closed	09/04/2013	09/14/2013	09/04/2013	Potentially	☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Marina Rosso **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference Drawing: 3/S 1-3001
Reference Spec: 03 20 00

Per field coordination with the on-site structural engineer the following conditions are to be confirmed as acceptable:

1. In the Northwest comer of Area 3, comer bars matching the size, spacing and lap splices of typical horizontal reinforcing are installed in-lieu ofbent typical horizontal bars. See Bar A in sketch FC-1

2. In-lieu of hooked haunch horizontal bars, straight bars of the same size have been installed with the required embedment. See Bar B in sketch FC-1.

3. At the intersection of the North and West haunch bars, the haunch bars along the North (Bar D) wall have been trimmed at the approximate intersection with the West (Bar C) haunch bars. Reference sketch FC-2. The observed condition is acceptable, but at future locations within the intersection of two haunches the detail for BarE will be used unless BarD already has 42" of embedment.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The field conditions as described in the RFI are confirmed as acceptable.

T-0722 **BGP - Haunch Reinforcing Intersection with Dewatering Wells** **Closed** **09/04/2013** **09/04/2013** **09/04/2013** **Potentially** ☐

From: Webcor Construction LP Marina Rosso **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference drawing: 1/S1-3201
Reference spec: 03 20 00

Per field coordination with the on-site structural engineer the following conditions are to be confirmed as acceptable:

1. In Area 3 along Gridline A, the haunch bars have been trimmed at the approximate intersections with the bottom mat. See sketch FC-3

2. In Area 3 along Gridline 1, (2) haunch bas have been trimmed at the approximate intersection with the top mat with no embedment. See sketch FC-4.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The field conditions as described in the RFI are confirmed as acceptable. Regarding potential future conflicts with dewatering wells, refer to RFI T-0710 BGP response.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

At future locations where dewatering wells interrupt haunch bars, use detail for bar E in sketches FC-3 or FC-4 if the haunch bars do not have 42" of embedment into the mat slab.

T-0723 **BGP - Couplers for Future Walls** **Pending** **09/05/2013** **09/13/2013** **09/05/2013** **Potentially** ☐

From: Webcor Construction LP Marina Rosso **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

Reference Det. 6 on S1-3001
See attached photo of the form savers that are going to be used as couplers for future walls.

As discussed in area 3 Mat Slab meeting on 9/4/2013 SCCI is proposing to installing all formsavers for future walls in the Mat slab flush with the top of the Mat slab, to EL -35.67'.
As shown on the attached photo, epoxy coated form savers have tin cap incorporated into coupler's body. This tin cap will protect the rebar until the future construction, and will substitute "tar" shown on Det. 6 on S1-3001.

Is this acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Epoxy-coated form savers shall be installed at the top of the mat slab as discussed on site in the RFI for locations where Detail 1/S1-9051 is applicable and may remain attached to the field observed 2x12 lumber, which shall be chaired to the target elevation. The form-saver/ lumber assembly is not applicable to any wall where there is a keyed joint or waterstop, such as the water tank walls. The arrangement is not acceptable for any "future wall" where the form-saver warranty will not cover corrosion protection for the construction interval without supplementary surface measures to be approved by the design team.

T-0724 **BGP - CDSM Soldier Pile Encroachment Area 8** **Closed** **09/06/2013** **09/16/2013** **09/17/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: Exhibits A - I

This RFI addresses the impact of the encroaching CDSM soldier piles (SP) on the north & south wall in mat slab pour Area 8 as well as all levels of the encroachment into the foundation wall between CDSM piles 133 to 164 on the north elevation and 618 to 650 on the south elevation for Location Plan see exhibit - A

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
9/16/2013
RESPONSE:
The contractor proposed revisions to foundation wall reinforcement due to encroaching CDSM Piles 146, 158, 161 and 632 are acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Exhibit - B, & C depict the location and degree in which the SP are encroaching

WOJV proposal North elevation on gridline A:
(See Exhibit - B & Exhibit - F) Between CDSM piles 145 to 147 and 157 to 159 WOJV is proposing to decrease the specified 36" wall thickness to 33 5/8" to clear the encroaching SP 146 & 158, originally these were WR1 reinforcement area's #11@8"oc EF vertically and would change to #11@6"OC, the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on SE stamped Detail A/Sk.1 (Exhibit - D).

Between CDSM piles 159 to 162-163, WOJV is proposing to decrease the specified 36" wall thickness to 33 5/8" to clear the encroaching SP 161. This foundation wall area was originally a WR2 reinforcement area (#11@6"oc EF vertically) and would change to #11@5"OC this reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on SE stamped Detail A/Sk.3 option 2 (Exhibit -E).

WOJV proposal on the South elevation:
(See Exhibit - B) Between CDSM piles 631 to 635, WOJV is proposing to decrease the specified 36" wall thickness to 33 5/8" to clear the encroaching SP 632. This foundation wall area was originally a WR2 reinforcement area (#11@6"oc EF vertically) and would change to #11@5"OC this reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on SE stamped Detail A/Sk.3 option 2 (Exhibit - E).

In all other areas without CDSM pile encroachment issues the reinforcement will remain unchanged as per the Contract drawings.

See Exhibit- G, H & I shows details of transition between modified reinforcement to contract reinforcement.

These solutions if approved would be incorporated into the TG06 shop drawings.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please confirm if these solutions would be acceptable.

T-0725 **BGP- CDSM Soldier Pile Cut-Off** **Closed** **09/06/2013** **09/16/2013** **09/18/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

In Detail 2/A1-8710 (see attached) it's not clear as to the final cut-off elevation for the CDSM wall shoring piles. Currently CDSM shoring piles extend up past the existing grade and future TG12.1 Civil Site Work Trade Contractor will be responsible for cutting off the CDSM wall shoring steel piles to the final elevation. WOJV propose that the cut-off elevations for the shoring piles be established at 3" above the train box lid i.e. at the top of concrete protection slab. See attached sketch SK -1.

If the shoring piles are to be cut off below the train box lid as currently shown in detail 2/A-8710, the waterproofing membrane could be compromised by the heat generated by the cutting torches which will have to be used to cut these large steel piles, also this detail does not address the instances where the shoring wall is shared with further new projects i.e. 181 Fremont street in Zone 4 and 101 1st street in Zone 3.

It is preferable that the shoring piles be cut-off 3" above the top of the train box lid to ensure that the waterproofing system isn't compromised and omits the need to pothole around 861 CDSM piles which are in close proximity to adjacent property and live traffic.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
9/17/2013
RESPONSE:
The soldier piles are within the City Public Right of Way. Obstructions either have to be at least 4' below the surface or be protected with 1" thick steel plates (similar to the Train Box Lid). Leaving the soldier piles in this Public Right of Way may compromise agreements that have been established with the City.

Either the piles will need to be cut down below the 4' depth entirely or the vertical flange adjacent to the Train box is left in place and the opposite (outside) flange and the web are cut down to 4' below the finished surface. Leaving the inside flange in place to the top of the Train Box Lid could facilitate support for the vertical waterproofing assembly.

T-0725.1 **BGP- CDSM Soldier Pile Cut-Off** **Closed** **09/30/2013** **10/10/2013** **10/14/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Further, in response to RFI T-725, WOJV requires the cut-off elevations for the 861 CDSM piles around the perimeter of the train box taking into account but not limited to, San Francisco city requirements for beam cut off in a public right of way, the elevation of utilities entering the train box structure, bridge structures and ramps as well as pedestrian stair towers 201A and 201 B and passenger elevator 201 foundations on the west side of Zone 1.
Another item which will also need to be taken into account is where the CDSM shoring wall is shared with adjoining Projects i.e. 181 Fremont Street in Zone 4 and 101 1st street in Zone 3.

This information once provided will but used as part of the future trade packages TG07.2 Concrete Superstructure and TG12.1 Civil Sitework scopes of work.

Please provide in tabular format a list of the final cut-off elevations for each individual CDSM pile around the perimeter of the train box.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

RESPONSE: RFI T-0725.1 BGP- CDSM Soldier Pile cut-off

George Metzger
10/11/2013
RESPONSE:
Per Design Review Meeting discussion on 10/09/2013, TJPA (ES) stated to reject the RFI as it is not construction related and will be addressed with W/O within the bidding documents.

T-0725.2 **BGP - CDSM Soldier Pile Cut-off** **Closed** **06/30/2014** **07/10/2014** **07/16/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche

To: Turner Construction Compan PHIL MILITELLO

Answered By: Turner Construction Comp Jack Adams

Co-Author:

REQUEST:

Further to response to RFI T-725.1 TG07.2 trade package requires the cut off elevations for the 861 CDSM pile around the perimeter or the train box taking into account but not limited to, San Francisco city requirements for beam cut off in a public right of way, the elevation of utility's entering the train box structure, bridge structures and ramps as well as pedestrian stair towers 201A and 201B and passenger elevator 201 foundations on the west side of zone 1, Another item which will also need to be take into account is where the CDSM shoring wall is shared with adjoining Projects i.e. 181 Fremont street in Zone 4 and 101 1st street in Zone 3.

Please provide in Tabular format a list of the final cut-off

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

As discussed with the design team and the TJPA, Tabular format a list of the final cut-off elevations for each individual CDSM pile does not exist. The CDSM Wall cut-off elevations are by contractor means and methods with the elevation determined by the contractor based on the various components of the Transit Center building construction for example; contractor formwork, waterproofing and re-construction of adjacent streets/sidewalks.

Where CDSM wall is shared with adjoining Projects i.e. 181 Fremont street in Zone 4 and (Salesforce Tower) 101 First street again the CDSM Wall cut-off elevations are a contractor means and methods with

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

elevations for each individual CDSM pile.

the elevation determined by the contractor to construct the Transbay Transit Center.

For future bid packages, the Construction Manager can coordinate with the City of San Francisco for the requirement for removal. For example the City DPW states sheet piling and laggin"shall be cut off at least 3 feet below pavement subgrade with the upper part removed."

Jack Adams, Turner Construction Dated 7/16/14

T-0726 **BGP- Trestle pile No 6 in comflict with beam at Lower Concourse Level** **Open** **09/09/2013** **09/19/2013** **09/20/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Webcor Construction LP Michael Spillane

REQUEST:

Following a review and discussion on the trestle pile location, it has been noted that trestle pile number 6 (see sketch attached) is in conflict with a beam (B45) at the lower concourse slab elevation between gridline 5-6, E-F. The contractor is proposing to blockout a section of slab as shown on the sketch, this blockout section would then be infilled once the trestle pile has been removed.

The contractor is to insure that the appropriate reinforcement lap splices are present between these concrete pours.

Please confirm if this option would be acceptable

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
9/20/2013
RESPONSE:
This approach is acceptable. Please submit detailing in reinforcement submittal for review.

T-0727 **BGP - Area 8 Clear Cover to the Vertical Reinforcement on the Foundation Wall** **Closed** **09/09/2013** **09/19/2013** **09/18/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Webcor Construction LP Michael Spillane

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference Documents: Exhibits A - E

Further to response to RFI T=0609 (see exhibit - D) this RFI shows the areas of foundation wall in pour area 8, on the north & south wall elevations which will have greater than 6" of clear cover to the vertical reinforcement for location plan see Exhibit - A

Exhibit - B & C depict the amount and location of the foundation walls which the will have greater than 6" of clear cover to the vertical reinforcement.

RFI T-0724 shows the thinning of the wall with the revised reinforcement spacing due to CDSM pile encroachment in Area 8.

Please confirm that the clear cover between the waterproofing system and the vertical reinforcement as outlined at these locations is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
9/17/2013
RESPONSE:
The clear cover between the waterproofing system and vertical reinforcement as presented in Exhibit C of this RFI is acceptable.

T-0728 **BGP - Column Shear Reinforcement and Bump-Out Pile Interference at GL G/15 in** **Closed** **09/10/2013** **09/20/2013** **09/13/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu
Co-Author: Webcor/Obayashi Joint Venture Bob Garcia
To: Turner Construction Compan Gary Krutsch
Answered By: Adamson Associates, Inc George Metzger

REQUEST:

Please refer to attached drawing S1-2024 (dated 11/27/12), S1-3005 (dated 08/3012) and attached Shimmick sketch SK-SCCI 316.

Per field measurements, the 36" bump-out trestle pile near gridlines F.7/15 interferes with the nearby column shear reinforcement at gridlines G/15. Due to the size of trestle pile, the adjustment of the shear head locations, as provided in RFI T-0703, cannot be achieved.

Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per SKS-0283 (Attached):

To avoid the trestle pile interference with the column shear heads at Grid G/15, the heads layout shall be rotated 45 degrees about the column center.

The layout of heads in an arm shall be modified such that each of the arms contains 9 lines of heads extending to 16' from the column center.

Heads in an arm shall be placed approximately at each 8' reinforcing module intersection, such that each adjacent line radiating from the column is staggard.

The minimum number of total heads shall be 508.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0729	BGP - Typical Trim Steel Requirements for Mat Slab per Field Coordination	Closed	09/10/2013	09/20/2013	09/11/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please refer to attached drawing S1-3009 and S1-3501.

As per field coordination between SCCI, Gerdau, WOJV and TT on 09/09/2013, to help alleviate congestion in the mat reinforcing, and in particular, congestion resulting from add bars due to openings and penetrations, please confirm the following items are acceptable:

1. Details 4 and 7 on Sheet S1-3009 in so far as they apply to trestle piles, pin piles, dewatering wells and piezometric pipes can be relaxed in terms of additional bars. For an even number of bars interrupted (typical bars and add bars) the number of bars added on either side of the opening can be (number of interrupted bars)/2. For an odd number of bars interrupted (typical bars and add bars) the number of bars added on either side of the opening can be (number of interrupted bars +1)/2.

2. Detail 1 on Sheet S1-3501, which applies to sinks, can be relaxed in terms of additional bars. For an even number of bars interrupted (typical bars and add bars) the number of bars added on either side of the opening can be (number of interrupted bars)/2. For an odd number of bars interrupted (typical bars and add bars) the number of bars added on either side of the opening can be (number of interrupted bars +1)/2. The minimum requirement of 2 bars on either side of the opening need not apply.

3. The number of bars and maintenance of clear spacing will take precedence over 8" or 4" module spacing as to minimize the number of potential bar interruptions (and minimize resulting add bars). Any bar may be displaced to avoid conflict. The maximum center-to-center spacing of any two adjacent bars may be as large as 16". Clear spacing of 1 bar diameter shall be maintained between bars where bar relocation necessarily reduces spacing in the vicinity of relocation. Where bar relocation affects a lap splice, noncontact lap splices will be allowed up to 6" for #10 and #11 bars. This remedy shall apply in particular when seeking to avoid interruptions at small penetrations such as risers, vents, sinks and conduits.

4. Clear spacing of 1db minimum shall be maintained in all mat reinforcing except for contact lap splices.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
9/11/2013
RESPONSE:
The measures to reduce congestion described in the RFI are confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

5. Measures to reduce congestion at other locations such as catch basins, sump pits, elevator pits, shoring bracing and bridge piers will be considered on a case-by-case basis during field coordination with Thornton Tomasetti's field representative.

T-0730 **BGP - Extended Time for Concrete Delivery of Protection Slab Mix** **Closed** **09/10/2013** **09/20/2013** **09/20/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please refer to attached excerpt from specification section 033020, Article 3.3 - D.

The referenced specification section requires mixed discharge concrete "...be completed within 1-1/2 hours or before the drum has revolved 300 revolutions, whichever comes first..." However, Cemex the concrete supplier has performed the set time test to evaluate the time at which the onset of hydration occurs for mix #1557217 (Protection Slab Mix) as per the attached Cemex letter dated August 26, 2013.

As per the attached test result by Cemex, please confirm it is acceptable to extend the concrete delivery to two (2) hours in lieu of 1-1/2 hours as specified.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It will be acceptable to extend the concrete delivery time as proposed in the RFI.

The contractor shall be responsible for providing an end concrete product that meets the specifications.

T-0730.1 **BGP - Extended Time for Concrete Delivery for Columns, Foundation Walls, Shear** **Closed** **12/04/2013** **12/14/2013** **12/11/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please see attached Set-time tests and Letter dated 11/25/2013, authored by Robert Foley, CEMEX QC Manager. The attached Set-time tests are for mixes: #1557205 - Columns, #1557216 - Foundation Walls, and #1558218 - Shear Walls and Concourse Slab.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
12/10/2013
RESPONSE:
It will be acceptable to extend the concrete delivery time as proposed in the RFI.
The contractor shall be responsible for providing an

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Is it acceptable to extend the delivery time of the mixes refernced herein to 2 hours?

end concrete product that meets the specifications.

T-0731 **BGP - Conduit Termination Location for Sump Pumps Between Grid Lines 1 & 12 - Closed** **09/12/2013** **09/22/2013** **09/23/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Please refer to drawing E1-6001, A1-2102, A1-2103, E1-2023 and E1-2022.

Per Detail 7 on plan sheet E1-6001, the sump pump conduits for the below grade package are to be terminated 12" above the mat slab directly adjacent to the future train platform wall.

1. With the train platform wall beginning at grid line 12 and moving east, please provide the conduit termination location for the sumps installed west of grid line 12 where there is no train platform. Please include a set dimension the conduit should be set away from the sump.

Please note that for the two sumps that have been poured in Area 3, the conduits were placed roughly 9' to the north of each sump opening to avoid the future train tracks. There are 8 total sumps west of grid line 12 with 6 of them left to be placed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per detail 7 on sheet E1-6001, note B reads to mount disconnect and receptacle on nearest column for zones 02 and 03. Please terminate conduit 12" above mat slab at nearest face of rectangular column

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T-0732 **SSS - Train Box Column Material Specification** **Closed** **09/13/2013** **09/23/2013** **09/25/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawings: S-0007

After review of General notes SS-9 F on drawing S-0007 Skanskas fabricator, Thompson Metal Fab, is requesting clarification on the material grade specification for the Train Box Columns.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For Trainbox Steel Columns, Frequency P testing is not required. Testing at Frequency H is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please review and update the following if needed prior to Thomson Metal Fab¿s material order.

Plate: Grade ASTM A709 H.P.S. 70W Zone 1
All Train Box material to have a Charpy V Notch Impact Test with a Minimum of 25FT Lbs. @ -10 degrees.
ASTM A673 Frequency "P", ASTM A6 supplementary requirement S5.

T-0733 **SSS - Transfer Girder Material Specifications** **Closed** **09/13/2013** **09/23/2013** **09/25/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawings: S-0007

After review of General notes drawing S-0007 Note our fabricator, Thompson Metal Fab, is requesting clarification on the material grade specification for the Transfer Girders.

Please review and update the following if needed prior to their material order.

Plate: Grade ASTM A572 GR 50 Zone 1
All Transfer Beam Material to have a Charpy V Notch Impact Test with a Minimum of 20FT Lbs. @ 70 degree F.
ASTM A673 Frequency "P", ASTM A6 supplementary requirement S5.

Or "AS Noted"

ASTM A709 Grade H.P.S. 70 W, Zone 1, CVN 25FT Lbs. @ -10 Deg. F.
ASTM Frequency "P", ASTM A6 Supplementary requirement S5.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

No update required.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0734	SSS - Transfer Girder Elevations	Closed	09/13/2013	09/23/2013	09/25/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: S1-2303 thru S1-2307,

Elevations for transfer girders shown on drawings S1-2303 thru S1-2307 are in decimal feet. Once converted to feet/ inches they become 1/16th values.

Please verify if the elevations should be rounded up to the nearest 1/8th of an inch or kept as converted.

See attached specific conversions for each transfer girder locations

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Transfer girder elevations may be rounded to the nearest 1/8".

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0735	SSS -Clarification of Lateral Bracing Members	Closed	09/16/2013	09/26/2013	09/25/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawing: S-0007

Please identify what are considered "LATERAL SYSTEM MEMBERS" as called out in the GENERAL NOTES SS-9, B "REGARDLESS OF THICKNESS ALL TRUSSES, LATERAL SYSTEM MEMBERS (INCLUDING COLUMNS, BRACES, ETC.): 20FT-LB @ 70 DEG. F."

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Lateral system members refer to members of the seismic framing. Following members constitute the seismic frame: Members designated as SLRS or SFRS in the drawings, members in "seismic frame elevations". See plan notes to locate "seismic frame elevations".
As called out in Specification 05 12 10 (Structural Steel - Additional Seismic Requirements) Section 2.1.A.1, "Heavy sections shall be supplied with CVN testing in accordance with AISC 341". Therefore, requirements of SS-9B need not be applied and CVN testing requirements can be limited to heavy sections (shapes) per the AISC 341 requirements. As noted in General Notes GR-2, AISC 341-10 is the governing provision.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0736	SSS - PJP Weld Designation at Type 2 Drag Connection	Closed	09/16/2013	09/26/2013	09/25/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Reference Drawing: 2/S1-5017
Reference Sketch: SK1

On detail 2/S1-5017 for the Type 2 Drag connection verify at the 2" plates the 1/2" PJP weld is the actual prep or is additional prep required to achieve a 1/2" effective weld requirement (IE; 5/8" prep).

The 1/2" is actual bevel dimension, effective weld will be (1/2"-1/8")=3/8".

T-0737 **SSS - Type 2 Drag Connection Pin Clearance** **Closed** **10/07/2013** **10/17/2013** **10/09/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

1) The Drag Connection Details on drawing S1-5017 appears to show double nuts securing each end of the pin, please confirm.

2) Refer to the Drag Connection Details on drawing S1-5017, is it acceptable to add a cotter pin thru the threads of the pins after the double nut to further secure the nuts from backing out?

3) Skanska proposes to size the pins for the Drag Connections per AISC Table 15-8, "Dimensions and Weights of Recessed-Pin Nut", i.e. provide a 4 ½" diameter thread for a 6" diameter pin. Is this acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) It is confirmed that double nuts are required.
2) It is acceptable to add a cotter pin thru the threads of the pins after the double nuts to further secure the nuts from backing out.
3) Sizing the diameter of the thread area per AISC Table 15-8 is acceptable, but please note that the pin for the Type IIM & IIP drag connections is 7" diameter, not 6" as noted in the RFI.

Stacy Wilson (TCCO Response)
If the Contractor elects to use cotter pins as described in the RFI above, it will come at no cost to the TJPA as it is considered means and methods.

T-0738 **SSS - Drag Connection to Bus Deck Castings** **Closed** **09/17/2013** **09/27/2013** **10/01/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawings: S1-5016 and S1-5017

The spacing of the shear plates on the bus deck cast nodes varies in conjunction with the thickness of the web of each connecting beam. See 1c/S1-5016 and 1b/S1-5017 for reference.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

In concept, TT take no exception with standardizing the bolt and pin lengths, but offer the following comments:

1.The bus deck cast nodes are in the process being fabricated, so the proposed change shall not affect the cast node pad width. The pad on the cast node has

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

In order to avoid customizing the cast nodes, connection pins and/or the bolt lengths, our fabricator, Oregon Iron Works, proposes to standardize the spacing on the cast node shear connection plates and customize the thickness of the web reinforcing plates. See the attached mark-ups of S1-5016 & S1-5017 depicting the proposed detail.

Please confirm that this proposal is acceptable.

sufficient width to accommodate the connection plates as shown on the contract documents.

2.For Type I drag connection, the tabulated plate thicknesses do not include the ones for W40 x327 (near Grid 9.9, 10.1, & 19.9) and W40x392 (near Grid 20.1).

T-0738.1 **SSS - Nominal Gap Dimensions for Cast Node Drag Connections** **Closed** **01/14/2014** **01/24/2014** **01/24/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

WOJV RFI T-0738 (SK RFI 004.1) was submitted to the EOR proposing a 1/2" gap for Type 1 and Type 2M drag connections at the Bus Deck Level Cast Nodes. These ½" gaps were not explicitly called out, but were indicated on the suppor ting documents attached for your reference.

Subsequent conversations with Thornton Tomasetti and Webcor/Obayashi have revealed that a 1/8" nominal gap is preferr ed in lieu of the noted ½" gap.

Please advise if a 1/2" or 1/8" nominal gap is required for the Type 1 drag connection on 1/S1-5016 and Type 2M drag connection on 1/S1-5017.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The 1/2" gap was proposed initially in RFI T-0738 to allow for 1/4" gap at each side of the beam web. We propose a 1/8" gap each side to mitigate the potential joint movement in an earthquake. We believe that the 1/8" gap is sufficient for erection tolerance. If Skanska prefer the 1/4" gap, please provide justification for the Design Team to review.

T-0739 **BGP - Column C16 and Knock-Out Corbel at West Throat** **Closed** **09/17/2013** **09/27/2013** **09/18/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please refer to attached drawing detail 1/S1-2022 and 4/S1-3260.

Per previous discussion with TT field engineer, in the West throat shearwalls which contain integrated CI6 columns and vertical corbels to restrain the knock-out

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
9/17/2013
RESPONSE:
Column C16 is a boundary element in the West Throat Shearwall. Integral to the column (and the wall) is a vertical corbel that restrains the knock-out wall. Ties

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

walls, only the CI6 column ties are required to penetrate the mat at the designated spacing for a distance of at least 12" below the lowest top mat elevation. The ties associated with the corbel are not required to penetrate the mat slab.

This RFI confirms that the column and corbel ties, as placed, are acceptable based on the observation by the TT field engineer.

are indicated for both the column and the corbel. Only the column ties are required to penetrate the mat at the designated spacing for a distance of at least 12¿ below the lowest top mat elevation. The ties associated with the vertical corbel are not.

As the corbel ties are not required below the mat, the corbel ties observed in the field are necessarily confirmed as acceptable.

The column ties, which are required to penetrate the mat, shall be placed per the contract drawings. This RFI response does NOT confirm the placement or spacing of the column ties observed in the field.

T-0740 **BGP - Mat Slab Rebar Alternate to Grade 75 #11 in Area 6 & 7** **Closed** **09/17/2013** **09/27/2013** **09/26/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Due to mill shortages of grade 75 #10 reinforcing please confirm that at no cost to the Owner, the implementation of grade 75 #11 reinforcing where required will be acceptable for use within the typical mat reinforcing installed at 8" O.C.

The use of the grade 75 # 11 rebar is expected to supplement the typical #1 0 bar in the following locations, 3rd and 4th layer of Area 6, and 4th layer of Area 7.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
9/25/2013
RESPONSE:
GR75 #11 bars as proposed in and limited to the scope of the RFI is acceptable.
Note that the lap splice length for #11 GR75 bars to #11 GR75 bars will increase over than of the previous #10 GR75 to #10 GR75 bars. Other combinations of spliced bars will be governed by the larger of LTE or the larger (or stronger) bar and the tension lap splice length of the smaller (or weaker) bar per Note 4 of Detail 1/S1-3001.
Clear documentation of these bars shall be made available from time of delivery. Submit as-built or marked-up submittal that reflects these bars for record.

T-0741 **BGP - Pile Location Discrepancy at GL E/34.5 in Zone 4** **Closed** **09/17/2013** **09/27/2013** **09/26/2013** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please reference attached drawing S1-2057 and S1-3007.

The bridge pier pile (4'-0" diameter) near grid E/34.5 is shown in Sl-2057 to be offset from the typical row of piles shown along gridline 34.7. In addition, detail 1/Sl-3007 depicts the pile being located within the pit that is located at gridline E/34.5. However, as per BBI's Beale Street Bridge drawings and as-built conditions, the aforementioned bridge pile is installed in line with the other piles on gridline 34.7.

Please confirm the as-built location of the bridge pier is acceptable and the sump pit detail shown in 1/S1-3007 is no longer applicable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
9/25/2013
RESPONSE:
This topic has already been addressed in past RFI's. Please refer to responses for RFI T-0264.7 BSE as well as RFI-0264.3 BSE.

T-0742 **BGP- CDSM Soldier Pile Encroachment Area 9** **Closed** **09/20/2013** **09/30/2013** **09/26/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: Exhibits A - G

This RFI addresses the impact of the encroaching CDSM soldier piles (SP) and steel plate on the north & south wall in mat slab pour Area 9 as well as all levels of the encroachment into the foundation wall between CDSM piles 164 to 188 on the north elevation and 595 to 618 on the south elevation for Location Plan see exhibit - A
Exhibit - B, & C depict the location and degree in which the SP are encroaching
WOJV proposal North elevation on gridline A: (See Exhibit - B) Between CDSM piles 167 to 168 WOJV is proposing to decrease the specified 36" wall thickness to 34" to clear the encroaching Steel plate attached to SP 167 & 168, originally this was a WR1 reinforcement area #11@8" oc EF vertically and would change to #11@6" OC, the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on Detail A/Sk.1 (Exhibit - D).
WOJV proposal on the South elevation: (See Exhibit - B) Between CDSM piles 611-612 to 613-614, WOJV is proposing to decrease the specified 36" wall thickness to

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
9/25/2013
RESPONSE:
The contractor proposed revisions to foundation wall reinforcement due to encroaching CDSM Piles (and added steel plates) in Area 9 are acceptable. Note that reducing the spacing of embedded column vertical reinforcement from 6 inch to 5 inch may negatively impact the installation of embedded column cross-ties which are #5 per construction drawings.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

34" to clear the encroaching SP 612. This foundation wall area was originally a embedment column with reinforcement in this area was a double layer of #11@6" OC EF vertically and would change to #11@5" OC this reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on Detail A/Sk.4 option1 (Exhibit -E).
In all other areas without CDSM pile encroachment issues the reinforcement will remain unchanged as per the Contract drawings.
See Exhibit - F & G showing details of transition between modified reinforcement to contract reinforcement.
These solutions if approved would be incorporated into the TG06 shop drawings.
Please confirm if these solutions would be acceptable.

T-0742.1 **BGP - U-Bar at CDSM Encroachment Near GL 16.9/J in Area 9** **Closed** **10/17/2013** **10/27/2013** **10/23/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please refer to drawing S1-2024, S1-3302 and response to RFI T-0742 - CDSM Soldier Pile Encroachment Area 9.

Per the response to RFI T-0742, the spacing of the verticals in the C21 embedded column at Gridlines 16.9/J was changed from 6" OC to 5" OC due to the CDSM soldier pile encroachment. As a result, there is an odd number (19) of verticals per layer which would leave one row of verticals to not be straddled by a U-bar. Gerdau proposes to widen the final U-bar in the embedded column and straddle 3 rows of vertical bars as depicted in the attached Gerdau sketch SK-97.

Please confirm it is accceptable to proceed as shown in SK-97.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/22/2013
RESPONSE:
All exterior wall bars at their penetration into the mat shall have lateral support perpendicular to the edge of the mat. In Gerdau Sketch SK-97, provide a single leg tie with a 180 hook on the odd exterior vertical wall bar. Alternatively, normal u-shaped ties can be placed either side of an odd bar and a 180 hook added to the odd bar. The embedment length of the single leg tie shall be that of the u-shaped bars.

T-0743 **BGP- CDSM Soldier Pile Encroachment Area 10** **Open** **09/20/2013** **09/20/2013** **09/26/2013** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: Exhibits A - I

This RFI addresses the impact of the encroaching CDSM soldier piles (SP) on the north & south wall in mat slab pour Area 10 as well as all levels of the encroachment into the foundation wall between CDSM piles 164 to 188 on the north elevation and 571 to 595 on the south elevation for Location Plan see exhibit - A
Exhibit - B & C depict the location and degree in which the SP are encroaching
WOJV proposal North elevation on gridline A: (See Exhibit - B) between CDSM pile 200-201 to 206, WOJV is proposing to decrease the specified 36" wall thickness to 34" to clear the encroaching SP 206. This foundation wall area was originally a WR2 reinforcement area (#11@6" OC EF vertically) and would change to #11@5" OC this reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on Detail A/Sk.3 option 2 (Exhibit -E).
WOJV proposal on the South elevation: (See Exhibit - B) Between CDSM piles 574 to 576 and 587 to 588 - 589 WOJV is proposing to decrease the specified 36" wall thickness to 34" to clear the encroaching SP 575 &588, originally these were WR1 reinforcement areas #11@8" OC EF vertically and would change to #11@6" OC, the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on Detail A/Sk.1 (Exhibit - D).
Between CDSM piles 588-589 to 591, WOJV is proposing to decrease the specified 36" wall thickness to 34" to clear the encroaching SP 589 & 590. This foundation wall area was originally a embedment column with reinforcement in this area was a double layer of #11@6"oc EF vertically and would change to #11@5" OC this reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on Detail A/Sk.4 option1 (Exhibit -F).
In all other areas without CDSM pile encroachment issues the reinforcement will remain unchanged as per the Contract drawings.
See Exhibit - G, H & I showing details of transition between modified reinforcement to contract reinforcement.
These solutions if approved would be incorporated into the TG06 shop drawings.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
9/25/2013
RESPONSE:
The contractor proposed revisions to foundation wall reinforcement due to encroaching CDSM Piles in Area 10 are acceptable. Note that reducing the spacing of embedded column vertical reinforcement from 6 inch to 5 inch may negatively impact the installation of embedded column cross-ties which are #5 per construction drawings.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please confirm if these solutions would be acceptable.

T-0744 **BGP - Reinforcement Ties in Knock-Out Corbel and Haunch at SW Corner in Area** **Closed** **09/17/2013** **09/27/2013** **09/18/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please refer to attached detail drawing 2/S1-2030, excerpt drawing from submittal package TG0600-301.2 and SCCI Sketch SK-RFI-324

Per field coordination with TT field engineer, please confirm it is acceptable to omit the pilaster ties of detail 2/S1- 3204 within the body of the haunch provided that:

- The pilaster West corner bar (Bar A in attached sketch) is tied with 135 hooks in both directions
- Ties shall be #4 bars spaced at 4" o.c.
- The tie perpendicular to the South wall shall be developed a minimum of 14" into the South wall beyond thehaunch
- The tie parallel to the South wall shall be hooked around the pilaster East corner bar (Bar B in attached sketch)
- In lieu of two individual ties, it is also acceptable to combine the ties into a single shape with a 90 degree bend at Bar A
- The extent of the ties shall be from the top of the mat to the top of the haunch, after which Detail 2/S1-3204 will resume
- The horizontal haunch bars shall terminate with a spliced matching hook
- The horizontal formsaver bars for the future train tunnel shall be #7 @ 6" O.C. on the inside and outside face of the 3'-0" foundation wall.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
9/17/2013
RESPONSE:
The pilaster detailing as described in the RFI is acceptable within the body of the haunch.

T-0745 **BGP - Construction Joint Layout Modifications at Area 6** **Closed** **09/18/2013** **09/28/2013** **09/30/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

See attached photos of the construction joint at mat slab area 6 South, near grid line 8.5, and CJ layout drawings.

Due to congestion and access SCCI would like to shift the walls and concourse joints at this location 14.5"' to the East. This adjustment does not affect any other structure's elements and complies with the CJ parameters outlined in the contract specifications.

Please confirm modifiying the construction joint layout is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
9/27/2013
RESPONSE:
Per conversation between TT & Shimmick, it was clarified that the proposed joint modification is only at the south end where the original N-S running joint in the mat and the Lower Concourse will turn an angle near the toe of the chamfer so that the joint will end perpendicular to the foundation wall. The 14.5" shift proposed in the RFI is shift in the south end point only.

T-0746 **BGP - Plumbing Clarifications to 2" Vent and 3" San Connection in Area 4** **Open** **09/18/2013** **09/28/2013** **09/20/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Webcor Construction LP Jackson Tukuafu **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

Pleaes refer to attached plumbing drawing PSK-2022 (dated 04/26/2013) and IR Report 1633.

On 09/10/2013, the SFDBI inspector expressed concern about the installation of the 2" vent and 3" connections in the mat slab area 4 - See IR 1633.

Please confirm the 2" vent and 3" connection pipes are to be installed per drawing PSK-2022..

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
9/20/13
RESPONSE:
The 3" drain and 2" vent connections serve as drain for the future Phase 2 under car deluge system control assemblies. They are similar to sprinkler drains, refer to detail 3/P1-6001 (with trap below floor, no trap primer connection below floor, the trap primer connection will be above floor).

T-0747 **SSS - BU Girder Size at Roof GL 28** **Closed** **09/20/2013** **09/30/2013** **09/25/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawing: S1-4114
Reference Sketch: CD RFI 015 SK1 attached.

Reference detail A/S1-4114 which does not indicated the built-up girder size at the Roof Park Level between column lines E.6 and D.4 (see CD RFI-015 SK1 attachment). It

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

GL28 Roof Beam size provided in the Revit model is accurate.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

appears from the latest Revit model that the BU girder is intended to be BU66x30x1.5x2.25. Please confirm the size provided on the Revit model is accurate or advise the girder size to be used at this location.

T-0748 **SSS - Type TTT Threadbar Anchor Bolt Embedment** **Closed** **09/20/2013** **09/30/2013** **09/23/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Stacy Wilson

Co-Author:

REQUEST:

Reference Drawings: S1-5051

Reference S1-5051 which indicates the embedment depths for Type T and TT threadbar anchors are to be 3'-8" and 2'-8", respectively, while the embedment depth for type TTT threadbar anchors is to be 16'-0". Please verify the embedment depth for Type TTT threadbar anchors is to be 16'-0" as indicated on 4/S1-5051.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please see attached email from Lee Ishida of Thornton Tomasetti confirming the embed length is 16 feet.

T-0749 **SSS - Anchor Bolt Finish Requirement** **Closed** **09/20/2013** **09/30/2013** **09/25/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawing: S1-5051, S-0007
Reference Specification: 05 10 00 3.2.P.6

Reference is made to the base plate anchor rod schedule on 7/S1-5051 indicating anchor rods are to conform to either ASTM A615 or A722 standards. While ASTM A615 does not explicitly state finish requirements, A722 calls for all bars to be uncoated. Within the IFC documents, Specification Section 05 10 00 3.2.P.6 and Note SS-10 on S-0007 call for miscellaneous metals and exposed steel to be the hot-dipped galvanized.

Please confirm the finish requirements for materials listed in the base plate anchor rod schedule on 7/S1-5051.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Anchor rods shown on sheet S1-5051 are to be uncoated, as they will be covered by fireproofing.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0750	SSS - Moment Frame Column Field Splice at Bus Level	Open	09/20/2013	09/30/2013	10/02/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawing: S1-4201, S1-4203, S1-4202
Reference Sketch: CD RFI 022 SK1 & SK2

Reference is made to drawing 1/S1-4201 detailing the moment frame column field splice above the Bus Deck Level. Per details 1/S1-4201 and 1/S1-4203, a thickened column web plate is required at the Bus Deck Level in the 48" deep moment columns. Please verify the following is acceptable at this field splice:

1. The web plate can be extended 14" to the field splice location, eliminating a shop web splice in the column. Reference CD RFI 022 SK1 & SK2 for additional information.

2. The thickened column web plate will need to be tapered similar to detail 8/S1-4202 at the field splice location.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The contractor's proposal to extend the thickened web plate to the splice point is acceptable.

The thickened web plate shall be tapered similar to detail 8/S1-4202 as stated in the RFI.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0751	SSS - Roof Level Moment Frame Column Field Splice at GL 28	Closed	09/20/2013	09/30/2013	09/26/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawing: S1-4114 ,S1-4203
Reference Sketch: Reference CD RFI 023 SK1 & SK2

Reference is made to drawing 1A/S1-4114 and detail 5/S1-4203 indicating the SMRF column to beam flange moment connection at the Roof Level. Please verify the 8'-0" typical field splice dimension noted on A/S1-4114 at column grid D4 and E.6 is from the top of the roof girder, providing a 30" column section welded to the underside of the girder.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

At GL28, 8 ft field splice dimension is measured from the bottom of the Roof beam, providing an 8 ft column section welded to the underside of the beam.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0752	SSS - Anchor Bolt Coupler Location	Closed	09/20/2013	09/30/2013	09/25/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Reference Drawing: S1-5051

Reference is made to detail 6/S1-5051 for Type TT Threadbar Anchors. Please confirm the couplers will be centered about the bottom of the moment frame beam as indicated.

Confirmed that the couplers will be centered about the bottom of the moment frame beam as indicated.

T-0752.1 **SSS - Anchor Bolt Coupler Location** **Closed** **10/21/2013** **10/31/2013** **10/22/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please confirm it is acceptable to locate the couplers for the Type TT Anchor system 12-3/4" above the column and moment frame beam joint to allow for the installation of a temporary 1/4" alignment plate to aid with the installation and alignment of the anchor rods during the initial column pour.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed that the couplers for Type TT anchor system may be moved to 12-3/4" above the column and moment frame beam joint as proposed for the installation of a temporary alignment plate.

T-0753 **BGP - East Bulkhead and Catch Basin Conflict with Mat Slab Construction Joint in Closed** **09/20/2013** **09/30/2013** **10/02/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

Please refer to attached photo of as-built location, drawing SKA-2821 and excerpt from the CJ submittal shop drawing CJ-04 (TG0600-030).

SCCI had to shift the construction joint between mat slab areas 6 and 7 Eastward due to the interference with the micropiles and trestle piles. This shift in the CJ puts the bulkhead against the catch basin near GL G11.

Please confirm it is acceptable to shift the catch basin location approx. 24-inches in either east or west direction of the bulkhead/CJ.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
9/28/2013
RESPONSE:
It is acceptable to shift the Catch Basin location approximately 24" to the West (Refer to SKA-2850). Drainage piping to be shifted to the west accordingly.

☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0754	BGP - Area 9 Clear Cover to the Vertical Reinforcement on the Foundation Wall	Closed	10/10/2013	10/20/2013	10/18/2013	Potentially	

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Further to response to RFI T-609 this RFI shows the areas of foundation wall/embedded column in pour Area 9, on the north & south wall elevations which will have greater than 6" of clear cover to the vertical reinforcement for location plan see exhibit - A

Exhibit - B & C depict the amount and location of the foundation walls which the will have greater than 6" of clear cover to the vertical reinforcement

RFI T - 742 shows the thinning of the wall with the revised reinforcement spacing due to CDSM pile encroachment in Area 9.

Please confirm that the clear cover between the waterproofing system and the vertical reinforcement as outlined at these locations is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/16/2013
RESPONSE:
The clear cover between the waterproofing system and vertical reinforcement as presented in Exhibit C of this RFI is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0755	BGP - Area 10 Clear Cover to the Vertical Reinforcement on the Foundation Wall	Closed	10/11/2013	10/21/2013	10/18/2013	Potentially	☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Further to response to RFI T-609 this RFI shows the areas of foundation wall/embedded column in pour Area 10, on the north & south wall elevations which will have greater than 6" of clear cover to the vertical reinforcement for location plan see exhibit - A
Exhibit - B & C depict the amount and location of the foundation walls which the will have greater than 6" of clear cover to the vertical reinforcement.
RFI T - 743 shows the thinning of the wall with the revised reinforcement spacing due to CDSM pile encroachment in Area 10.

Please confirm that the clear cover between the waterproofing system and the vertical reinforcement as outlined at these locations is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/16/2013
RESPONSE:
The clear cover between the waterproofing system and vertical reinforcement as presented in Exhibit C of this RFI is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0756	BGP - Structural Slurry Primer in Mat Slab	Closed	09/24/2013	10/04/2013	09/25/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please refer to the attached letter, authored by Rober Foley (CEMEX QC), dated September 17, 2013.

With limited site access, many Mat Slab pours will require a larger than normal amount of slick-line. To ensure that no slick-line gets plugged, SCCI is proposing to prime the slick-line with a structural slurry that will reach and exceed the specified design strength for the Mat Slab. A miniscule percentage of this primer will be deposited into the mat slab. This percentage would amount to .01 to .02 percent by volume.

Please confirm the proposed SCCI method of slick-line priming is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
9/24/2012
RESPONSE:
Any material that is not the approved mix design for the mat slab, including slick-line primer, shall not be placed in the mat slab.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0757	SSS - HSS Vertical Post Size at Roof Park Level	Closed	09/25/2013	10/05/2013	09/26/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawings: 2/S1-7109, A&C/S1-7136

At grid lines D.4 and E.6, west of grid line 24.9, four HSS vertical posts were added per ASI No. 0105. Please provide the missing HSS vertical post sizes at the indicated locations above the Roof Park Level (reference CD RFI 021 SK1 & SK2).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The four vertical HSS posts that were added above the Roof Park Level in ASI No. 105 and shown on S1-7109 and details A & C on S1-7136 have been removed in ASI No. 106.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0758	SSS - W12 Beam Information at Roof Level GL E.1	Closed	09/25/2013	10/05/2013	10/11/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference is made to Drawing S1-2602 regarding the W12x14 beam stubs near grid line E, east of grid line 1. Please verify the following W12x14 beam characteristics as noted on CD RFI 027 SK1:

1) Please supply the location, length, and elevation for

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. The W12x14 beam identified in the RFI sketch is not required.
2. The 3 beams identified in the RFI sketch are not required.
3. See response to #2.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

W12x14 beams between grids E.2 and E.6.
2) Please verify the member sizes for the three areas noted between grids D & E.2 are to be W12x14.
3) For the same areas indicated in item #2, please supply the beam locations, lengths, and elevations.

W/O Note: Provide credit for deleted beams.

T-0759 **SSS - Beam Camber Dimensions at Ground Level** **Closed** **09/25/2013** **10/05/2013** **09/27/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference is made to Drawings S1-2303 and S1-2304 near grids F.9 and G.13. Please verify the following:

1) S1-2303 indicates the W30x90 beam near grid F.9 is to have a 3 ¼" camber (reference CD RFI 028 SK1). Please verify the camber should be ¾" in lieu of the 3 ¼" dimension indicated.

2) S1-2304 indicates that three W24x76 beams between grids F/G & 13/14 are to have a 3 ¼" camber (reference CD RFI 028 SK 2). Please verify the cambers should be ¾" in lieu of the 3 ¼" dimension indicated.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For the W30x90 beam near grid F.9 and the three W24x76 beams between grids F/G & 13/14, the beam cambers shall be 3/4" and not 3 1/4".

T-0760 **SSS - Column Base Plate Detail Clarification** **Closed** **09/25/2013** **10/05/2013** **10/10/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please verify the following in reference to Detail 5B on S1-5051 and the sketches attached (SD RFI 029 SK1, SK2, & SK3)

1) For type 2 column base plates at the lower concourse please confirm the grout hole indicated is to be 7" below the base plate in order to place it 5" below the top of concrete as appears to be shown in detail 5B/S1-5051.

2) For the 26" by 30" type 2 base plates as shown in 2/S1-

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) The Grout hole in the shear key is to be centered at the 10" deep shear key (5" from the bottom of the base plate).

2) The location of the shear key shall be as shown on 3/S1-5051. Location of the shear key is controlled by the concrete beam top bars below. Where the base plate is only 26" wide, the shear key may be located 10" from center of column (instead of 10- 3/4" shown on 3/S1-5051) to fit within the width of the 26" wide

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

5051 please confirm the shear key plates may be located 10" from center of column to fit within the width of the 26" wide as shown on SK3 base plates.

base plate.

T-0761 **SSS - Beam Size Clarification - Roof Park Level GL** **Closed** **09/25/2013** **10/05/2013** **10/02/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please reference S1-2603 which calls out the beam near grid F.8 as "BU-44x230" (see CD RFI 032 SK1 attached).

Please supply the plate sizes for this BU member or advise if this should be a W44x230 beam.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The framing in the area between 7.8 & 9 has been changed. Please refer to ASI 106.

T-0762 **BGP - Haunch Bar Grade and Size Increase** **Closed** **09/25/2013** **10/05/2013** **09/30/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please refer to attached drawing S1-3201 and spec section 032000.

The #10, Grade 60 concrete reinforcement for the "haunch" is shown on the typical foundation wall section drawing S1-3201. The trade group package contractor SCCI proposes the use of a Grade 75 #10 or #11 rebar in-lieu of the Grade 60 #10 "haunch."

Please confirm it is acceptable to use Grade 75, #10 or #11 rebar in lieu of the specified concrete reinforcement at the "haunch."

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
9/30/2013
RESPONSE:
The #10 GR60 haunch reinforcing shown on the typical foundation wall section, 1/S1-3201, can be substituted with #10 GR75 reinforcing with the following conditions:

1. RFI T-702 BGP stands, i.e. the detailing and location of the hooked top remains unchanged.

2. RFI T-710 is modified such that headed bars are not allowed.

3. RFI T-710 is modified such that the straight embedment into the mat, either vertical or inclined, where the bar is interrupted by a dewatering well, shall be 52" minimum.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

#11 bars of either grade shall not be used in lieu of #10 haunch reinforcing.

T-0763 **SSS - MC10 Link Brace Foul at Roof Perimeter** **Closed** **09/26/2013** **10/06/2013** **10/02/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference detail 5/S1-4205 showing the link brace detail at the roof along column lines B and H. In the IFC documents, the beam size was increased from W21x55 to W24x55, causing the MC10x41.1 brace (increased from M8x22.6) to foul the beam flange. See CD RFI 020 SK 1 & SK2 attached for reference and advise on resolution for the foul noted.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

A portion of the W24x55 bottom flange and a portion of the web (up to 1" from the bottom of the beam) may be coped to clear the double channel braces.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0764	SSS - Built-Up Beams - Plate Yield Strength	Closed	09/26/2013	10/06/2013	09/30/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please reference contract sheet S-0007, specifically structural steel note SS-1, which indicates that plates used for flanges in built up beams shall meet the criteria of ASTM Designation A572-50 (UNO) and have a maximum yield point of 58ksi.

The plate mills will not guarantee material that meets the A572-50 criteria and further restricts the yield to a maximum of 58ksi. The plate mills will guarantee material that will yield within the range of 50ksi - 65ksi. Attached you will find correspondence with two major US steel mills for reference.

Please confirm, for the plates used for flanges in built-up members produced from A572-50 material, that a yield range of 50ksi - 65ksi is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The maximum yield strength specified on General Note SS-1 is to ensure the strong column/weak beam condition is met. Hence, this requirement may be relaxed to applicable to steel plates for seismic moment frame beams only.

From our past experience, the maximum yield of 58 ksi is a very reasonable target. Also, the lab tensile tests commonly show a lower yield than what is provided on the mill certifications (around 2- 6 ksi lower).

However, we understand that this is still a risk to the steel contractor even though it is only applicable to the seismic moment frame beams. We agree to relax this requirement further accepting the yield strength up to 65 ksi as requested

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T-0766	SSS - Stiffener Requirements at Column Base Detail	Closed	09/27/2013	10/07/2013	10/02/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please confirm the following in reference to the column base details shown on S1-5051.

a) With reference to Drawing S1-5051, please confirm that only the Type I base plates have vertical stiffeners at the column flanges and web, while the Type II and Type III base plates have vertical stiffeners only at the column web.

b) With reference to Details 4 and 6 on Drawing S1-5051, please confirm the base plate type and column indicated in these details are for graphical purposes only and do not indicate the type of base plate to be used with the detailed threadbar anchor.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

a) Yes. Type I base plate has stiffeners at flange and web while Type II & Type III base plate only have stiffeners at column web.

b) Yes. the base plate shown is for graphical purpose only. The type of the base plate shall be in accordance with Base Plate Schedule.

T-0767	SSS - Herrick RFI 01 - W shapes from BU	Closed	09/27/2013	10/07/2013	10/04/2013	Potentially	☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

The following sizes and shapes are not available in the U.S. Please confirm all sizes will be Built up sections from plate.

W40 X 392 Grade A992, W40 X 503 Grade A992, W40 X 593 Grade A992 will be fabricated with A572-50 Plate. W40 X 392 Grade A709, W40 X 503 Grade A709, W40 X 593 Grade A709 at the Bus Deck will be fabricated with A709-50 Plate.

Welding Preparation of Built up sections to follow.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

We confirm that equivalent built-up sections can be provided in lieu of rolled shapes listed in the RFI that are domestically unavailable. Proposed plate types and grades are acceptable. Plate dimensions for the equivalent built-up sections shall be per corresponding rolled shapes in AISC Steel Manual.

T-0767.1 **SSS - Fillet Weld Sizes for Built up Members** **Closed** **10/18/2013** **10/28/2013** **10/30/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

The response to Webcor/Obayashi RFI T-0767 (SK RFI 013) confirmed that equivalent built-up sections can be provided in lieu of W shapes not available domestically. All W40 X 503 and W40 X 593 at the Ground level (reference S1-2302 thru S1-2311) will be built-up sections.

Please provide fillet weld sizes accordingly for the sections noted in the attached sketch.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) For web to flange welding of built-up sections equivalent to W40x503, refer to response provided for RFI T-0704.1.

2) For built-up sections equivalent to W40x593, web to flange welding shall be with double 7/8" fillet welds for 4 ft from each end of each flange plate and double 5/8" fillet welds in between.

Note that W40X503 and W40x593 are also used at Bus Deck and Roof Levels. W/O to coordinate RFI T-0767.1 response with other sub-contractors, as needed.

T-0767.2 **SSS - Weld Preferences At Added Built Up Sections** **Closed** **11/18/2013** **11/28/2013** **11/25/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

The response to Webcor/Obayashi RFI T-0767 (SK RFI 013) confirmed that equivalent built-up sections can

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For the built-up sections equivalent to W40x392, web to flange welding shall be with double 5/8" fillet welds

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

beprovided in lieu of W shapes not available domestically. All W40 X 392 at S1-2505, S1-2603, S1-2604, S1-2605 will be built up sections.

Please provide fillet weld sizes accordingly for the sections noted in the attached sketch.

for 4 ft. from each end of each flange plate and double 1/2" fillet welds in between.

T-0768 **SSS - PJP Weld Preperation at Column Base** **Closed** **09/30/2013** **10/10/2013** **10/02/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawing: 3/S1-5051

Please confirm the weld prep for the PJP weld indicated on Detail 3/S1-5051 is ½" deep at 45 degrees (reference CD RFI 038 SK1).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirm that the bevel for PJP weld is 1/2" as shown.

T-0769 **SSS - Verify Beam Locations at Ground Level East** **Closed** **09/30/2013** **10/10/2013** **10/02/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawings: S1-2305, S1-2306, and S1-2307

As indicated on the sketches attached, there are beams which have not been located on the referenced drawings. The dimensions provided and clouded in red are taken from the latest Revit model. Please verify all clouded dimensions required to located the steel in question.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Beam locations are identified on structural drawings by:

1) Dimensions to nearest gridlines,

2) Dimensions to Edge of slab (Coordinate with architectural edge of slab drawings per sheet note on first zone plan of each level to identify beam locations),

3) Dimensions shown on partial plans,

4) Special symbols such as asterisks (*) adjacent to beam size tags in combination with sheet notes. See 3a) and 3b) for examples.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

a) Ground level: Beams supporting W systems are identified with asterisks. Sheet notes are provided on S1-2305, S1-2306 and S1-2307 stating that the locations of such beams need to coordinated with TG08.1 package.

b) Roof park Level: Sheet note 5 on S1-2602 states that for beams with a specific connection symbol, beam locations need to the coordinated with TG08.1 package.

5) General note GR-13 on S-0005 which states "Assume equal spacing between established dimensions, if not indicated on drawings".

6) General notes GR-11 through GR-16 shall apply.

Considering the above guidelines, please resubmit RFI 769 and 770 if further clarification is needed. We will clarify beam locations other than those covered by the above guidelines.

T-0769.1 **SSS - Verify Beam Locations at Ground Level East** **Closed** **11/22/2013** **12/02/2013** **12/13/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On the response to Webcor RFI # T-0769 (SK RFI # SK 050) & T-0801 (SK RFI # 066) we have reviewed and located most of the beam locations in question using the nearest gridlines, architectural dwg's, partial plans, equal spacing, etc per the noted guidelines in the response. However on drawings S1-2302, S1-2303 & S1-2304 there are still some beam locations that cannot be located and require verification therefore on sketches CD RFI 047.1 SK1 to SK3 please verify all clouded dimensions in RED as noted to close this RFI.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Responses to the queries on dimensions for locating beams on floor plans have been noted on the attached sketches SKS-0303, SKS-0304 and SKS-0305.

T-0770 **SSS - Verify Beam Locations at Roof Park Level West** **Closed** **09/30/2013** **10/10/2013** **10/02/2013** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawings: S1-2602

See attached CD RFI 026 SK1 showing missing dimensions required to locate beams at the Roof Park Level Zone 02. Please verify all dimensions indicated in red, which have been taken from the latest Revit model, are accurate to locate the steel in question.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please see response to RFI T-769 for response.

T-0770.1 **SSS - Verify Additional Beam Locations at Roof Park Level West** **Closed** **12/10/2013** **12/20/2013** **12/31/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Arup Rich Coffin

REQUEST:

On the response to Webcor RFI # T-0770 (SK RFI # SK 052) & T-0769 (SK RFI # 050) we have reviewed and located most of the beam locations in question using the nearest gridlines, architectural dwg's, partial plans, equal spacing, etc per the noted guidelines in the response. However, on drawings S1-2602 to S1-2607 there are still some beam locations that cannot be located and require verification; therefore, on sketches CD RFI 026.1 SK1 to SK6 please verify all clouded dimensions in RED as noted to close this RFI.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Responses to the queries on dimensions for locating beams on floor plans have been noted on the attached sketches SKS-0316 through SKS-0321.

T-0771 **SSS - Lower Concourse Anchor Bolt Details** **Closed** **09/30/2013** **10/10/2013** **10/04/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please reference Drawing S1-5051 and confirm the following in regards to the column base details:

1) Confirm it is acceptable to oversize the holes for anchor bolt penetrations through base plate per AISC's 13th Edition Table 14-2 (reference CD RFI 016 SK2 attached).

2) Confirm the hole sizes indicated in Part 1 are acceptable for anchor bolt penetrations through the horizontal column stiffener.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The numbering of the response below matches with the numbering of the RFI.

1.Confirmed the holes may be oversized per AISC's 13th edition, Table 14-2.

2.Confirmed.

3.Washer thickness shall be in accordance with AISC's 13th edition, Table 14-2.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

3) Confirm it is acceptable to supply a ½" x 4" x 4" (A36) plate washer above the column stiffener with a 1/16" oversize hole.

4) Confirm it is acceptable to locate the grout holes typically as shown on CD RFI 016 SK3.

5) To aid in the alignment of the thread bar anchor rods during concrete operations, please confirm it is acceptable to provide one ½" thick anchor plate at the base of the thread bars with size to match the base plate in lieu of four separate ½" x 4" x 4" anchor plates.

6) Confirm the thickness of the stiffener for Type II and Type III column bases is to be 2".

7) Confirm an anchor bolt projection of 2.5 x AB dia. above the plate washer on top of the column stiffener is acceptable. See CD RFI 030 SK3 for reference.

8) Confirm an anchor bolt extension of 2.5 x AB dia. below the bottom plate washer is acceptable. See CD RFI 030 SK3 for reference.

9) Confirm that the 1" cover as shown on CD RFI 030 SK3 is acceptable.

10) Confirm that the anchor bolts shall be installed wrench tight.

4.Grout hole locations and procedure shall be confirmed by the mock-up.

5.1/2" anchor plate matching the base plate at the bottom of the anchor bolt is not acceptable as it will affect the consolidation of the concrete.

6.Confirmed, the stiffener is 2" thick.

7.Contractor to verify with the anchor rod suppliers for the length of the hex nut. Recommend projection = washer thickness+ hex nut length + 1.5x d Minimum to account for construction tolerance

8.See response to question #7.

9.Confirmed the 1" clear is acceptable.

10.Confirmed that wrench tight is adequate.

T-0771.1 **SSS - Lower Concourse Anchor Bolt Details at Column Base** **Closed** **10/11/2013** **10/21/2013** **10/14/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

As per the response to RFI# T-0771 please confirm the following:

1. For items 8 & 9 please confirm it is acceptable to have 0" cover at the underside of the concrete beam. See attached sketch SK-1 for clarification.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed that it is acceptable to have 0" cover at the underside of the concrete beam, as the bolt is directly above the concrete column.

2. Confirmed that it is acceptable to use an alignment plate with a 7" diameter center hole

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

2. For item 5 please confirm it is acceptable to use an alignment plate with a 7" diameter center hole to allow for the consolidation of concrete and aid the alignment of the threaded bar. See attached sketch SK-2 for clarification.

T-0772 **SSS - Anchor Bolt Details at Column Base** **Closed** **09/30/2013** **10/10/2013** **10/04/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please reference Drawing S1-5051 and the attached sketches in regards to the column base details:

1) Confirm that the 1-3/4" anchor bolts as referenced 7/S1-5051 are acceptable to typically locate as shown (reference CD RFI 034 SK1 attached) so that the plate washers clear the stiffener plate and weld.

2) Confirm the plate washer size, thickness and grade is acceptable (reference CD RFI 034 SK1 attached).

3) Confirm that the 2-1/2" anchor bolts as referenced 7/S1-5051 are acceptable to typically locate as shown (reference CD RFI 034 SK2 attached) so that the plate washers clear the stiffener plate and weld

4) Confirm the plate washer size, thickness and grade is acceptable (reference CD RFI 034 SK2 attached).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) confirmed.

2) confirmed.

3) confirmed.

4) Use 1" thick washer plate per anchor rod catalog.

T-0773 **BGP - Geothermal Fields 11, 12, & 13 Layout in Zone 4** **Closed** **09/30/2013** **10/10/2013** **10/10/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Please refer to Spec Section 31 23 34.

To avoid conflicts with trenching through the buttress shaft concrete and rebar, please confirm if either of the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/10/2013
RESPONSE:
This should not be an RFI. Our preferred option is to

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

proposed options is acceptable.

install as shown on the Contract Documents. Option 1 is not acceptable. Option 2 reduces geothermal system capacity and is a change to the Contract Documents. Per the Contract Documents this contractor proposed change should be submitted as a change order for review by the TJPA or the TJPA's representatives.

T-0773.1 **BGP - Geothermal Piping Layout at Buttress Shaft (Field 12)** **Closed** **02/04/2014** **02/14/2014** **02/14/2014** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Option #2 from RFI 0773 was chosen by the design team to re-route the geothermal piping in Fields 11, 12, and 13 to avoid conflicts with the buttress shaft. Upon further SCCI/AIRCO review, the chosen option still has conflicts with the buttress shaft. Airco has attempted to detail the piping around this conflict and miscellaneous micropile conflicts while maintaining minimum bend radius' and spacing of all 10 loops and was unsuccessful
.
Please see the attached revised drawing of the Geothermal Piping at Field 12 and confirm it is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

As decided in 2/4/2014 meeting between WSP, AAI, Webcor, Schimick and Airco all 10 loops shall be installed. Minimum bend radii of 25 times the outside diameter of the pipe shall be maintained. 4'-0" Minimum spacing between pipes is not required in this field only. Final layout to be painted and reviewed in the field prior to trenching.

T-0774 **BGP-Pre-cutting of CDSM Soldier Pile** **Closed** **09/30/2013** **10/10/2013** **10/21/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Gary Krutsch

Co-Author:

REQUEST:

Further, in response to RFI T-725, WOJV is proposing to pre-cut the inside flange of the CDSM beams at the required cut off elevations prior to the installation of the waterproofing system see exhibit A for details, This pre-cutting of the CDSM beams would minimize the possibility of heat damage to the waterproofing system. The remainder of the CDSM beam cutting and top section removal will be completed by the TG012.1 Civil Sitework

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Judy Long
10/18/2013
RESPONSE:
This is a means and method item. Contractor to comply with manufacturer's requirements and recommendations to ensure proper installations and warranties while performing work per contract documents.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

contractor.
Please confirm if this would be acceptable.

T-0775 **BGP-Concrete strength requirement for bracing Removal** **Closed** **09/30/2013** **10/10/2013** **10/10/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

In accordance with Spec section 31-55-00 1.4 J the contractor is to submit concrete strength results to the design team prior to the removal of internal bracing. In order to fulfill this requirement the contractor has asked the following questions.

1. What is the criteria for bracing removal for instant if the average strength of the concrete cylinders tested is calculated to be above the design strength can the internal bracing be removed?

2. Is there any tolerance on the design strength requirement for bracing removal, for example if the concrete has reached 90% of design strength could the bracing be removed? Obviously this could have a positive effect on the construction schedule.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/9/2013
RESPONSE:
The response of this RFI is limited to the scope of the removal of the lowest level D temporary shoring struts:

1. The criteria for removing the shoring struts is defined in general note FO-5 on sheet S-0005 of the TG03 BSE documents: " F0-5 Do not remove temporary shoring struts against foundation walls until the foundation wall and mat concrete has attained 100% of its design strength."

For consideration of bracing removal prior to 56 day concrete cylinder tests, design strength may be considered achieved when all earlier tested cylinders meet ACI 318 acceptance criteria. For this purpose, "test" in ACI will not be required to be the average of multiple test results of a particular batch.

If the results of the concrete cylinders meet ACI criteria and averages (as defined by ACI) exhibit values above design strength, the element may be considered to have attained its design strength.

2. The lowest level brace D may be removed when the concrete strength has reached 90% of design strength. Note that this is a relaxation of the contract document criteria and limited to the removal of the lowest level brace D.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0775.1	BGP-Concrete strength requirement for level D bracing removal	Closed	10/09/2013	10/19/2013	10/16/2013	Potentially	☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

To clarify question 2 in RFI T-0775

WOJV is requesting that the level D bracing be removed once the concrete in the mat slab beneath has reached 75% of its design strength.

Please confirm if this would be acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/15/2013
RESPONSE:
RFI T-0775 already allowed a relaxation of the original contract document requirement. To consider the criteria of 75% design strength, the Contractor shall produce all necessary calculations to justify that the 75% strength and the reduced stiffness at 75% strength is sufficient.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0775.2	BGP-Concrete strength requirement for the level D bracing removal	Closed	11/15/2013	11/25/2013	11/20/2013	Potentially	☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Further to response to RFI T-0775.1, Please find attached supporting calculations to justify that the concrete in the mat slab is sufficient at 3000 psi to removal the level D bracing.

Please confirm that this is acceptable

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
11/19/2013
RESPONSE:
A submittal is required to address the contents of this RFI.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0776	BGP - Mat Slab Construction Joint Between Area 2 and Area 4	Closed	10/01/2013	10/11/2013	10/03/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

Please refer to attached excerpt drawing CJ-04 from submittal package TG0600-030.3, Item ID #033000-003.3.

As discussed and coordinated in various Progress Meetings, SCCI plans to combine slab pours S102 and S104 into one pour without bulkhead forms in between. The specificaitons do not restict SCCI from using bulkheads in the east and west directions. The returned construction joint layout shop drawing review comments

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/3/2013
RESPONSE:
The construction joints submitted and approved in Submittal TG0600-030.2 (Item 033000-003.2) dated May 29, 2013 were acceptable to the design team and formed the basis for CTL's Submittal TG0600-201.1 (Item 033020-011).

CTL (Shimmick's consultant) indicates that slab

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

do not reflect the coordinated revised construction joint.

Please confirm it is acceptable to combine slab placement areas S102 and S104 into one pour without bulkhead forms in between.

cracking becomes increasingly likely when aspect ratios exceed 1.5:1. TT notes that the revised construction joint layout creates an additional high aspect ratio pour. While TT does not recommend the elimination of the joint, the contractor may at their own risk eliminate the joint between Area S102 and S104 per the revised joint layout contained in Submittal TG0600-030.3 (Item 033000-003.3) dated September 17, 2013. Further, the contractor shall verify that the new geometry does not change the previously issued CTL submittals.

T-0777 **BGP - FF & FL Values for Concourse Slab** **Closed** **10/02/2013** **10/12/2013** **10/17/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please refer to attached RFI T-0691.

This RFI is being submitted in response to RFI response T-0691. As per contract specification section 033020, Section 3.6.B the concrete finish of the lower concourse slab notes an FF value of 20.

Table 8.15.3b of ACI 302.1R (page 46) states that to achieve a surface with an FF value of 20, it must be a smooth floated surface. ACI 302.1R does not provide any recommendations of "F" numbers for broomed surfaces.

Please confirm the design intent for the concourse slab finish: 1. To have a rough broom/rake finish or 2. To have the concourse slab finished to an FF value of 20.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/16/2013
RESPONSE:
The Lower Concourse shall be finished to the FF and FL numbers contained in the Specification 03 30 20, Section 3.6B-1a. Section 3.6B-1a will take precedence over Section 3.6B-1c.

T-0778 **BGP - Electrical Equipment and Box Layout in Electrical Room B2640 - Area 15** **Closed** **10/02/2013** **10/12/2013** **10/25/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please reference drawing E1-2026 and Spec Section 26 05 34.

As per spec section requirement 26 05 34 - Raceways and Boxes, Article 3.2 - B, please confirm the proposed "...location of outlets, fixtures and equipment..." layout as shown in the attached SCCI sketch SK-RFI-337 for Electrical Room B2640 in Area 15 is acceptable.

Please advise.

George Metzger
10/10/2013
RESPONSE:
WSP has reviewed these layouts for conformance with electrical equipment locations and layouts are in conformance with the Contract Documents. As noted in response to RFI 0665.1, documentation should be presented on CAD for review and approval, hand sketches are not acceptable.

T-0778.1 **BGP - Electrical Equipment and Box Layout in Electrical Room B2640 - Area 15** **Closed** **10/28/2013** **11/07/2013** **10/30/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please reference RFI #T-0778, drawing El-2026, and Spec Section 26 05 34.

RFI #0778 response proposes layout for electrical equipment and box layout in Electrical Room B2640 - Area 08 in CAD format. See attached.

Please confirm layout is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/29/2013
RESPONSE:
WSP cannot review these layouts because walls have not been properly coordinated. Refer to markup from AAI. Further submissions of equipment layouts should be submitted as shop drawings on CAD backgrounds for proper coordination.

T-0778.2 **BGP - Electrical Equipment and Box Layout in Electrical Room B2640 - Area 15** **Closed** **12/20/2013** **12/30/2013** **12/26/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeremy Lau

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference RFI #T-0779, drawing El-2024, and Spec Section 26 05 34.

As per spec section requirement 26 05 34 - Raceways and Boxes, Article 3.2 - B, the "...location of outlets, fixtures and equipment is governed by field conditions...verify final location of outlets, fixture and equipment with the TJPA through the RFI process."

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Judy Long
12/23/2013
RESPONSE:
Per design team, Delete the subcontractor's request regarding additional cost.

Please submit layout in shop drawing submission for all areas.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please confirm the coordinated equipment layout with the knee walls per RFI T-0899 as shown in the attached proposed layout SCCI sketch SK-RFI-337.1 for Electrical Room B2640 in Area 15 is acceptable. Please refer to the conduit layout in submittal shop drawing package TG0600-905.

T-0778.3 **BGP - Electrical Equipment and Box Layout in Electrical Room B2640 - Area 15** **Closed** **01/28/2014** **02/07/2014** **02/10/2014** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Webcor Construction LP Jackson Tukuafu

REQUEST:

Please reference RFI #T-0779, drawing EI-2024, and Spec Section 26 05 34.

As per spec section requirement 26 05 34 - Raceways and Boxes, Article 3.2 - B, the "...location of outlets, fixtures and equipment is governed by field conditions...verify final location of outlets, fixture and equipment with the TJPA through the RFI process."

Please confirm the coordinated equipment layout with the knee walls per RFI T-0899 as shown in the attached proposed layout SCCI sketch SK-RFI-337.1 for Electrical Room B2640 in Area 15 is acceptable. Please refer to the conduit layout in submittal shop drawing package TG0600-905.

Please note this RFI is being remitted per coordination meeting between AAI, WOJV, SCCI and TCCO to exclude SCCI's version of the RFI; referencing cost impacts.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For confirmation of the equipment layouts, please document on shop drawings. All further layout confirmations for panels and conduits should be submitted on shop drawing format

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T-0779 **BGP - Electrical Equipment and Box Layout in Electrical Room B2461 - Area 8** **Closed** **10/02/2013** **10/12/2013** **10/10/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please reference drawing E1-2024 and Spec Section 26 05 34.

As per spec section requirement 26 05 34 - Raceways and Boxes, Article 3.2 - B, please confirm the proposed "...location of outlets, fixtures and equipment..." layout as shown in the attached SCCI sketch SK-RFI-336 for Electrical Room B2461 in Area 08 is acceptable.

Please advise.

George Metzger
10/10/2013
RESPONSE:
WSP has reviewed these layouts for conformance with electrical equipment locations and layouts are in conformance with the Contract Documents. As noted in response to RFI 0665.1, documentation should be presented on CAD for review and approval, hand sketches are not acceptable.

T-0779.1 **BGP - Electrical Equipment and Box Layout in Electrical Room B2461 - Area 8** **Closed** **10/28/2013** **11/07/2013** **10/31/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please reference RFI #T-0779, drawing EI-2024, and Spec Section 26 05 34.

RFI #T - 0779 response proposes layout for electrical equipment and box layout in Electrical Room B2461 - Area 08 in CAD format. See attached.

Please confirm layout is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

RESPONSE: RFI T-0779.1 BGP - Electrical Equipment and Box Layout in Electrical Room B2461 - Area 8

George Metzger
10/29/2013
RESPONSE:
WSP cannot review these layouts because walls have not been properly coordinated. Refer to markup from AAI. Further submissions of equipment layouts should be submitted as shop drawings on CAD backgrounds for proper coordination.

T-0779.2 **BGP - Electrical Equipment and Box Layout in Electrical Room B2461 - Area 8** **Closed** **12/20/2013** **12/30/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:**

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference RFI #T-0779, drawing EI-2024, and Spec Section 26 05 34.

As per spec section requirement 26 05 34 - Raceways and

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Boxes, Article 3.2 - B, the "...location of outlets, fixtures and equipment is governed by field conditions...verify final location of outlets, fixture and equipment with the TJPA through the RFI process."

Please confirm the coordinated equipment layout with the knee walls per RFI T-0899 as shown in the attached as-built layout SCCI sketch SK-RFI-336.1 for Electrical Room B2461 in Area 08 is acceptable. Please refer to the conduit layout in submittal shop drawing package TG0600-905.

T-0779.3 **BGP - Electrical Equipment and Box Layout in Electrical Room B2461 - Area 8** **Closed** **01/28/2014** **02/07/2014** **02/10/2014** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Webcor Construction LP Jackson Tukuafu

REQUEST:

Please reference RFI #T-0779, drawing EI-2024, and Spec Section 26 05 34.

As per spec section requirement 26 05 34 - Raceways and Boxes, Article 3.2 - B, the "...location of outlets, fixtures and equipment is governed by field conditions...verify final location of outlets, fixture and equipment with the TJPA through the RFI process."

Please confirm the coordinated equipment layout with the knee walls per RFI T-0899 as shown in the attached as-built layout SCCI sketch SK-RFI-336.1 for Electrical Room B2461 in Area 08 is acceptable. Please refer to the conduit layout in submittal shop drawing package TG0600-905.

Please note this RFI is being remitted per coordination meeting between AAI, WOJV, SCCI and TCCO on 1/10, to exclude SCCI's version of the RFI which makes reference to cost impacts.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For confirmation of the equipment layouts, please document on shop drawings. All further layout confirmations for panels and conduits should be submitted on shop drawing format.

T-0780 **BGP - Electrical Equipment and Box Layout in Electrical Room B2460 - Area 08** **Closed** **10/02/2013** **10/12/2013** **10/14/2013** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Please reference drawing E1-2026, A1-2104 and Spec Section 26 05 34.

As per spec section requirement 26 05 34 - Raceways and Boxes, Article 3.2 - B, please confirm the proposed "...location of outlets, fixtures and equipment..." layout as shown in the attached SCCI sketch SK-RFI-335 for Electrical Room B2460 in Area 08 is acceptable.

Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/10/2013
RESPONSE:
WSP has reviewed these layouts for conformance with electrical equipment locations. The layout dimensioning should be revised as noted in the attachments to be in conformance with the Contract Documents. As previously noted in response to RFI 0665.1, documentation should be presented on CAD for review and approval, hand sketches are not acceptable.

T-0780.1 **BGP - Electrical Equipment and Box Layout in Electrical Room B2460 - Area 08** **Closed** **10/28/2013** **11/07/2013** **10/30/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please reference RFI #T-0780, drawings El-2026 and Al-2104, and Spec Section 26 05 34.

RFI #T - 0780 response proposes layout for electrical equipment and box layout in Electrical Room B2460 - Area 08 in CAD format. See attached.

Please confirm that the layout is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/29/2013
RESPONSE:
WSP cannot review these layouts because walls have not been properly coordinated. Refer to markup from AAI. Further submissions of equipment layouts should be submitted as shop drawings on CAD backgrounds for proper coordination.

T-0780.2 **BGP - Electrical Equipment and Box Layout in Electrical Room B2460 - Area 08** **Closed** **12/20/2013** **12/20/2013** **12/30/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference RFI #T-0780, drawings El-2026 and Al-2104, and Spec Section 26 05 34.

As per spec section requirement 26 05 34 - Raceways and Boxes, Article 3.2 - B, the "...location of outlets, fixtures and equipment is governed by field conditions...verify final

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
12/27/2013
RESPONSE:
WSP response: WSP has reviewed these layouts for conformance with electrical equipment locations and layouts are in conformance with the Contract

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

location of outlets, fixture and equipment with the TJPA through the RFI process."

Please confirm the coordinated equipment layout with the knee walls per RFI T-0899 as shown in the attached as-built layout SCCI sketch SK-RFI-335.1 for Electrical Room B2460 in Area 08 is acceptable. Please refer to the conduit layout in submittal shop drawing package TG0600-905.

Documents.

Judy Long
12/23/2013
RESPONSE:
Per design team, Delete the subcontractor's request regarding additional cost.

Please submit layout in shop drawing submission for all areas.

T-0781 **BGP - Electrical Equipment and Box Layout in Electrical Room B2441 - Area 09** **Closed** **10/02/2013** **10/12/2013** **10/10/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Please reference drawing E1-2024, A1-2104 and Spec Section 26 05 34.

As per spec section requirement 26 05 34 - Raceways and Boxes, Article 3.2 - B, please confirm the proposed "...location of outlets, fixtures and equipment..." layout as shown in the attached SCCI sketch SK-RFI-334 for Electrical Room B2441 in Area 09 is acceptable.

Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/10/2013
RESPONSE:
WSP has reviewed these layouts for conformance with electrical equipment locations and layouts are in conformance with the Contract Documents. As noted in response to RFI 0655.1, documentation should be presented on CAD for review and approval, hand sketches are not acceptable.

T-0781.1 **BGP - Electrical Equipment and Box Layout in Electrical Room B2441 - Area 09** **Closed** **10/28/2013** **11/07/2013** **10/30/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please reference RFI #T-0781, drawings El-2024 and Al-2104 and Spec Section 26 05 34.

RFI #T-0781 response proposes layout for electrical equipment box layout in Electrical Room B2441 - Area 09 in CAD format. See attached.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/29/2013
RESPONSE:
WSP cannot review these layouts because walls have not been properly coordinated. Refer to markup from AAI. Further submissions of equipment layouts

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please confirm that the layout is acceptable.

should be submitted as shop drawings on CAD backgrounds for proper coordination.

T-0781.2 **BGP - Electrical Equipment and Box Layout in Electrical Room B2441 - Area 09** **Closed** **12/20/2013** **12/30/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:**

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference RFI #T-0781, drawings El-2024 and Al-2104 and Spec Section 26 05 34.

As per spec section requirement 26 05 34 - Raceways and Boxes, Article 3.2 - B, the "...location of outlets, fixtures and equipment is governed by field conditions...verify final location of outlets, fixture and equipment with the TJPA through the RFI process."

Please confirm the coordinated equipment layout with the knee walls per RFI T-0899 as shown in the attached as-built layout SCCI sketch SK-RFI-334.1 for Electrical Room B2441 in Area 09 is acceptable. Please refer to the conduit layout in submittal shop drawing package TG0600-905.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T-0781.3 **BGP - Electrical Equipment and Box Layout in Electrical Room B2441 - Area 09** **Closed** **01/28/2014** **02/07/2014** **02/10/2014** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Webcor Construction LP Jackson Tukuafu

REQUEST:

Please reference RFI #T-0781, drawings El-2024 and Al-2104 and Spec Section 26 05 34.

As per spec section requirement 26 05 34 - Raceways and Boxes, Article 3.2 - B, the "...location of outlets, fixtures and equipment is governed by field conditions...verify final location of outlets, fixture and equipment with the TJPA through the RFI process."

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For confirmation of the equipment layouts, please refer to the shop drawings TG0600-104.0 BGP-Comprehensive Layout DWG. To avoid duplication of information and submissions, all further layout confirmations for panels and conduits should be submitted on shop drawing format

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please confirm the coordinated equipment layout with the knee walls per RFI T-0899 as shown in the attached as-built layout SCCI sketch SK-RFI-334.1 for Electrical Room B2441 in Area 09 is acceptable. Please refer to the conduit layout in submittal shop drawing package TG0600-905.

Please note this RFI is being remitted per coordination meeting between AAI, WOJV, SCCI and TCCO on 1/10, to exclude SCCI's version of the RFI which makes reference to cost impacts.

T-0782 **BGP - Electrical Equipment and Box Layout in Electrical Room B2560 - Area 09** **Closed** **10/02/2013** **10/02/2013** **10/14/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Please reference drawing E1-2025, A1-2105 and Spec Section 26 05 34.

As per spec section requirement 26 05 34 - Raceways and Boxes, Article 3.2 - B, please confirm the proposed "...location of outlets, fixtures and equipment..." layout as shown in the attached SCCI sketch SK-RFI-333 for Electrical Room B2560 in Area 09 is acceptable.

Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/10/2013
RESPONSE:
WSP has reviewed these layouts for conformance with electrical equipment locations. The layout dimensioning should be revised as noted in the attachments to be in conformance with the Contract Documents. As previously noted in response to RFI 0665.1, documentation should be presented on CAD for review and approval, hand sketches are not acceptable.

T-0782.1 **BGP - Electrical Equipment and Box Layout in Electrical Room B2560 - Area 10** **Closed** **10/28/2013** **11/07/2013** **10/31/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please reference RFI #T-0782, drawing El-2025, Al-2105, and Spec Section 26 05 34.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/29/2013
RESPONSE:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

RFI #T -0782 response proposes layout for electrical equipment and box layout in Electrical Room B2560 - Area I0 in CAD format. See attached.

Please confirm that the layout is acceptable.

WSP cannot review these layouts because walls have not been properly coordinated. Refer to markup from AAI. Further submissions of equipment layouts should be submitted as shop drawings on CAD backgrounds for proper coordination.

T-0782.2 **BGP - Electrical Equipment and Box Layout in Electrical Room B2560 - Area 10** **Closed** **12/20/2013** **12/30/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:**

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference drawing E1-2025, A1-2105 and Spec Section 26 05 34.

As per spec section requirement 26 05 34 - Raceways and Boxes, Article 3.2 - B, the "...location of outlets, fixtures and equipment is governed by field conditions...verify final location of outlets, fixture and equipment with the TJPA through the RFI process."

Please confirm the coordinated equipment layout with the knee walls per RFI T-0899 as shown in the attached as-built layout SCCI sketch SK-RFI-333.1 for Electrical Room B2560 in Area 10 is acceptable. Please refer to the conduit layout in submittal shop drawing package TG0600-905.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T-0782.3 **BGP - Electrical Equipment and Box Layout in Electrical Room B2560 - Area 10** **Closed** **01/28/2014** **02/07/2014** **02/10/2014** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Webcor Construction LP Jackson Tukuafu

REQUEST:

Please reference drawing E1-2025, A1-2105 and Spec Section 26 05 34.

As per spec section requirement 26 05 34 - Raceways and

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For confirmation of the equipment layouts, please document on shop drawings. All further layout confirmations for panels and conduits should be submitted on shop drawing format

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Boxes, Article 3.2 - B, the "...location of outlets, fixtures and equipment is governed by field conditions...verify final location of outlets, fixture and equipment with the TJPA through the RFI process."

Please confirm the coordinated equipment layout with the knee walls per RFI T-0899 as shown in the attached as-built layout SCCI sketch SK-RFI-333.1 for Electrical Room B2560 in Area 10 is acceptable. Please refer to the conduit layout in submittal shop drawing package TG0600-905.

Please note this RFI is being remitted per coordination meeting between AAI, WOJV, SCCI and TCCO on 1/10, to exclude SCCI's version of the RFI which makes reference to cost impacts.

T-0783 **BGP- CDSM Soldier Pile Encroachment Area 11** **Closed** **10/18/2013** **10/28/2013** **10/24/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

This RFI addresses the impact of the encroaching CDSM soldier piles (SP) on the north & south wall in mat slab pour Area 11 as well as all levels of the encroachment into the foundation wall between CDSM piles 188 to 236 on the north elevation and 548 to 571 on the south elevation for Location Plan see exhibit - A

Exhibit - B & C depict the location and degree in which the SP are encroaching

WOJV proposal North elevation on gridline A: (See Exhibit - B) between CDSM pile 234 to 236, WOJV is proposing to decrease the specified 36" wall thickness to 34' to clear the encroaching SP 235. Originally this was a WR1 reinforcement areas #11@8"oc EF vertically and would change to #11@6" OC, the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on Detail A/Sk.1 (Exhibit - D).

WOJV proposal on the South elevation: (See Exhibit - B)

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/23/2013
RESPONSE:
The contractor proposed revisions to foundation wall reinforcement due to encroaching CDSM Piles in Area 11 are acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Between CDSM piles 548 to 551 WOJV is proposing to decrease the specified 36" wall thickness to 34" to clear the encroaching SP 550, originally this was a WR1 reinforcement areas #11@8" oc EF vertically and would change to #11@6"OC, the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on Detail A/Sk.1 (Exhibit - D).

In all other areas without CDSM pile encroachment issues the reinforcement will remain unchanged as per the Contract drawings.

See Exhibit - E & F showing details of transition between modified reinforcement to contract reinforcement.

These solutions if approved would be incorporated into the TG06 shop drawings.

Please confirm if these solutions would be acceptable.

T-0784 **BGP- CDSM Soldier Pile Encroachment Area 12** **Closed** **10/18/2013** **10/18/2013** **10/24/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

This RFI addresses the impact of the encroaching CDSM soldier piles (SP) on the north elevation in mat slab pour Area 12 for location Plan see exhibit - A. This RFI is subject to revision as the current survey data available does not recorded positioning of the CDSM beams at the lowest mat slab elevation.
Exhibit - B, & C depict the location and degree in which the SP are encroaching

WOJV proposal North elevation on gridline A: (See Exhibit - B) between CDSM pile254 to 257, WOJV is proposing to decrease the specified 36" wall thickness to 34" to clear the encroaching SP 255 & 256. Originally this was a WR1 reinforcement areas #11@8"oc EF vertically and would change to #11@6"OC, the reduction in foundation wall thickness would be compensated by

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/23/2013
RESPONSE:
The contractor proposed revisions to foundation wall reinforcement due to encroaching CDSM Piles in Area 12 are acceptable. We note that the survey data for CDSM piles near the mat level is not provided in this RFI. Once that information is available, the encroachment information and therefore the foundation wall reinforcement in Area 12 may require further revision.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

reducing the rebar spacing predicated on Detail A/Sk.1 (Exhibit - D).

The South elevation has no encroaching piles and therefore the reinforcement would remain unchanged per the contract drawings

In all other areas without CDSM pile encroachment issues the reinforcement will remain unchanged as per the Contract drawings.

See Exhibit - E which shows a detail of transition between modified reinforcement to contract reinforcement.

This solution if approved would be incorporated into the TG06 shop drawings.

Please confirm if these solutions would be acceptable.

T-0784.1 **BGP- CDSM Soldier Pile Encroachment Area 12** **Closed** **03/06/2014** **03/16/2014** **03/13/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: Exhibits A - G

This revised RFI addresses the impact of the encroaching CDSM soldier piles (SP) on the north & south wall in mat slab pour Area 12 as well as all levels of the encroachment into the foundation wall between CDSM piles 235 to 265 on the north elevation and 517 to 548 to on the south elevation for location Plan see exhibit - A Exhibit - B, & C depict the location and degree in which the SP are encroaching

WOJV proposal North elevation on gridline A: (See Exhibit - B) between CDSM pile 234 to 237-238, 241-242 to 243, 254 to 257 and 262-263 to 270 WOJV is proposing to decrease the specified 36" wall thickness to 34" to clear the encroaching SP 235,242,255,256,263. Originally these were WR1 reinforcement areas #11@8"oc EF vertically

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The contractor proposed revisions to foundation wall reinforcement due to encroaching CDSM Piles in Area 12 are acceptable. Update Area 12 shop drawings affected by the new shoring encroachment info presented in this RFI and submit them for record.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

and would change to #11@6"OC, the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on Detail A/Sk.1 (Exhibit - D).

Between CDSM piles 237-238 to 241-242, WOJV is proposing to decrease the specified 36" wall thickness to 34" to clear the encroaching SP 241. This foundation wall area was originally a WR2 reinforcement area (#11@6"oc EF vertically) and would change to #11@5"OC this reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on detail A/Sk.3 option 2 (Exhibit - E).

WOJV proposal on the South elevation: (See Exhibit - B)
Between CDSM piles 530 to 531 WOJV is proposing to decrease the specified 36" wall thickness to 34" to clear the encroaching SP 531, originally this was a WR1 reinforcement areas #11@8"oc EF vertically and would change to #11@6"OC, the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on Detail A/Sk.1 (Exhibit - D).

Between CDSM piles 531 to 535 WOJV is proposing to decrease the specified 36" wall thickness to 34" to clear the encroaching SP 531, originally this was a WR2 reinforcement areas #11@6"oc EF vertically and would change to #11@5"OC, the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on Detail A/Sk.3 option 2 (Exhibit - E).

In all other areas without CDSM pile encroachment issues the reinforcement will remain unchanged as per the Contract drawings.
See Exhibit - E, F & G showing details of transition between modified reinforcement to contract reinforcement.

These solutions if approved would be incorporated into the TG06 shop drawings.

Please confirm if these solutions would be acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0785	BGP - Column Type C31/D22 Vertical Coupler Layout	Closed	10/03/2013	10/03/2013	10/08/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please refer to drawing 1/S1-3300, S1-3301, S1-3306 and attached Sketch SK-90.

Detail 1/S1-3301 requires the couplers for the adjacent column vertical bars be staggered with a vertical distance of 24" or more; however, due to the pattern and spacing of vertical bars for the type C31/D22 detailed on S1-3306, the condition cannot be met. Attached is Gerdau sketch SK-90 - C31/C22 Column Vert Layout with a proposed pattern for the vertical bars in the type C1/D22 columns.

Please confirm the proposed concrete reinforcement detail shown in the attached sketch is acceptable for type C31/D22 columns.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/7/2013
RESPONSE:
Contractor proposed configuration for placement of vertical bars for Column C31 is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0785.1	BGP - Type C8 & C9 Coupler Stagger Revised Pattern	Closed	01/17/2014	01/27/2014	01/27/2014	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Reference: RFI T-0785 and drawings s1-3300, S1-3301 and S1-3305.

Detail 1/S1-3301 requires the couplers for the adjacent column vertical bars be staggered with a vertical distance of 24" or more; however, due to the pattern and spacing of vertical bars for the type C8/D9 detailed on S1-3305, the condition cannot be met. The attached SCCI sketch SK-RFI418, is the proposed pattern for the vertical bars in the type C8/D9 columns, please confirm if it is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

RESPONSE: RFI T-0785.1 BGP - Type C8 & C9 Coupler Stagger Revised Pattern

George Metzger
1/24/2014
RESPONSE:
The proposed stagger is acceptable

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0786	SSS - Light Column Clevis Pin Material	Closed	10/04/2013	10/14/2013	10/11/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawing: S1-6006

Note on drawing S1-6006 states "ALL CLEVIS PINS AISI

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

We checked the proposed substitution with regard to chemical composition and strength requirements. An acceptable substitution for the pin material is ASTM-

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

5160 STEEL, OIL QUENCHED FROM 830C, 650C TEMPER OR DIN 34 CRNIMO 6 + QT CODE EN 10083". The pin manufacturer, Dyson Corp., indicates this material is not available and suggests a substitution to ASTM-A540 grade 823, class 5 (see attachment).

A540 grade B23, class 4.

T-0787 **SSS - Charpy V-Notch Impact Testing Requirements** **Closed** **10/04/2013** **10/14/2013** **10/10/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please confirm the following regarding the Charpy V-Notch (CVN) testing requirements for the project:

· The members identified on the attached sketches (SFRS - SK) are the only members that are part of the Seismic Force Resisting System (SFRS/SLRS/MF/BF) and are CVN tested in accordance with AISC 341-10 "Heavy Section" definition.
o Except from AISC 341-10: "For structural steel in the SFRS, hot rolled shapes with flanges 1-1/2" thick and thicker shall have a minimum CVN toughness of 20 ft-lb at 70°F, tested in the alternate core location as described in ASTM A6 Supplementary Requirement S30. Plates 2" thick and thicker shall have a minimum CVN toughness of 20 ft-lb at 70°F, measured at any location permitted by ASTM A673, Frequency P, where the plates is used for the following:"
- Members built up form plate
-The steel core of buckling restrained braces

· SFRS/SLRS/MF material will use the "Heavy Section" definition from AISC 341-10: hot rolled shapes with flanges 1-1/2" thick and thicker and plate 2" thick and thicker.

· Non SFRS/SLRS/MF material will use the project specification, Section 05 10 00, Part 1, 1.2, C.6, "Heavy Section" definition: hot rolled shapes with flanges exceeding 1-1/2" thick and plates exceeding 2" thick.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1-) In elevation sheets S1-4101 through S1-4116; moment frame columns, transfer girders and tapered roof girders are part of Seismic Framing (SFRS). In this RFI, only moment frame beams are highlighted by the Contractor as SFRS in these sheets. As indicated in Sheet S1-2302 (see Sheet Notes), Sheets S1-4101 through S1-4116 include "superstructure transverse seismic frame elevations".

2-) RFI correctly highlighted all the members in the "longitudinal seismic framing elevations" as SFRS. This was also indicated in Sheet S1-2302 (Sheet Notes).

3-) Buckling Restrained Braces are part of SFRS. If core plates within the BRBs 2" or thicker (unlikely since the specified BRB steel core area is relatively small), AISC 341-10 Heavy Section CVN requirements will apply.

4-) Ground Level Gridline G beams between Gridlines 12 and 16.9 are SFRS. Note that RFI correctly highlights these beams as SFRS in longitudinal seismic framing elevation views. However, they were not shown as SFRS in the plans.

5-) 2nd Floor Gridline D beam between Gridlines 16 and 16.9 is SFRS as indicated in construction drawings.

6-) For pipe columns (large diameter tubular sections),

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

· Non SFRS/SLRS/MF material will be CVN tested in accordance with note SS-9 on drawing S-0007. These testing requirements apply only to steel using complete joint penetration groove welds that fuse through the thickness of a flange or web. Members or plates that meet this criteria shall be CVN tested as follows:

o ASTMA6/A6M hot rolled shapes with a flange thickness exceeding 2" and built-up heavy shapes with plates exceeding 2" in thickness shall have a minimum CVN toughness of 20 ft-lb at 70°F.

o ASTM A709 hot rolled shapes with a flange thickness exceeding 2" and plates exceeding 2" in thickness shall have a minimum CVN toughness of 30 ft-lb at 70°F.

o ASTM A709 hot rolled shapes with a flange thickness less than or equal to 2" and plates less than or equal to 2" in thickness shall have a minimum CVN toughness of 25 ft-lb at 70°F.

The testing is in accordance with ASTM A673. The frequency is H.

o For "Heavy" rolled shapes, as defined by 05 10 00, test to be in accordance with ASTM A6/A6M, supplementary requirement S30, CVN impact test for structural shapes ¿ alternate core location. The testing is in accordance with ASTM A673. The testing frequency is H.

o For "Heavy" built-up shapes, as defined by 05 10 00, test to be in accordance with ASTM A6/A6M, supplementary requirement S5, CVN test. The testing is in accordance with ASTM A673. The testing frequency is P.

- Confirm that the exception noted in the response to SK RFI 020 (W/O T-0732) for the built-up train box columns still applies which states that for the built-up heavy plates of the train box columns frequency H testing is acceptable.

Please confirm that this RFI, and its response, shall be the governing document for all CVN testing for the structural steel shapes, plates and bars, and that no further testing, beyond what is explicitly stated within the RFI and its response is required.

CVN requirements are as indicated in General Notes SS-1 (API 5L, Product Specification Level 2). CVN requirements for alternative material options for pipe columns are also provided in the same section of General Notes. Note that the CVN requirement for option 1 (API 2B) and option 2 (Spuncast pipe) shall be 30 ft-lb at 0 degree Centigrade (not 0 degree Fahrenheit). This revision is to a higher temperature therefore to a less stringent CVN requirement.

7-) CVN requirements for steel below grade columns are as indicated in our response to RFI T-0732.

8-) For Non SFRS/SLRS members, the testing requirements indicated in General Note SS-9 apply to a) steel using CJP welds that fuse through the thickness of a flange or web, b) members that are spliced using CJP welding (see meeting minutes, 09/26/13 - Weekly Structural Issues Coordination).

We note that scope of this RFI is limited to CVN requirements for steel plates.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0788	BGP - Areas 5 and 6 EW Top Mat Reinforcing at South Wall Radius	Closed	10/04/2013	10/14/2013	10/04/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

Refer to the attached sketch 131003_S105-S106 South Radius.

In Areas S105 and S106, EW top mat reinforcing makes an increasingly acute angle with the south wall. This eventually prevents the reinforcing from penetrating the haunch and wall reinforcing curtains to reach the edge of the mat.

Per field coordination, please confirm it is acceptable to terminate EW top mat reinforcing in a hook prior to reaching the edge of the mat slab provided the following provisions are as followed:

- All terminating EW top mat reinforcing shall be hooked
- Where the angle becomes such that the mat reinforcing cannot penetrate the inner wall reinforcing. The reinforcing may terminate immediately in front of the wall reinforcing inside the haunch. This is labeled Zone 1 in the sketch.
- In Zone 1, single haunch bars that interfere with penetration of mat reinforcing into the haunch shall be relocated to allow penetration. Relocation will be to the nearest adjacent placement opportunity without regard to the 8" spacing module. Clear spacing, however, between haunch bars shall be maintained.
- The total number of haunch bars will remain unchanged.
- In Zone 1, provide a curved band of reinforcing at the typical size and spacing of the mat within the wall.
- Where the angle becomes such that the mat reinforcing cannot penetrate the haunch without relocating more than one haunch bar, reinforcing may terminate at the toe of the haunch. This is labeled Zone 2 in the sketch.
- In Zone 2, provide a curved band of reinforcing at the typical size and spacing of the mat within the haunch.
- Zone 1 and Zone 2 bands will overlap typical reinforcing by the distance LTS.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/4/2013
RESPONSE:
It is acceptable to terminate EW top mat reinforcing of Areas S105 and S106 prior to reaching the edge of the mat as described in the RFI.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0789	ASI 106 - Forced Air Thermal Cooling addition to LCC Nodes	Closed	10/07/2013	10/17/2013	10/21/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Reference: Attached Bradken letter

ASI 106 specification section 05 15 21 2.1.B.2.a.1.f calls for "casting to be normalized with forced air cooling."; however, in order to reach other requirements (chemistry, carbon equivalent, and mechanical properties) Skanska will need to water quench the material to achieve the mechanical properties specificed for the nodes.

The addition of this specification requirement willl greatly affect Bradkens ability to deliver the product, thus Bradken is requesting that this change to the specifications be removed.

The heat treatment proposed by Bradken/Skanska (liquid quenching) is acceptable to replace normalized and force air cool thermal treatment specified in 05 15 21.

T-0790 **SSS - Anchor Bolt Diameter Clarification** **Closed** **10/07/2013** **10/17/2013** **10/09/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawings: S1-5051

See attached CD RFI 043 SK1 & SK2 and confirm the anchor bolts for the columns at Grids 21/D.4 & 21//E.6 are 1" diameter per 7/S1-5051.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Anchor bolts are 3/4" diameter. The details for 3/4" diameter anchor is similar to the ones for 1" diameter (Type T anchor bolts). At the contractor's option without additional cost to TJPA, 1" diameter anchor bolt is acceptable to substitute the 3/4" diameter anchor bolt.

T-0791 **SSS - Anchor Plate Dimensions** **Closed** **10/07/2013** **10/17/2013** **10/09/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

See attached CD RFI 044 SK1 and confirm the noted plate washer dimensions are sufficient for the 2 1/2" dia. anchor bolts. Additionally confirm that the plate washer thickness may be ½" as per Detail 3 Section A, not 2" as shown.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The plate washer dimension is correct as shown (2' x 4" x 4").

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0792	SSS - Anchor Bolt Detail Clarification	Closed	10/07/2013	10/17/2013	10/21/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawing: S1-5051

1) The plate washer will clear the fillet weld by 3/16". This is not sufficient to accommodate the maximum anchor bolt as-built tolerance based on the maximum oversize holes per A.I.S.C. Please advise.

2) The plate washer will clear the fillet weld by 1/4". This is not sufficient to accommodate the maximum anchor bolt as-built tolerance based on the maximum oversize holes per A.I.S.C. Confirm it is acceptable to locate the anchor bolts 5 1/2" from the center of the column.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

In the direction parallel to column web, moving the anchor bolts to 5-1/2" from column center line as proposed in RFI will cause washer plates to clash with column flange (or welds). To alleviate this problem, suggest locating the 2 1/2" anchor bolts 4" from column center line (in direction parallel to web). The plate washer for the lower nut may be deleted.

In the direction perpendicular to column web, moving the anchor bolts as proposed in this RFI is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0793	SSS - Connection Plates at Type 2 Drag Connections	Closed	10/07/2013	10/17/2013	10/22/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

On S1-5017 for the Type 2 Drag connections there are finger type connections where the carrying plates on the beams slide between the framing plates. In order for the beams to side down between these shop attached plates during erection please confirm a 1/8" clearance is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed that the proposed 1/8" gap is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0795	SSS - Transfer Girder Stiffener Configuration	Closed	10/07/2013	10/17/2013	10/11/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

Reference Draiwngs: S1-4302 & S1-5052

Stiffeners required on TR9 transfer girder (A/ S1-4302) at line F are fouling. Stiffeners were detailed as per 2/ S1-5052 and 4/ S1-5052. See attached sketch CD RFI 040 SK1 for clarification. We propose to trim the stiffeners by ½" to avoid fouling.

Please advise if this proposal is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Trimming not required. Interference for this case can be avoided moving the below grade column stiffener 1/2" towards the center of the column.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0796	SSS - Transfer Girder Stiffener Thickness	Closed	10/07/2013	10/17/2013	10/09/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawings: S1-4300, S1-4308, S1-5052

For columns above transfer girders Detail 1/ S1-5052 calls out thicknesses of "X=1 1/2" for tfc <2 or tfc=2" and "X=2" for tfc >2"). For columns that are below transfer girders 4/ S1-5052 calls out "2 1/2" thk stiffener PL ea side, typ. (see note 3)". Note 3 states "Stiffeners required UON in transfer girder elevations".

Where columns are directly above and below a transfer girder and full height stiffeners are shown per transfer girder elevations, please advise on what thickness these full height stiffeners should be.

*Please note that 1/S1-5052 is also referred to on 2 and 6/S1-5052.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

When a below grade column is present immediately below an above grade column, full depth stiffeners that line up with the flanges of the column above are used within the transfer girder. Therefore, Details 1, 2 or 6/S1-5052, which are for above grade columns, govern the thickness of the full height stiffeners. This condition is indicated by Note 4 of Detail 1/S1-5052 which states, the stiffeners are half-depth UON in transfer girder elevations. For information not shown in Detail 2 and 6/S1-5052 (see Note 2 in these details), Detail 1/S1-5052 is referred to as correctly understood by the contractor.

Note that where the above grade columns are connected to the transfer girders via castings, different details apply and stiffener requirements are different. Refer to corresponding details from Transfer Girder elevations.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0797	BGP - Mat Slab Construction Joint Conflicts in Area 8	Closed	10/08/2013	10/18/2013	10/16/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

Please refer to attached photos, excerpt drawing CJ-05 from submittal package TG0600-030.3 and SCCI sketch SK-0341.

The east side of the mat slab construction joint of Area 8 (S108) has several constructability issues with the mat keyway and other project structure elements. The following are identified conflicts and SCCI proposed remediation:

1. The current east construction joint layout in Area 8 falls within the row of micropiles as shown in attached Photo-1 and Photo-2. SCCI intends to jog the joint an addition 12" +/- to the East of GL 16.6 to clear the micropile conflict
2. The east construction joint of area 8 currently jogs thru the thickened slab section at GL 16.6/G.3. SCCI intends to shift the joint Eastward to capture the thickened section

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/15/2013
RESPONSE:
1. We assume the RFI means to state the proposed shift is "... 12"+/- to the East towards GL 16.6..." (and not "...12"+/- to the East of GL 16.6...") as graphically depicted in the RFI sketch SK-341. This is acceptable.

2. The proposed jog around the pit/thickened slab is not acceptable as proposed. However, an acceptable alternative would be to turn the CJ westward along (or parallel) to GL F.7 within S108 and then turn 90 degrees south to align with the CJ on the west side of wall W160.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

within the Area 8 pour.

Please confirm the revised construction joint layout shown the attached SCCI sketch SK-341 is acceptable.

T-0798 **BGP - Mat Slab Construction Joint (east side) Conflicts in Area 09** **Closed** **10/08/2013** **10/18/2013** **10/16/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

Please refer to attached SCCI sketch SK-345 and drawing (CJ-05) excerpt from submittal package TG0600-30.2.

The east side of the mat slab construction joint of Area 09 (S109) has several constructability issues wih the mat keyway and other project structure elements. SCCI proposes to install the CJ between area 09 and 10 as shown on the attached sketch.

Please confirm the revised construction joint layout as shown in the attached SCCI sketch SK-342 is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/15/2013
RESPONSE:
The proposed mat joint between S109 and S110 is acceptable.

Refer to RFI T-0797 for the joint on west side of area 9 between S109 and S108.

T-0799 **BGP - Partition Wall Pilaster and Plumbing Conflict at GL C.5/4.8** **Closed** **10/08/2013** **10/18/2013** **10/10/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please refer to drawing S1-2052 and S1-9050.

The reinforcement for the partition wall pilaster at approximately GL C.5/4.8 is in conflict with the drainage pipe below. Per note 3 on detail 9/S1-9050 the ties will be installed if possible.

Two vertical bars in the pilaster will have to be bent in order to clear the pipe and two others will have to be slightly displaced to clear the pipe. See the attached

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/9/2013
RESPONSE:
The revised reinforcement detail for pilaster near Grid C.5/4.8 as described in the RFI is acceptable

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Gerdau sketch SK-93 for details.

Please confirm the revised reinforcement detail for the partition wall pilaster as detailed in sketch SK-93 is acceptable.

T-0800 **SSS - Top of Base Plate Elevation Clarification** **Closed** **10/08/2013** **10/18/2013** **10/09/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawing: S1-3621, S1-5051

The top of base plate elevation at Grids 21.0/D.4 & 21.0/E.6 is shown as -4"-4 1/2 in 2/S1-5051 but when working with detail 5/S1-3621, the top of base plate elevation is -4' -6 1/2. Please refer to attached CD RFI # 041 SK1 to SK3 and provide the top of base plate elevation to be used at the noted Grids.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Yes, the top of the base plate for grids 21.0/D.4 & 21.0/E.6 shall be at (-) 4'-6 1/2".

T-0801 **SSS - Revit Model Dimension Verification** **Closed** **10/08/2013** **10/18/2013** **10/09/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

On S1-2302, S1-2303 & S1-2304 there are some beam & HSS member locations that are not located on the design drawings therefore we have used the Revit model to locate these members. On sketch CD RFI 047 SK1 to SK3 please verify all clouded dimensions that were taken from the latest Revit model received 9/12/13 to locate the steel in question.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See response to RFI-0769. Resubmit the RFI considering the guidelines provided in the response to RFI-0769 to locate beams on floor plans

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T-0802 **BGP - Mat Slab Construction Joint (east side) Conflicts in Area 10** **Closed** **10/08/2013** **10/18/2013** **10/16/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Filip Filipic

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Please refer to attached SCCI sketch SK-345 and drawing (CJ-05) excerpt from submittal package TG0600-30.2.

The east side of the mat slab construction joint of Area 10 (S110) has several constructability issues wih the mat keyway and other project structure elements. SCCI proposed to install the CJ between area 10 and 11 as shown on the attached sketches.

Please confirm the revised construction joint layout as shown in the attached SCCI sketch SK-345 is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/15/2013
RESPONSE:
The proposed mat joint between S110 and S111 is acceptable.

Refer to RFI T-0798 for the joint on west side of area 10 between S110 and S111.

T-0803 **SSS - 2nd Level Revit Model Dimension Verification** **Closed** **10/08/2013** **10/18/2013** **10/09/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

On S1-2402, S1-2403, S1-2404, S1-2406 & S1-2407 there are some beam & HSS member locations that are not located on the design drawings therefore we have used the Revit model to locate these members. On sketches CD RFI 048 SK1 to SK5 please verify all clouded dimensions that were taken from the latest Revit model received 9/12/13 to locate the steel in question

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Revit model is not a contract document. See response to RFI-0769. Resubmit the RFI considering the guidelines provided in the response to RFI-0769 to locate beams on floor plans.

T-0803.1 **SSS - 2nd Level Revit Model Dimension Verification** **Closed** **11/22/2013** **12/02/2013** **12/19/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On the response to Webcor RFI # T-0769 (SK RFI # SK 050) & T-0803 SK RFI # 067) we have reviewed and located most of the beam locations in question using the nearest gridlines, architectural dwg's, partial plans, equal spacing, etc per the noted guidelines in the response. However on drawings S1-2402, S1-2403, S1-2404, S1-2406 & S1-2407 there are still some beam locations that cannot be located and require verification therefore on sketches CD RFI 048.1 SK1 to SK5 please verify all

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Responses to the queries on dimensions for locating beams on floor plans have been noted on the attached sketches SKS-0307 through SKS-0311 and SKA-2970.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

clouded dimensions in RED as noted to close this RFI.

T-0804 **SSS - W21 Beam Substitution** **Closed** **10/08/2013** **10/18/2013** **10/11/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

With reference to the W21x44 and W21x50 beams shown on Dwgs S1-2302 to S1-2307 (Ground Level), S1-2402 to S1-2407 (Second Level), Dwgs S1-2502 to S1-2507 (Bus Level) and Dwgs S1-2602 to S1-2607 (Roof Park Level), these beams have relatively narrow flanges. These beams sizes are problematic with regard to stability during erection for spans over 30 feet in length. The substitution of the W21x48 for the W21x44 and W21x55 for the W21x50 would resolve the stability issue. Please advise if these substitutions are acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

In general, where there is no shaft opening or recess on either one or both sides of the W21, the proposed substitutions for temporary erection stability are acceptable as long as there is no additional cost to TJPA. However, where there is an opening or recess on either one or both sides of the W21, substituting W21x44 or W50 with a beam with wider flange might negatively affect the edge clearance. Skanska may decide to move the beam to gain the same edge distance and submit the revised framing plan (with dimensions) as a RFI.

T-0805 **BGP-Area 7 level D bracing removal** **Closed** **10/08/2013** **10/18/2013** **10/21/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Further to response to RFI T-0641 please find attached supporting information from the internal bracing designer (PB&A) see exhibits B this information is a three dimensional structural analysis of the CDSM wall and bracing system. WOJV is proposing the removal of the level D bracing in area 7 and also the bracing which spans across the Construction joints between Areas 6 & 7 and Areas 7 & 8 waler (WD-09 to WD-12, & WD-60 to WD-63 as well as struts 20-25 level D See SK-1 2 &3 in exhibit A) The removal of this bracing will allow all the first lift of wall to be completed in area 7 and mitigate any possible delays to the construction schedule.
As part of this bracing removal process, WOJV will also put a monitoring plan in place to monitor the CDSM beams which will be unsupported by either the concrete of the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/17/2013
RESPONSE:
For the condition where the Level D bracing will be removed above a poured mat slab that has not reached adequate strength, the structural engineer should comment as to the appropriateness of this.

Where mat slabs are not yet poured, Level D bracing removal will allow additional movement and pose a risk of cracking and loss of watertightness of the CDSM material as compared to the sequence illustrated on drawing GT-1112. Therefore we recommend that the early removal of the Level D bracing not be done.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

mat slab or the level D walers and struts see exhibit C

Please confirm if this would be acceptable

T-0806 **SSS - Backing Bar Removal from CJP Welds** **Closed** **10/09/2013** **10/19/2013** **10/11/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

1. In reference to AWS D1.1, Skanska has not found any members or connections identified on the drawings as 'subject to cyclical loading'. Therefore, it is our understanding that the provisions of AWS D1.1 - Clause 2 - Part C do not apply. Please confirm.

2. Please confirm that for welds subject to the provisions of AWS D1.8, Table C-1.1 is the governing reference for the removal of tabs and backing.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed that AWS D1.1-Caluse 2-Part C does not apply.

2) For welds subject to the provisions of AWS D1.8, the removal of weld tabs and backing shall be in accordance with the details included in the contract documents. Confirmed that where removal of weld tabs and backing are not specifically detailed on the contract documents, AWS D1.8, Table C-1.1 is the governing references.

T-0807 **Blockout and reinforcement detail on the future bridge decks** **Closed** **10/10/2013** **10/20/2013** **10/16/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please provide a blockout and reinforcement detail for the 48"diameter bridge piers support the TG03 BSE (Balfour installed) temporary bridges on 1st street, Fremont street and Beale street.
Provide specification for positional couplers to be used, and confirm that rebar has appropriate concrete cover with positional coupler use.

This detail will be part of the TG07.2 scope of works.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/14/2013
RESPONSE:
It is our understanding that this RFI is in regards to block-outs for the temporary bridge piers through the TG07.2 Ground Level concrete roadway slabs. These block-outs are considered temporary openings and therefore the responsibility of the Contractor per General Note GR-9 to propose a detail.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0808	SSS - Material Grade Certification	Closed	10/10/2013	10/20/2013	10/18/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please refer to attached CD RFI 046 SK1 to SK5 sketches and confirm all connection material shown on drawing S1-5051 is ASTM A36 material per the material note for plates in SS-2 on drawing S-0007 unless specifically noted on the drawing.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0809	SSS - Shear Plate Connections	Closed	10/10/2013	10/20/2013	10/22/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

For the typical shear plate connections per detail 1/S1-5011 see sketches CD RFI 060 SK1 & SK2 for items 1, 2 & 3 noted below.

1. Confirm it is acceptable to locate the bolts 2 3/4" from face of beam web as shown for duplication of shear plate marks.

2. Confirm it is acceptable to cope the beam to match the "k" distance of the supported beam (W24) while maintaining a 1/2" minimum clearance to avoid cutting inside the "k" in lieu of the 1/2" max. shown in detail 1/S1-5011.

3. Confirm the shear plate thickness and weld size at a W16x31 to W24x68 connection as per Note 3 in 1/S1-5011 is 3/8" shear plate and 1/4" weld.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Confirmed. It is typically acceptable to provide a distance of 2 3/4" between face of the beam web and the bolt centerline.

2. It is acceptable to typically cope the supported beam by a distance of k - e while maintaining a ½" minimum clearance as noted wherever detail 1/S1-5011 applies. k is the "k" distance of the supported beam and e is the fillet encroachment allowed per Figure 10-3 of the AISC Steel Manual 14th Edition. For the instance highlighted in the RFI, see response to 3.

3. The shear plate connection shown in SK1 and SK2 occurs at 4 locations between GL 12 and 14. W16 beams at these four locations are going to be upsized in a future ASI.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0810	SSS - Transfer Girder Kicker Connection	Closed	10/10/2013	10/20/2013	10/11/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

On S1-2305 near grids 24.9/E the kicker angle connection per detail 5/S1-5015 will miss the connecting beams at 4 locations as noted on sketches CD RFI 064 SK1 & SK2. Please supply an alternate connection detail at these

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Provide kickers with 1 to 1.25 slope at the four locations highlighted in the RFI so that the top gusset plates connect to the short W44 beams that span East-West.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

locations.

T-0811 **SSS - Fitted Stiffeners** **Closed** **10/10/2013** **10/20/2013** **10/17/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: Attached sketch

Spec 05 10 00 - 16 N states: "Stiffeners: Fitted stiffeners shall be ground to fit closely against flanges."

1.Please clarify which stiffeners are fitted stiffeners as this terminology does not appear to be noted in the structural drawings.

2. Confirm it is acceptable to provide the shear plate height as d-2tf minus 1/16" for fabrication tolerance.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1.) When a stiffener is called out in the drawings as "fitted" stiffener, it shall be ground to fit closely against the flanges as indicated in the specification. In following cases, "fitted" requirement can be disregarded and stiffeners can be constructed using standard AISC fabrication tolerances: a-) When stiffeners are welded to beam/column flanges using CJP welding. b-) In Sheets S1-8001, S1-8002, S1-8003. c-) In Detail 1/S1-5013.

2.) If a stiffener is not called out as "fitted", use of standard AISC fabrication tolerances for construction is acceptable.

T-0812 **SSS - Pipe Column Connections to Cast Nodes** **Closed** **10/10/2013** **10/20/2013** **10/18/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please review attached sketches with details on S1-4020 and cast node details for pipe connections to cast nodes.

1. Work points for 32" diameter basket column to cast node connections have been offset from the theoretical work line as noted on design sheet S1-4020. Verify ends of 32" pipe will need to be bevel cut to match face of cast node geometry.

2. Where necessary bevel cuts are required at each end of the 32" diameter pipe we propose to add a scribe line along the top surface on centerline of the pipe to facilitate

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. As noted on details on Sheet S1-4020, the center line of the pipe is not in line with the center line of the cast node. Since the cast node ears are casted to be perpendicular to the cast node axis, the pipe end need to be bevel cut to match face of the case node geometry.

2. Scribe line if needed shall be laid out and scored into the casting by Skanska as a part of means and methods. The depth and thickness of the scribe line shall be submitted for review. Scribe line if added, shall not affect the appearance of the cast node nor

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

matching the cut surface to the cast node face. Please verify a corresponding scribe line will be added to the face of Cast Nodes.

pipe after painting.

T-0813 **SSS - Kick Angle Requirements** **Closed** **10/10/2013** **10/20/2013** **10/21/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please refer to sketch CD RFI #070 SK1. The BU members on Grid 1 are not noted as MF, TR or TPG and it is not clear which kicker brace detail on S1-5015 applies. Please advise which kicker brace detail on S1-5015 is to be applied along Grid 1

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Bottom flange bracing is not required at the BU-40x22x1x2 beams along GL 1.

T-0814 **SSS - Missing BU Members in the Bottom Flange Brace Schedule** **Closed** **10/10/2013** **10/20/2013** **10/14/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Per detail 7/S1-5015 please refer to sketch CD RFI # 072 SK1 and supply the information for the missing BU 30x18x1x1.5 & BU 30x22x1.5x2 members in the schedule.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Bottom flanges of Moment Frame (MF) beams are to be braced per 6/S1-5015 where the "H" dimension noted in the detail is less than or equal to 12" or per 7/S1-5015 where the "H" dimension is greater than 12". The BU30 MF beams highlighted in the RFI are to be braced per 6/S1-5015 as "H" < 12" for these beams

---

T-0815 **SSS -Missing Kicker Brace Details** **Closed** **10/10/2013** **10/20/2013** **10/21/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

At the Bus level near grid line 12 and at grids 18 & 26 please refer to sketches CD RFI # 073 SK1 to SK3 and supply the appropriate kicker brace detail on S1-5015 to

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Kicker brace at the locations highlighted in the RFI shall be per Detail 7/S1-5015, similar to the one for BU-40x18x0.75x1.5.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

be used for the noted beams as these beams are not MF beams, Transfer Girders or Tapered Girders.

T-0816 **BGP - Revised Placement Tolerance at Top Mat Reinforcement** **Closed** **10/10/2013** **10/20/2013** **10/22/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please refer to drawing S1-2052 and ACI 117.

Please confirm it is acceptable to increase the top mat slab reinforcement placement tolerance from +/-1/2" to +1/2" and -1" as discussed and coordinated with TT field respresentative. This would also change the concrete cover tolerance from -1/2" to +/-1/2".

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/18/2013
RESPONSE:
Minimum acceptable concrete cover over top reinforcing stands at 1" per ACI 117 Section 2.2.2 (+1/2 proposed in RFI). Minimum acceptable concrete cover over headed reinforcing stands at ½" per ACI 117 Section 2.2.2.

Maximum acceptable concrete cover may be increased to as much as 3" provided that the distance from the top of reinforcing to the protection slab is no less than 58" (Relaxation of proposed -1" tolerance in RFI to -1.5" with stipulation).

T-0817 **BGP -Compressible material between concrete structure & CDSM wall** **Closed** **10/11/2013** **10/21/2013** **10/23/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

The contractor has raised a concern see letter in exhibit A attached.
Does the design team envisage any possible issues with the CDSM wall if the waterproofing substrate becomes compressed between the permanent structure and the CDSM wall once the level D bracing is removed? The same question applies when the re-bracing is installed against the permanent foundation walls.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/21/2013
RESPONSE:
We do not envisage any problems with the CDSM wall due to the compressible layer. The performance of the CDSM wall with regards to meeting the specified deflection criteria is the responsibility of the internal bracing designer.

WOJV shall coordinate between the Waterproofing

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

and shoring Sub-contractor and provide requested information to BBI.

T-0818 **SSS- Kicker Brace Connection to Underside of Beam Flange** **Closed** **10/10/2013** **10/20/2013** **10/17/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

On S1-2505 at grid lines 20.1/E please refer to sketches CD RFI # 074 SK1 & SK2 and supply a connection detail for the kicker brace to the underside of the beam flange as shown.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Adjust the slope of the kicker brace such that the top gusset plate connects to the bottom flange of the W24x55 beam. For connection detail of kicker brace to underside of beam flange refer to typical gusset plate detail 7/S1-5015. Slope of the kicker brace should not exceed 3:5 (3 horizontal to 5 vertical).

T-0819 **SSS -Gusset Plates at Kicker Angle Connections** **Closed** **10/10/2013** **10/20/2013** **10/14/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

On S1-5015 for the bottom flange connection and the kicker angle connection clarification please refer to sketches CD RFI # 077 SK1 & SK2 for items 1 & 2:

1) Confirm it is acceptable to cut the gusset plate as shown to avoid a pointed corner as the weld will not beeffective in the shaded triangle area.
2) Confirm it is acceptable to cut the gusset plate as shown to avoid a pointed corner as the weld will not be effective in the shaded triangle area.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed. Changes proposed in the RFI (cutting the gusset plate as shown in CD RFI 077 SK1 and SK2) are acceptable

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T-0820 **SSS - Missing Beam Connection Details** **Closed** **10/10/2013** **10/10/2013** **10/22/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

SUGGESTION:

ANSWER:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

At the ground level north of grid line G at grids 2, 3 & 4 please refer to sketches CD RFI # 078 SK1 to SK4 for items 1 to 4 below and supply connection details as noted.

1) Supply a connection detail.
2) Confirm connection is per 12/S1?]5010.
3) Supply a connection detail.
4) Supply a connection detail.

Accept Suggestion: ☐

1. Connection detail at the W30x99 beam will be similar to 2/S1-5011 except that instead of a single shear plate, the connection will have two shear plates between the three transfer girder flange plates. Width of plates to match the larger of the transfer girder flange plate widths. Provide 2 bolts in the top shear plate and 4 bolts in the bottom shear plate. Bolt sizes, spacing between the bolts, bolt edge distances, shear plate thickness and fillet weld between the shear plate and transfer girder flanges/web for the two plates are to be followed per 2/S1-5011. Provide closure plates for the metal deck at the gap between the WT and the transfer girder top flange. Refer to SKS-0288 (attached) for the connection details.

2. Provide connection detail per 2/S1-5011 except that the shear plate spans between top and middle flange plates of the Transfer girder. Refer to SKS-0288 (attached).

3. Connection detail at the W30x99 beam will be similar to that described in 1. For the connection at W40x183, provide 2 bolts in the top shear plate and 7 bolts in the bottom shear plate. Width of plates to match the larger of the transfer girder flange plate widths. Bolt sizes, spacing between the bolts, bolt edge distances, shear plate thickness and fillet weld between the shear plate and transfer girder flanges/web for the two plates are to be followed per 2/S1-5011. When a transfer girder brace is required per 5/S1-5015 at a beam with a shear plate connection, connect the brace angle to the shear plate. Bottom gusset plate per 5/S1-5015 is typically not required in such instances. Refer to SKS-0289 (attached) for the connection details.

4. Provide a double angle connection per detail 9/S1-5010 at the W40x183 beam. Provide 1 bolt less than that required by the connection detail to avoid conflict with the connection on other side of the transfer girder.

T-0821	**BGP - Plumbing Line in Area 4 Stairway**	**Closed**	**10/10/2013**	**10/20/2013**	**10/31/2013**	**Potentially**	☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Webcor Construction LP Jackson Tukuafu

REQUEST:

Reference Drawing P1-2022 between Line C/4-5

Per drawing P1-2022, a 6" sanitary line and vent connection is shown inside the Area 4 stairway. WOJV recognizes the need to flush the sprinkler system and/or needed drain. However, per CBC Code 2007 section 1020.1.2, plumbing line or drains are not listed under Penetrations.

Please confirm the plumbing line detailed inside the Area 4 stairway will comply with the referenced code section.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/30/2013
RESPONSE:
There are a number of sprinkler drains that terminate with an indirect waste connection and they are located in the level B2 stairwells outside of the exit path radius. The dedicated indirect waste connections for the sprinkler drain risers are an integral part of the sprinkler system just as much as the sprinkler drain riser itself.

T-0822 **SSS - Angle Connection Details at GL 23** **Closed** **10/11/2013** **10/21/2013** **10/14/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

On S1-2305 around the light column @ grid 23 see attached CD RFI 062 SK1 and confirm details 6 & 7/S1-5015 may be applied at the noted (16) locations. If not, supply a detail reference.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed. Braces may be provided per 6 and 7/S1-5015 at the 16 highlighted locations.

T-0822.1 **SSS - Angle Connection Details at GL 23** **Closed** **12/03/2013** **12/13/2013** **12/13/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

RFI T-0822 (attached for reference) confirmed the use of details 6 and 7/S1-5015 at the 16 highlighted areas. Please refer to CD RFI 062.1 SK1 and confirm that the weld dimension "A" indicated on 7/S1-5015 applies to skewed angle connections as indicated on the sketch attached. Otherwise, please provide the required welding information.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

T-0823 **SSS - Bolted Beam Connections** **Closed** **10/11/2013** **10/21/2013** **10/14/2013** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Per S1-5012 for the typical bolt beam connections please refer to sketches CD RFI # 079 SK1 to SK3 for items 1 to 7:

1) Confirm the noted dimension may be 1 3/4" in details 1 & 2/S1-5012 to match 3/S1-5012.
2) Confirm the noted dimensions are acceptable for details 1, 2 & 3/S1-5012.
3) Supply plate thickness.
4) Supply welding for shear plate to column.
5) Confirm dimensions are acceptable.
6) Confirm dimensions are acceptable.
7) Supply plate thickness.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed. Vertical bolt edge distance 2db can be changed to 1 3/4" in details 1 and 2/S1-5012 if the bolt diameter is not more than 7/8".

2) Confirmed. The noted dimensions are acceptable for details 1, 2 and 3/S1-5012. Note that the distance between the centerline of the bolts and the face of the column is 3".

3) Plate thickness is 3/4" as noted on Superstructure ASI 106 drawings.

4) Welds between shear plate and column are double sided 5/16" fillet welds as noted on ASI 106 drawings.

5) Confirmed. Noted dimensions are acceptable.

6) Confirmed. Noted dimensions are acceptable.

7) Plate thickness is 1" as noted on Superstructure ASI 106 drawings.

T-0824 **SSS - Bottom Flange Connection Plate** **Closed** **10/11/2013** **10/21/2013** **10/22/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Per detail 6/S1-5015 for the bottom flange connection plate please refer to sketches CD RFI # 069 SK1, SK2 & SK3.

1) Access for field welding the web extension plate per 6/S1-5015 is a problem at the noted location as well as other similar locations.

Confirm the web extension plate may be typically omitted when the dimension shown as 1 3/4" is 3" or less.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Access for field welding of the web extension plate per 6/S1-5015 is a problem at the following locations:

1) Location highlighted in SK1 in the RFI

2) At GLs 6/C.3 and 6/F.7

3) At GLs 9.9/C.3 and 9.9/F.7

4) At GLs 20.1/C.3 and 20.1/F.7

5) At W40x149 beams framing into moment frame beams between GL 32.4 and 33.2 (Total 8 brace locations).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Provide brace detail per sketch SKS-0290 (attached) at locations listed in 1, 3 and 4 above. Braces at locations listed in 2 and 5 are not required.

T-0825 **SSS - W30 Beam to Girder where bf exceeds 22** **Closed** **10/11/2013** **10/21/2013** **10/17/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

On S1-2505 along grid line 20.1/E.6 where the W30x108 beam frames into the MF girder please refer to sketches CD RFI # 076 SK1 & SK2 for items 1 & 2 noted below.

1) The noted "MF" beam is a BU-44x24x1.25x2.75. Detail 1/S1-5011 does not apply as "bf" exceeds 22". Please supply a typical connection for a round circle on plans when the "bf" exceeds 22 (work with item 2 on SK2)
2) Please note that if a full depth shear plate is used it will foul the beam extension plate per 6/S1-5015. Please clarify.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Provide double angle connection per 1/S1-5010 at the two W30x108 beams that frame into the Moment Frame beam at GL 20.1. For the four shear plate connections at the W30x108 and W40x149 beams on GL 21, provide connections per 1/S1-5011. There are no other locations where a shear plate connection per 1/S1-5011 is specified and where support beam flange width is greater than 22".

2) See response to 1.

T-0826 **SSS - Oversized Hole Size in Web Stiffeners** **Closed** **10/14/2013** **10/24/2013** **10/22/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please confirm it is acceptable to oversize the bolt holes in the web stiffeners to the bolt diameter + 3/16". Reference Detail 1 on S1-5019 and CD RFI 055 SK1 for additional information.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Use of oversize bolt holes in this drag connection is not acceptable.

T-0826.1 **SSS - Clarification of Oversized Holes in Web Stiffeners** **Closed** **11/11/2013** **11/21/2013** **11/15/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

SUGGESTION:

ANSWER:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Accept Suggestion: ☐

Reference the response to W/O RFI # T-0826 (SK 114 & CD 055D), attached for reference.

W/O RFI T-0826 response states that "Use of oversize bolt holes in this drag connection is not acceptable." Confirm that the response above applies only to conditions when the web stiffener plate is the outside plate in a connection and that the 3/16" oversize holes for the web stiffener plates are acceptable in details 1 & 2/S1-5016 when the web stiffener plate is not the outside plate in the connection.

RESPONSE:
Use of oversize hole is not allowed for drag connections, neither at the shear plates nor at the web stiffener plates, and regardless of whether the web stiffener plate is the inside plate in the connection or not.

T-0827 **BGP - Clarification to Galvanized Steel Plate at Seismic Joint in Area 16** **Closed** **10/14/2013** **10/24/2013** **10/28/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Scott Bunnell

REQUEST:

Please refer to attached drawing detail 7/A1-8881 and 4/S1-3010.

Detail 7/A1-8881 (and other details on A1-8881) call for a 5/8" x 6' galvanized steel plate secured to the mud slab and soldier piles. This plate does not appear on the structural details for the seismic joint in drawing S1-3010.

1. Please explain the functionality and purpose of the galvanized steel plate shown in 7/A1-8881 and 1/A1-8881 in relation to the seismic joint assembly.

2. Please provide revised structural drawings showing all welding and design criteria required to attach and secure the "5/8" THK x 6' wide galv steel plate" to the mud slab and soldier beam, respectively.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/24/2013
RESPONSE:
AAI Response:
1. The 5/8" thk x 6' wide plates were provided at the mat slab (horizontal) and at the shoring wall (vertical) to serve as relatively smooth backing for the seismic joint assembly as the train box moves against the mud slab and shoring wall. It also provides a flat surface for the neoprene gasket seal when pressed against it.
2. The horizontal plates are mechanically anchored to the 4" thk reinforced mud slab with 3/8" expansion anchors (with the shortest minimum embed 2 5/8" or 3" depending on the manufacturer) spaced at 8" min. The vertical plates are either seam/slot welded to the soldier piles or are 2 plates (with total width of 6')-plate panels welded to the solder piles, depending on the field location of installed adjacent soldier piles. Welds ground to a smooth finish.

TT Response:
This plate is not intended to show on the structural drawings.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0828	SSS - Locations for Scratch Plate for BRBs	Closed	10/14/2013	10/14/2013	10/17/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please reference the sketch attached and verify the proposed scratch plate end locations and surface locations are acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The locations of the BRB scratch plates are acceptable with following modification: Move the scratch plate from the BRB in Detail H/S1-4150 to one of the BRBs in Detail F/S1-4150. Mount scratch plate near the top of the brace, on near side.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0829	BSE - Voids Across Top of CDSM Wall on the West side of Zone 1	Closed	10/15/2013	10/25/2013	10/21/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Photos: attached

There are a number of voids that run across the top of the CDSM wall on the West side of zone 1 (see attached photos). During prior conversations between W/O and Arup there has been discussion of filling these voids with material. Please provide the material and application desired by the design team to fill these voids.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The voids do not need to be filled at this time.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0830	SSS - Type T, TT, and TTT Base Plate Anchor Rod Location Confirmation	Closed	10/15/2013	10/25/2013	10/21/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Detail 7 on S1-5051 provides locations where type TT and type TTT base plate anchor rods will be installed. There are other details throughout the plans that contradict the columns base plate anchor rod locations provided in 7/S1-5051. For example: 7/S1-5051 shows a column at gridline 10.1/G.3 as having a type TTT base plate anchor rod detail; however, 1/S1-3610 shows the column at 10.1 and G.3 as having a type T base plate anchor rod detail.

Please confirm that detail 7/S1-5051 provides the correct base plate anchor rod detail for each of the columns.

Please provide a type T base plate anchor rod detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed that 7/S1-5051 provide correct anchor rods information.

2) Type T anchor rod details are provided in Detail 3 & 5/S1-5051 (see the note stating "TYPE T thread bar anchor shown, for Type TTT threadbar anchor see 4/S1-5051, for TYPE II threadbar anchor see 6/S1-5051).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0831	BGP - Area 11 Clear Cover to the Vertical Reinforcement on the Foundation Wall	Closed	10/22/2013	11/12/2013	10/29/2013	Potentially	☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Further to response to RFI T-609 this RFI shows the areas of foundation wall/embedded column in pour Area 11, on the north & south wall elevations which will have greater than 6" of clear cover to the vertical reinforcement for location plan see exhibit - A

Exhibit - B & C depict the amount and location of the foundation walls which the will have greater than 6" of clear cover to the vertical reinforcement in this case only pile number 225 on the north elevation has this issue.

RFI T - 783 shows the thinning of the wall with the revised reinforcement spacing due to CDSM pile encroachment in Area 11.

Please confirm that the clear cover between the waterproofing system and the vertical reinforcement as outlined at these locations is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/29/2013
RESPONSE:
The clear cover between the waterproofing system and vertical reinforcement as presented in Exhibit C of this RFI is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0832	BGP - Area 12 Clear Cover to the Vertical Reinforcement on the Foundation Wall	Closed	10/24/2013	11/05/2013	10/29/2013	Potentially	☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Further to response to RFI T-609 this RFI shows the areas of foundation wall/embedded column in pour Area 12, on the north & south wall elevations which will have greater than 6" of clear cover to the vertical reinforcement for location plan see exhibit - A

Exhibit - B & C depict the amount and location of the foundation walls which the will have greater than 6" of clear cover to the vertical reinforcement in this case only two pile numbers 237 & 238 on the north elevation has this issue.

RFI T - 784 shows the thinning of the wall with the revised reinforcement spacing due to CDSM pile encroachment in Area 12.

Please confirm that the clear cover between the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/29/2013
RESPONSE:
The clear cover between the waterproofing system and vertical reinforcement as presented in Exhibit C of this RFI is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

waterproofing system and the vertical reinforcement as outlined at these locations is acceptable.

T-0833 **BGP - Embed Clarification at Elevator Rail Support** **Closed** **10/16/2013** **10/26/2013** **10/30/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please confirm the length of the elevator rail support embed dimension is 2'-7", as shown in the attached detail drawing 4/S1-7630..

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/26/2013
RESPONSE:
Inquired length is confirmed.

Note that there is more than one size of HSS, therefore the height of vertical plate may vary.

CMGC shall make all future bidders of trades that may be impacted by detail issues such as this, aware of the work of adjacent trades.

T-0834 **BGP - Structural Steel Embeds in Concourse Slab/Columns** **Closed** **10/17/2013** **10/27/2013** **10/24/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Chris Williams

REQUEST:

Attached is a rebar congestion model of the concourse slab and column C2 at C/24.9. As is apparent, the structural steel shear lug portion of the plate embed is in conflict with the reinforcing steel and will not fit with required rebar spacing. The rebar conflicts with he shear lug and blockout that are present, include but are not limited to:

- Typical MFB Beam at C/24.9 (blue colored bars in model)
- B-68 Beam (yellow colored bars in model)
- Main concourse slab (pink colored bars in model)

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The 3-D images provided seems to orient the base plate/shear key in the wrong direction. The long face of the shear keys are to be in parallel to the web of the steel column as shown in details on Sheet S1-5051.

Spacing for the slab rebars and the top rebars for the misc. beams (e.g., B71 at Grid C/2, B68 @ Grid C/24.9) shall be adjusted slightly to clear the shear keys.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

- Column C-2 vertical T-Heads (purple colored bars in model)

Please provide a solution that will provide a constructible blockout and embediment of the structural steel plate.

T-0835 **BGP - Vehicle Ramp Beam and Wall Support Embed Clarifications** **Closed** **10/17/2013** **10/27/2013** **10/29/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please reference attached drawings S1-2251, A1-7401, S1-3411, S1-3203 and S1-3204.

1. Please confirm the beam support angle/plate as shown on D1 of S1-3411 are located where shown on drawing S1-2251 (notation in red). There will be a total of three total embeds.

2. Please confirm the wall support angle/plate (two total embeds) shown on detail D6/S1-3203 and D10/S1-3204 are located where shown on the notated drawing S1-2251 (notation in green).

3. Please provide a drawing that shows the acute and obtuse angles for embeds highlighted on A1-7401.

Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/29/2013
RESPONE:
1. Confirmed.

2. Confirmed.

3. See attached SKA-2863.

T-0835.1 **BGP - Vehicle Ramp Beam Support Embeds** **Closed** **11/05/2013** **11/15/2013** **11/19/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please reference RFI T-0835, RFI T-0453.1 and attached SKA-2863.

RFI Response T-0453.1, stated that in lieu ofbending the L8x8x1-1/8" member, is was acceptable to weld two 1-1/8"

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
11/17/2013
RESPONSE:
Contractor proposal as presented in the RFI is acceptable. Include in forthcoming shop drawings that

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

thick plates together in order to achieve desired obtuse and acute angles.

1. Please confirm that additional embeds per detail 1 S1-3411, not reference in RFI T-0453.1, can be welded to create the specified angles per RFI response T-0853 (this will be an additional2 angles). Please reference attached SKA-2863 for specified angles and locations of embeds in question.

is referenced in RFI T-0881.

(Note that we assume the RFI is intending to reference "T-0835" and not "T-0853".

T-0836 **BGP - Sump Pit Rebar Tail and Trestle Pile @ GL 18.5/E - Area 9** **Closed** **10/17/2013** **10/27/2013** **10/23/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference: RFI T-0644

Three of the sump pit lower mat #11 tails near grid line 18.5/E are in conflict wit the nearby trestle pile. The bars have been trimmed to clear the trestle pile and provide an LTE of 34" instead of 60" as required per plans.

Typically, a bent bar would be spliced to the interrupted bar as required in SKS-0281 in the response to RFI T-066; however, the trimmed bars have a 70" length which would not beet the 78" LTS requirement. Gerdau propose to leave the 3 ea trimmed bars as-is and not incoporate an additional spliced bent bar. Please confirm if this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/22/2013
RESPONSE:
Provide spliced bent bar as indicated in RFI T-0664 and that RFI's accompanying Sketch SKS0281. Lap length may be reduced to 69". The total length of bent bar extending beyond the intersection with the bottom mat reinforcing shall be 60". The bent bar may be rotated so that the tail clears the layer of mat top reinforcing.

T-0837 **BGP - Structural Details for Elevator Door Sill Plate Angles on Concourse Level** **Closed** **10/17/2013** **10/26/2013** **11/07/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please refer to attached drawing A1-2824 through A1-2847.

The architectural drawing note at the elevator door sill

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
11/7/2013
RESPONSE:
Refer to detail 4/A1-7576. The galvanized steel angle

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

plates refer to the structural drawings for details. However, the current structural drawing set do not provide the applicable misc metal angle detail.

Please provide structural detail drawings showing the typical misc metal elevator door sill support angle. Please include mounting detail to concourse slab or topping slab detail, misc. metal details, and all pertinent information to accurately detail the elevator door sill plate angle.

cast on top of the lower concourse structure (which forms the edge of the topping) shall be an L6x4x3/8 (LLH) with ¾¿ x 8¿ long studs at 12¿ OC. Studs shall be 3¿ clear from edge of lower concourse slab. Elevator sill angle to be provided by elevator manufacturer.

T-0837.1 **BGP - Elevator Sill Conflict with Elevator Rail Embed Plate** **Closed** **11/19/2013** **11/29/2013** **12/04/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

The architectural elevator sill angle/emebed (continous) detail shown in 4/A1-7576 is in conflict with the structural elevator rail support embed drawing in 4/S1-7130.

Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
12/3/2013
RESPONSE:
The elevator sill plate support angle is interrupted by the HSS elevator guiderail support. The support angle shall terminate and recommence as follows:
Cope horizontal (6") leg of sill plate support L6x4x3/8 contained in RFI response T-0837 up to 2" to clear vertical PL 5/8 of Detail 4/S1-7630. Remaining L4x4 (approx.) shall extend over the PL 1/2 embed plate to within 2" of the HSS elevator guiderail support. Length of cope shall not exceed HSS depth. A stud shall be placed within 3" of the cope.

T-0838 **BGP - Concourse Slab Opening Dimension Clarification at GL C/13** **Closed** **10/17/2013** **10/26/2013** **10/25/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please refer to attached drawing A1-2844 and S1-2204.

The slab opening east of GL 13 and north of GL C shown on drawing A1-2844 appears to be in conflict with the slab

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/24/2013
RESPONSE:
The Slab Opening for future ST 402 is 91-1 ¼" as

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

opening shown on drawing S1-2204.

Please confirm the aforementioned slab opening is 26'-3" x 8'-8 3/4".

shown on Sheet A1-2844 issued in ASI 107.

T-0838.1 **BGP - Concourse Slab Opening Dimension Clarification at GL C/13** **Closed** **10/29/2013** **11/08/2013** **11/20/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Webcor Construction LP Jackson Tukuafu

REQUEST:

Please refer to the attached drawing A1-2844, S1-2204 and RFI T-0838.

WOJV is in receipt of AAI's response to RFI T-0838, in which the slab opening dimension is referenced in a drawing that has yet to be issued for construction (A1-2844, ASI 107).

Please provide the dimensions for the slab opening east of GL 13 and north of GL C as located on the current contract drawing A1-2844 dated 08/31/2012.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
11/14/2013
RESPONSE:
See attached SKA-2870 showing dimensions to the slab opening east of GL 13 and north of GL C. Structural beams are aligned at the edges of the opening.

T-0839 **SSS - Bolt Specifications** **Closed** **10/18/2013** **10/28/2013** **10/30/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

As per the Contract Drawings and Specifications all high strength bolts shall be A325, A490 & A354 BD. All TC bolts shall additionally conform to ASTM F1852 & F2280.

1. We propose to use TC bolts for all connections (shop & field) 1-1/8" diameter or less (unless galvanized). All galvanized bolts to be standard A325.

2. All bolts 1-1/4" to 1-1/2" diameter to be standard A490.

3. All bolts larger than 1-1/2" diameter to be standard A354 BD

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

We assume the term "Standard AXXX" used in this RFI refers to high-strength bolts with Hex Heads that will be pre-tensioned using acceptable methods per Specification Section 05 10 00 - 3.2.K (other than TC). If this is not the case, please resubmit the RFI with additional clarification. Responses to individual items in RFI as follows:

1.) As indicated in Specification Section 05 10 00 - 3.2.K.1, it is acceptable to use TC bolts. Bolt specification shall be as indicated in the construction drawings. Standard A325 is acceptable for galvanized

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please confirm this is acceptable.

bolts.

2.) Standard A490 is acceptable in this diameter range.

3.) Standard A354BD is acceptable in this diameter range.

T-0840 **SSS - Means & Methods - Erection Devices** **Closed** **10/21/2013** **10/31/2013** **10/23/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Stacy Wilson

Co-Author:

REQUEST:

As per OSHA Standards Sub Part R Steel Erection 1926.756 (C)(1) When two structural members are sharing common connection holes, at least one bolt shall remain connected to the first member unless a shop or field attached seat or equivalent connection device is supplied with the member to prevent displacement. We propose the Means & Methods depicted in the attached sketch SK-1A to meet these OSHA requirements.
Please advise if this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per 01 10 40 1.6 C 2 - TJPA will not reply and will reject the RFI: "Questions relating to construction means, methods, techniques, sequences, procedures or safety precautions. (These are the Contractor's responsibilities exclusively.)"

T-0841 **SSS - Transfer Girder Splice Conflict with Clip Angle Connection** **Closed** **10/18/2013** **10/28/2013** **10/24/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

As noted on sketches CD RFI 075 SK1 through SK8, there are several instances where the clip angle at the beam to transfer girder connection is in conflict with the transfer girder web splice. This condition occurs at TR7, TR8, TR11, TR19.1, TR19.9, TR21, and TR24.

Please reference the sketches attached and confirm the modified transfer girder web splice locations are acceptable to avoid conflict with the beam clip angle connection.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Transfer girder splice locations may be moved as shown in sketches SK1 through SK7 in this RFI.

There is no splice specified on the structural drawings (D/S1-4305) at TR24 between gridlines E.2 and D.8. Additional splice shown on SK8 is not acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0842	SSS - Full Height Columns	Closed	10/18/2013	10/28/2013	10/24/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please refer to the attached drawing, S1-4104. The columns shown in the transverse frame elevation that extend from the ground level to the roof level typically have a field splice located 4' above the bus deck slab. Please confirm that this field splice may be eliminated and that it is acceptable to provide full height columns.

The detail is shown at GL 7 & GL 8. Other locations are similar.

Note that a shop splice may be required due to limitations in mill rolling lengths.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

At moment frames where the column sections above and below the splice point are identical, it is acceptable to eliminate the column field splice.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0842.1	SSS - Moment Frame Column Splice	Closed	01/27/2014	02/06/2014	02/04/2014	Potentially	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

In reference to W/O RFI T-0842, in which permission was given to eliminate field splices in the built-up columns, please see the following:

At certain column locations (see S1-4102 at GL4, for example) the thickness of the flange is constant throughout the height of the column. The fabricator will seek to provide single piece flanges when material availability permits. In instances where the availability of certain plate sizes does not permit the fabricator to provide a single piece / full height flange plate, a shop splice will need to be introduced.

Please identify any locations or areas along the height of the column flange that a shop splice is not permissible so that these limitations may be considered while finalizing our shop details and plate purchases.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is acceptable to use single plate flanges where column depth is the same throughout the column height (refer to Sheets S1-4101 through S1-4116 Moment Frame Elevations). However, where column depth changes at the splice locations (for example, at GL2/E.6 and GL2/D.4), splices will be needed since flange thicknesses change. It is acceptable to have these splices done in the shop at Contractor's option.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0843	SSS - PJP Welds at Roof Node to Brace Beam	Closed	10/18/2013	10/28/2013	10/25/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Reference is made to sheet S1-4205, Detail 2 "Brace Detail" which specifies a 1 ¾" effective weld from roof node to brace beam. Sheet S1-5131, Detail 1, Side View F specifies a bevel of 2 3/8" x 45 degrees for the weld joint area in question.

Sheet S-0007, General Note SC-4 states that weld sizes shown are considered effective weld sizes. Prequalified weld joint BTC-P4-GF (attached for reference) states that the effective weld size shall equal the bevel size for flat and horizontal weld positions.

These welds are intended to be performed in the horizontal or flat position. Please confirm that a bevel size of 1 ¾" to equal the specified weld size of 1 ¾" is acceptable and conforms to the requirements of note SC-4 and AWS 2010 D1.1 Detail BTC-P4-GF attached.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The weld size shown in Detail 2/S1-4205 is the effective weld size required for this joint. It is acceptable to revise the bevel size shown in 1/S1-5131 according to the effective weld size as required by the welding procedure.

T-0844 **SSS - PJP Weld at Roof Node to EBF Link Beam** **Closed** **10/18/2013** **10/28/2013** **10/24/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference is made to sheet S1-4205, Detail 1 "EBF Link Beam Detail" which specifies a 2 ¼" effective weld from roof node to EBF Link beam. Sheet S1-5131, Detail 2, Side View F specifies a bevel of 2 3/8" x 45 degrees for the weld joint area in question.

Sheet S-0007, General Note SC-4 states that weld sizes shown are considered effective weld sizes. Prequalified weld joint BTC-P4-GF (attached for reference) states that the effective weld size shall equal the bevel size for flat and horizontal weld positions.

These welds are intended to be performed in the horizontal or flat position. Please confirm that a bevel size of 2 ¼" to equal the specified weld size of 2 ¼" is acceptable and conforms to the requirements of note SC-4 and AWS 2010 D1.1 Detail BTC-P4-GF attached.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The weld size shown in Detail 1/S1-4205 is the effective weld size required for this joint. It is acceptable to revise the bevel size shown in 2/S1-5131 according to the effective weld size as required by the welding procedure.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0845	SSS - Welding Type 61 Roof Nodes to Roof Beams	Closed	10/21/2013	10/31/2013	11/05/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawings: S1-4205, S1-5132, S-0007

Reference is made to sheet S1-5132, Detail 1, Side View D which specifies a bevel of 1" x 45 degrees for the weld joint for Type 61 roof nodes to the roof beam.

Sheet S-0007, General Note SC-4 states that weld sizes shown are considered effective weld sizes. Prequalified weld joint BTC-P4-GF (attached for reference) states that the effective weld size shall equal the bevel size for flat and horizontal weld positions.

These welds are intended to be performed in the horizontal or flat position. Based on the information provided above, please provide the required effective weld size at the area in question and confirm the bevel size is to match the specified weld size.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Effective weld size required for this joint is 1". According to the welding procedure indicated in this RFI, corresponding bevel size at this joint would also be 1".

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0846	SSS - Grade 60 A615 Threaded Anchor Rod	Closed	10/21/2013	10/31/2013	10/23/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

With reference to the Grade 60 A615 Type T threaded anchor rod specified on detail 7/S1¿]5051 (attached), we request to substitute this material for the higher Grade 75 A615 anchor rod at no additional cost.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed that substituting Grade 60 Type T thread bar anchors with Grade 75 A615 anchor rods as proposed is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0847	SSS - Weld Process for Roof Nodes at Roof Beams	Closed	10/21/2013	10/31/2013	10/28/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please reference sheet S1-5131 Detail 1 Section F, Detail 2 Section F, and sheet S1-5132 Section D. OIW is proposing to perform the CJP welds from P3 to P4 using a "Narrow Gap Improved Electroslag Weld (NGI ESW)"

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Using "Narrow Gap Improved Electroslag Weld" (NGI ESW) for the proposed location is acceptable pending on prior approval of the WPS and Welding procedure Qualification. WPS shall be prepared in accordance

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

process. AWS D1.8 Section 6.2.1 allows the use of alternate weld processes contingent upon approval by the Engineer.

Attached is a detailed narrative and supporting data for this welding process including the following:
-Process Details, General Parameters, and Practices from ARCMATIC (OIW welding consultant)
-Sample Welding Procedure Data Sheets (WPS) including MTR¡¦s and destructive testing

Upon conceptual approval of this process, applicable and job specific PQR/WPS data will be provided for Engineer review.

Please confirm that NGI ESW welding process is acceptable in this application.

with AWS D1.5.

T-0847.1 **SSS - Weld Process for Roof Nodes at Roof Beams** **Closed** **11/25/2013** **12/05/2013** **11/26/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

The response to RFI T-0847 states that "WPS shall be prepared in accordance with AWS D1.5," while the specifications require that welds be prepped in accordance with AWS D1.1 and D1.8. Please verify that the reference to AWS D1.5 is the intended Standard for the proposed weld process, as Skanska intends to prepare PQR/WPS in accordance with D1.1 and D1.8.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The specification requires that weld to be prepped in accordance with AWS D1.1 and D1.8. However, since the weld procedure proposed by Skanska (narrow gap improved electroslag weld) is not covered in AWS D1.1 and D1.8, but covered in AWS D1.5, the WPS shall be prepared in accordance with AWS D1.5

T-0848 **BGP - Dewatering Well Pipe Alternate Route** **Closed** **10/21/2013** **10/31/2013** **10/31/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Scott Bunnell

REQUEST:

Please refer to attached excerpt details 6/A1-8711 and 1/S1-3201.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/31/2013
RESPONSE:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

SCCI is requesting to re-route all 2" dewatering well lines as proposed in the attached drawings and depicted in the attached photo. The SCCI proposed re-route is to eliminate any potential conflicts with future work (bracing removal, wall waterproofing, rebar, and form/pour/strip). Upon completion of the use of the dewatering system, the line will be cut below the sleeve, capped and grouted in with the trestle block-out pour back. The line will be poured in place with the future mat and concourse slabs and all 3 wall lifts. The line will also be capped at the top of the final wall lift.

Please confirm the proposed dewatering well re-route as shown in the attached file is acceptable.

Routing the temporary dewatering system within the permanent foundation wall will not be permitted.

T-0849 **BGP - Mat Slab Layer 3 Lap Splice Relocation in Area 11 thru 16** **Closed** **10/21/2013** **10/31/2013** **10/23/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please refer to drawing S1-2052.

Due to limited access between the waterproofing and access trestle, Gerdau proposes to shorten the mat slab typical layer three (North-South) 67'-0" bars at Areas 11 through 16. This requires the lap splice location to be moved from the center of column line, as specified on Note 1 of the Mat Top Bar Notes in S1-2052, to the location shown in the attached Gerdau sketch SK-99.

Please confirm the revised lap splice detail shown in Gerdau sketch SK-99 is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
10/22/2013
RESPONSE:
It is acceptable to move the reinforcing splice from the center of the column line as indicated in the RFI.

T-0850 **BGP - Request for 14 day Concrete Compressive Strength test on future mat slab ı** **Closed** **10/22/2013** **11/01/2013** **10/25/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Per discussion with TT field Engineer and TJPA

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

representatives, WOJV is asking for all future mat slab pours that one of the two concrete test cylinders allotted for the 28 day compressive strength test could be tested at 14 days instead, This information will be used to assess the concrete strength for the level D bracing removal.

Please confirm if this would be acceptable.

10/24/2013
RESPONSE:
At 14 days it is acceptable to test (1) of the (2) concrete test cylinders allotted for 28 day compressive strength testing by the Specifications.

All future mat slab pours will have a sample set for testing consisting of (1) cylinder for 7, 14, and 28 days followed by (3) cylinders for 56 days. (1) additional cylinder per set shall be retained in reserve for later testing if required. The total number of cylinders taken per sample set shall remain at (7).

T-0852 **SSS - Weld Returns at EBF Link Beams** **Closed** **10/24/2013** **11/03/2013** **10/25/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Detail 3 on sheet S1-4205 indicates the weld requirements from the underside of the EBF link beam (28" W) to the roof node (24" W). Detail 3 requires a 3 ½" reinforcing weld to be returned (boxing) 6" at each interior corner of the welded roof node. The distance from the roof node to the edge of the girder flange is only 2" on each side based on the dimensions noted above (reference drawings attached).

Please confirm it is acceptable for the returns running longitudinal to the direction of the EBF Beam to be made as 1 ½" reinforcing fillets, while the weld running transverse to the girder flange remain at 3 ½" as specified. Reference the attached detail showing this condition.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is acceptable to use 1-1/2 inch reinforcing fillets at the 6 inch returns provided that welding pass is continuous from the 3-1/2 inch thick region into the 6 inch returns.

T-0853 **SSS - Transfer Girder Field Splice** **Closed** **10/24/2013** **11/03/2013** **11/04/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

In order to facilitate self-supporting erection of the transfer girders during temporary conditions prior to the completion of the field welded splice joints, please confirm it is acceptable to utilize a temporary connection plate that will bolt the two transfer girders together while the weld takes place, as shown on the attached sketches GS-1.0 and GS-2.0. The temporary connection plate will be removed and open holes will be permanently filled with A325 bolts.

Acceptable for the bolt diameter (1-1/8") and spacing (6") shown in sketches GS-1.0 and GS-2.0.

T-0854 **SSS - Type 4 Drag Connection (Y)** **Closed** **10/25/2013** **11/04/2013** **10/29/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

For Type 4 Drag connection (Y) per detail 1/S1-5019 please refer to sketches CD RFI # 082 SK1 to SK3 for items 1 & 2 noted below. Note sample location is on S1-2402 near grids 2/C.3 shown on SK2.

1) See SK2 & SK3 and confirm this 18" applies at all locations noted as "Y" on plans as this will place the bolts exceedingly outside the supporting beam profile.
2) Please clarify which plan drawings this note applies to.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1a) At Ground Level: Provide b = 18" per schedule in 1/S1-5019 for all Type 4-(Y) drag connections.

2b) At Second Level: There are 14 locations between GL 2 and GL 3 where Type 4-(Y) drag connections per Detail 1/S1-5019 are to be provided. At 8 of these 14 locations the supporting girder is a W30x99. At these 8 locations, provide b such that the beam end is 1" outside of the W30x99 flange as indicated in SK3 of the RFI. Provide b = 2" at the remaining 6 locations.

2) Note applies to Ground Level plans.

T-0855 **SSS - Double Angled Connection** **Closed** **10/25/2013** **11/04/2013** **10/29/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

For the double angle connection at the Transfer girders per detail 12/S1-5010 please refer to sketch CD RFI 085 SK1 for the following question.

Based on the 3" bolt location from the face of girder web, confirm it is acceptable to use a 1" gap between the girder

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed. It is acceptable to use 1) 1" gap between the face of the girder web and end of the beam and 2) 2" distance between the bolt centerline and the beam end as shown in SK1.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

web and the end of the beam with a 2" end distance on the beam.

T-0856 **SSS - Skewed Beam Connections** **Closed** **10/25/2013** **11/04/2013** **11/04/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

For the skewed beam connections up to 15 degrees per detail 7/S1-5011 see sketch CD RFI 087 SK1 for items 1 to 3 noted below.

1) Confirm it is acceptable to typically locate the bolts 2 3/4" as shown to minimize the number of shear plate marks.

2) Confirm it is acceptable to cut the end of the skewed beams square and clip the flange as shown.

3) Confirm it is acceptable to cut the shear plates square as shown and apply the welds per schedule in detail 7/S1-5011.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Acceptable.

2) Acceptable.

3) Acceptable provided that weld sizes in Detail 7/S1-5011 are adjusted to account for the root opening introduced by the square cut.

T-0856.1 **SSS - Skewed Beam Connections** **Closed** **02/07/2014** **02/17/2014** **02/24/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

For skewed beam connections per detail 7&8/S1-5011 please confirm our fabricators proposed weld detail as per Herrick sketches 3-SK2 is acceptable.
Also for reference please refer to the response to RFI T-0856 for the approval of square cut shear plates.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Acceptable, See red marks noted on the attached sketch.

T-0857 **SSS- Gusset Plate Fouling W24 Beam** **Closed** **10/25/2013** **11/04/2013** **10/29/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

1). On S1-2602 to S1-2607 along the north & south perimeter lines the gusset plates required for the MC10x41.1 Link braces per detail 5/S1-4205 are fouling the bottom of the revised beam size W24x55 beam flanges as noted on sketches CD RFI 089 SK1 & SK2. Please verify the bottom of the W24 beam can be coped to clear the gusset plate as an alternate solution. Please note the bottom of the beam flange will be partially coped to clear the MC10 channels per the response to Webcor RFI # T-0763 (SK RFI # 032).

2). On sketch SK1 to establish the gusset plate shape please verify the 8 3/8 to 12 bevel (scaled) noted on the gusset plate.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) It is acceptable to cope the bottom flange of the W24 beam as shown in SK-2 to clear the gusset plate (stiffener) and the double channel.

2) The 8 3/8 inch to 12 inch bevel on the gusset plate (stiffener) as shown in SK-1 is acceptable.

T-0858 **SSS - Framing HSS Post & Bracing** **Closed** **10/25/2013** **11/04/2013** **11/13/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawings: S1-2303

Please clarify the details for the HSS indicated on SK1 (member sizes, connections etc¿) as they are not defined on the framing plans or elsewhere on the contract drawings.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The inquired HSS posts (qty=2) and the bracing (qty=2) are not required.

T-0858.1 **SSS - Framing HSS Post & Bracing** **Open** **12/12/2013** **12/22/2013** **12/26/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Following response to W/O RFI T-0858 (SK RFI 136) confirming the HSS posts are not required, we assume the underlying W12x14 beams are not required either. See attached SK1 and SK2. Please confirm.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed

☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0859	SSS - Elevator Framing	Closed	10/25/2013	11/04/2013	10/30/2013	Potentially	

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

On details 2, 3 & 4/S1-7108 and section A/S1-7136 per ASI 0106 please refer to sketches CD RFI 106 SK1 & SK2 and clarify the discrepancy in framing that is shown on the referenced drawings. Note the elevator vertical was removed on ASI 0106 but a similar vertical is shown on section C/S1-7136.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Section A/S1-7136 does not show the highlighted vertical HSS sections because they are beyond the extent of the section cut. Section C/S1-7136 shows the vertical HSS because the section is directly cut through the HSS member in S1-7108 partial plans. The primary purpose of the section cuts in S1-7136 is to show elevator rail support framing elevations. The vertical HSS members highlighted in the RFI are not part of the elevator rail support framing, they support the W-5 system.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0859.1	SSS - Elevator Framing	Closed	12/19/2013	12/29/2013	12/19/2013	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Webcor Construction LP Jeff Galoyan **Answered By:** Webcor Construction LP Gregory Kemerer

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

In attached drawings S1-7108, S1-7136 and S1-7137, we have highlighted structural members we consider are part of TG07.1R scope around elevators PE502 and PE503. Please confirm.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

All structural steel shown in your contract drawings are included in your scope. This is including, but not limited to, all the highlighted members noted in this RFI. The beams marked "NIC" are not excluded from your contract.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0860	BGP - Area 3 Drill and Epoxy Walls	Closed	10/25/2013	11/04/2013	11/07/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference: Contract Dwg. A1-2122 to A1-2123, and attached sketch

Rebar dowels were installed for future partition walls at gridlines A-F/1-6 during Area 3 mat slab pour on September 7, 2013. Due to conflicts with equipment access for the removal of Level C and D shoring struts and walers, selected rebar areas as shown on the attached drawing will need to be cut at and removed. Any additional walls that are found to be blocking access once operations have begun will be analyzed on an as needed basis. Please confirm it is acceptable to cut rebar dowels

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
11/6/2013
RESPONSE:
It is not acceptable to cut the inquired (interior partition & water tank) wall dowels and re-instate them with drill and epoxy method.

Contractor may cut the inquired wall dowels and reinstate the bars with Type 2 couplers. Note that this is limited to the walls inquired in this RFI. Contractor SHALL coordinate with the work of other packages per General Note GR-3 and GR-22 on S-0005.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

in the partition walls as shown on the attached sketch and on an as needed basis, with exception to columns and wall pilasters, then return to drill and bond after bracing procedures are complete. Scanning will be included.

T-0861 **BGP - Interior Wall Thickness Change Clarification in Area 8 & 11** **Closed** **10/28/2013** **11/07/2013** **11/06/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please refer to drawing S1-2054, S1-2055 and attached excerpt drawings from submittal package T0600-0103.

Per the submittal review notes found on drawing sheet S108.2 and S111.1 from submittal package TG0600-0103, the train platform future interior wall thicknesses have been increased from 10" to 1-0" and 1'-2" to 1'-4", respectively. In addition to the revised wall thicknesses, the following noted was included: "For 1'-4" walls use same coupler reinf as 14" walls. Coordinate with RFI T-0587." The note does not include 12" walls which were previously 10".

Please confirm the now 12" wall is to use the same coupler reinforcing as the 10" walls.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
11/6/2013
RESPONSE:
Bars for 12" thick walls are per contract detail 5/S1-3205.

T-0861.1 **BGP - GL 15.4/E Partition Wall Formsavers in Area 8** **Closed** **11/07/2013** **11/17/2013** **11/13/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please refer to drawing S1-2054, TG0600-103 and RFI T-0861.

The response to RFI T-0861 confirms that the train platform future interior wall near GL 15.4/E which was changed from 10" thick to 12" thick requires the bars to be #6 @ 8" O.C. E.F. per detail 5/S1- 3205; however, the # 6

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
11/12/2013
RESPONSE:
Contractor-proposed use of #5 bar couplers/dowels is acceptable for the scope of this RFI only.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

epoxy coated formsavers are not available for the Area 8 pour.

Please confirm it is acceptable to use # 5 @ 8" O.C. E.F. in lieu of the # 6 @ 8" O.C. E. F. in Area 8 as shown in 5/S1-3205.

T-0862 **SSS -Full Height Stiffener Detail Clarifications** **Closed** **10/28/2013** **10/28/2013** **11/05/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

Please reference detail 1/S1-5013 regarding the full height fitted stiffener detail and confirm the following:

1) Confirm it is acceptable to provide a 2" end distance typically at beams with 7/8" dia. bolts in lieu of the 1 ¾" end distance noted by the "2db" dimension.

2) Confirm the stiffener width is to equal the beam "a" dimension, defined as [bf - tw]/2, thus the noted dimension should read "2db min."

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1.) Acceptable.

2.) Confirmed.

T-0863 **SSS - Double Angled Connections at TPG1 & TPG3** **Closed** **10/28/2013** **11/07/2013** **11/07/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

For the double angle beam connections per detail 1/S1-5010 into the TPG1 & TPG3 roof girders on detail 1/S1-4200 are problematic due to the thick flanges. See sketches CD RFI 091 SK1 & SK2 for items 1 & 2 below for proposed modified connection.

1) Confirm it is acceptable to reduce the end distance on the connection angles to 1 1/4" per A.I.S.C.13th Edition Table J3.4 in order to fit the connection angles inside the beams at the TPG1 & TPG3 girders.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For connections to TPG1:

1)
a) W14x22: Provide one less bolt than that required by 1/S1-5010. All other connection parameters including edge distance on the connection angles shall be per 1/S1-5010.
b) For all other beam sizes noted on SK1, our response is "Acceptable".

2)

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

2) Confirm it is acceptable to cut the beam flanges flush as shown when the connection angles encroach into the beam "k" area beyond A.I.S.C. allowable limits.

a) W14x22: Cutting the beam bottom flange is not required with the reduction in number of bolts per (see 1a).
b) W24x68, W27x84, W30x90, W33x118, W36x135, W40x297: The encroachment of the angle into the "k" region is less than the maximum allowed per AISC 360-05, Figure 10-3. Cutting the bottom flange flush as shown in the RFI is not required and not acceptable.
c) W40x149, W40x183, W40x199: Acceptable.

For connections to TPG3:

1)
a) W14x22: Provide one less bolt than that required by 1/S1-5010. All other connection parameters including edge distance on the connection angles shall be per 1/S1-5010.
b) W24x68: Acceptable.
c) W27x84: There is no W27x84 framing into a TPG3.
d) W40x392: The connection is per detail 8/S1-5032 as noted on Sheet S1-2604 near GL 14/D. In addition, gravity moment connection is shown at the ends of these beams where they connect TPG3. Therefore, flanges of the W40X392s are to be welded to TPG3 per detail 4D/S1-5010.

2)
a) W14x22: Cutting the beam bottom flange is not required with the reduction in number of bolts (see 1a).
b) W24x68: The encroachment of the angle into the "k" region is less than the maximum allowed per AISC 360-05, Figure 10-3. Cutting the bottom flange flush as shown in the RFI is not required and not acceptable.
c) W27x84: See 1c.
d) W40x392: See 1d.

T-0864 **SSS - Beam to Column Connection at Roof Level** **Closed** **10/28/2013** **11/07/2013** **11/04/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Robert Kjome

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Reference sheet S1-2606 for the BU beam to column connection at grids 31/D.4 and 31/E.6. Please confirm it is acceptable to reduce the "Lev" dimension indicated on 3/S1-5011 from 5" to 2 ¾" in order to clear the BU flange to web weld as indicated in CD RFI 092 SK1 & SK2.

If this is not acceptable, please provide an alternate detail for this condition.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Provide 10 bolt rows ("M" = 10) and vertical bolt edge distance, Lev = 4" for connections at all BU56 beams where 3/S1-5011 is applicable.

T-0865 **SSS - Clarifications for Kicker Brace at Ground Level** **Closed** **10/28/2013** **11/07/2013** **11/07/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please refer to detail 6/S1-5022 and verify the kicker brace requirements at ground level as noted on CD RFI 093 SK1 to SK3 and in the items below:

1) Confirm the alternate bracing connection proposed in CD RFI 093 SK1 is acceptable.
2) Supply the weld size and length for brace angles to ½¿ plate.
3) Confirm the work point location indicated is acceptable (intended to match S1-5015 details).
4) Confirm the reference to S1-2304 should be added to the referenced detail and the reference to S1-2307 should be deleted.
5) Confirm detail 6/S1-5022 applies only to grid lines 16.9, 19.1, 24.9 & 27.1 on the Ground Level as referenced on plans.
6) Confirm detail 6/S1-5022 is typical for all braces along grid line 16.9, similar to grid line 19.1.
7) Confirm detail 6/S1-5022 is typical for all braces along grid line 27.1, similar to grid line 19.1.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Locate the top gusset plate such that the centerline of kicker angle divides the gusset plate into a 1:3 ratio (3":9") at the top of the plate.

2) Provide a weld size of 5/16" with a minimum length of 4" on each side of the kicker angles.

3) Confirmed.

4) Correct references are S1-2304 and S1-2306 (updated in ASI 106 drawings).

5) Detail 6/S1-5022 is applicable at Gridlines 16.9 and 27.1 at Ground Level. Detail 9/S1-5022 is applicable at Gridlines 19.1 and 24.9.

6) Refer to SKS-0297 (attached) that shows applicable bracing type along GL 16.9 transfer girder. As indicated in the sketch, the bracing along GL16.9 is either transfer girder brace per 5/S1-5015 or kicker brace per 6/S1-5022. Same sketch can be used to identify the bracing type along 19.1 transfer girder by replacing 6/S1-5022 with 9/S1-5022.

7) Refer to SKS-0298 (attached) that shows applicable bracing type along GL 24.9 and GL 27.1 transfer girders. As indicated in the sketch, the bracing along GL 27.1 is either transfer girder brace per 5/S1-5015

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

or kicker brace per 6/S1-5022. Similarly, the bracing along GL 24.9 is either transfer girder brace per 5/S1-5015 or kicker brace per 9/S1-5022.

T-0866 **SSS - Bending Radius at Skewed Beam Connections** **Closed** **10/28/2013** **11/07/2013** **11/07/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Refer to details 7 & 8/S1-5010 regarding bending radius requirements for skewed beam connections. The radius indicated in CD RFI 095 SK2 is per A.I.S.C. (2.5t for A572 GR50 material). Please confirm it is acceptable to proceed per this criteria.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The minimum inside bending radius for a A572 GR 50 plate up to t = 1" is 1.5t per AISC 360-10 Table 10-13, if the bend line is perpendicular to final direction of rolling. These values need to be increased 50% if the bend lines are parallel to the final direction of rolling. 2.5t inside bending radius proposed by the contractor is acceptable for the condition presented in SK2, where t = 1/2". In general, it is acceptable to proceed with the minimum bending radii specified in AISC 360-10 Table 10-13.

T-0867 **SSS - W24 Skewed Beam Connections at Grid 6.C.3** **Closed** **10/28/2013** **11/07/2013** **11/07/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Refer to drawing S1-2303 (CD RFI 096 SK1) indicating the portion of the W24x68 running between GL C.3 and GL 6. CD RFI 096 SK2 shows the tight design requirements for this beam run connecting to TR6. Please advise if this portion of the W24x68 beam can be eliminated due to the tight design requirements. If eliminating this portion of the beam is not acceptable, please provide an alternate connection detail to TR6, as detail 8/S1-5010 will not work at this location.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The portion of the W24x68 beam indicated in the RFI can be eliminated.

T-0868 **SSS - Framing Clarification for W21 Beams at Ground Level** **Closed** **10/28/2013** **11/07/2013** **11/07/2013** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

Refer to the areas indicated on S1-2303 between grids 10.1 & 11 and D & F (CD RFI 097 SK1). Please confirm the noted W21x50 beams are at top of steel elevation 19'-1 5/8" and the BU-WT's are not required.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The noted W21x50 beams support the depressed escalator pit slab (Slab S4). T/Slab for Slab S4 is 17.44' as indicated in Sheet S1-2303 and T/Steel for these two beams is 6 1/4" below the T/Slab for S4 as indicated in Sheet Note 2 on S1-2302. Therefore, these two beams support slabs with different elevations and BU-WTs are required.

T-0868.1 **SSS - Framing Clarification for W21 Beams at Ground Level** **Closed** **11/25/2013** **12/05/2013** **12/20/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Per the response to W/O RFI T-0868 (SK RFI 135), the TOS for the W21 should be at 16'-11" and the BU-WTs are required to support the slab at 19'-9 1/8". Based on this response, please confirm the following:

1) The difference between the TOS elevations per the response to SK RFI 135 requires a BU-WT with a total height of 2'-2 5/8", exceeding the maximum height dimension indicated on 5/S1-5002. Please confirm it is acceptable to proceed with detail 5/S1-5002 and the required BU-WT height of 2'-2 5/8" at this location.

2) Please confirm it is acceptable to stop the BU-WTs 1" clear from the edge of the transfer girder flange to allow for erection clearance or advise if the BU-WTs are required to extend to the face of the transfer girder web for deck support. (Reference CD RFI 097.1 SK1)

3) The W21 connection to the transfer girder at grid line 11 fouls the bottom flange of the girder and cap plate of the train box columns as indicated on CD RFI 097.1 SK1. Please provide an alternate connection detail at this location.

4) As indicated on CD RFI 097.1 SK2, there is no support down for the escalator slab perpendicular to the W21 near the edge of the knock-out slab and the W21 supporting the S4 escalator slab. Please advise if deck support is required at this location and, if so, please provide details

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.
2) It is acceptable to stop the BU-WTs 1" clear from the edge of the transfer girder flange.
3) Cope the top of the W21 beam and provide a double angle connection per 1/S1-7604 with 3 bolts. The connection plates shown in 1/S1-7604 are to be welded to bottom of the trainbox column cap plate. In addition, provide web stiffener plates on each side of the beam web at the coped section per 12/S1-5010. Extend the stiffener plate beyond the coped section a distance equal to the depth of the cope.
4) There is no deck at the highlighted location. The pit slab edge is the same as the knock-out slab edge only it is lower. Refer to detail 4/A1-7550 that shows the slab and escalator enclosure assembly at this location. Note that detail 6/S-7660 is called out on 1/S1-7302 (partial plan of this location). Detail 6/S-7660 applies at the north and east edges of the E305 escalator pit but not at the knock-out slab edge. Similarly detail 6/S-7660 applies at the south and east edges of the E304 escalator pit but not at the knock-out slab edge.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

as required.

T-0868.2 **SSS - Escalator Pit Framing Details GL10.1** **Closed** **03/24/2014** **04/03/2014** **04/09/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

This is a follow-up RFI to RFI T-
0868.1 (SK 135.1, CD 097.1)
See attached CD RFI # 097.2 SK1 to SK3 for items 1 to 3:

1) The section looking west on SK1 as modeled on SK2 is not what is shown in detail 4/A1-
7550 (SK3) as referenced in
T-
0868.1 #4 response. Confirm the structural drawing SK1 & SK2 as shown are correct.

2) As per Thornton Tomassetti's revised email response to RFI T-
0868.1 (see SK4), the bent plate should be added at knock-out slab edge as shown on 4/A1-
7550 (SK3). Please confirm.

3) On 4/A1-
7550 (SK3) there is gauge or bent plate shown at the pit sl ab edge. Please verify if bent plate should be provided or will this be gauge plate?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.

2) Confirmed.

3) Provide bent plate per typical edge of slab detail 8/S1-5000.

T-0869 **SSS - Coping Brace Beam Bottom Flange** **Closed** **10/29/2013** **11/08/2013** **11/11/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Per details 1&2/S1-5016 refer to sketch CD RFI 056.1 SK1 and confirm it is acceptable to cope the beam as shown to be able to erect the beam with the double shear plates permenantly shop welded.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is acceptable to cope the beams in details 1&2/S1-5016 as indicated in SK1 of the RFI, except that cope the bottom flange only (flush with the beam web) and cope shall be 1" max beyond the shop welded shear

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

The gap between the shear plates will be the beam web thickness, the doubler plate(s) + 1/16" ~ confirm.

plates. In these details, contractor proposed gap between the two shear plates (beam web thickness + doubler plates + 1/16") is acceptable.

T-0870 **SSS - Skewed Beam Connections** **Closed** **10/30/2013** **10/30/2013** **11/07/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

For skewed beam connections per detail 8/S1-5011 please verify the skewed beams may be cut square with the flange clipped as shown on sketch CD RFI 088 SK1.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Acceptable.

T-0871 **SSS - Type 4 Drag Connection Stiffener Clarification** **Closed** **10/30/2013** **11/09/2013** **11/07/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference drawing S1-2303 and CD RFI 115 SK1 highlighting the W40x149 beam connection along grid line F, between grid lines 9.9 and 10.1. Per detail 1/S1-5019, the web stiffener plate is to be 31" long at each end. Due to the length of this beam, the web stiffeners will foul each other. This same condition occurs on S1-2303 along grid line D between 9.9 and 10.1.

Please confirm it is acceptable to supply one continuous web stiffener plate at the two locations identified as indicated in CD RFI 115 SK2.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Acceptable

T-0872 **SSS - Drag Connection Clarification for Kicker Brace** **Closed** **10/30/2013** **11/09/2013** **11/07/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference drawing S1-2303 and CD RFI 116 SK1

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1-) It is acceptable to connect the kicker brace to the

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

indicating the W40 beam connection to TR11 at Grid F.11. This detail requires a full height shear plate per 1/S1-5019 and bracing per 5/S1-5015. (Reference CD RFI 116 SK2). This same condition occurs on S1-2303 along grid D.11.

Please confirm it is acceptable to connect the required kicker brace to the 1 ½" full depth shear plate and increase the gusset plate below the beam to 1 ½" thick. Otherwise, please provide an acceptable detail for this condition.

1-1/2" thick full depth shear plate at the location highlighted in the RFI and at other similar instances. Length of the fillet weld between the kicker and the shear plate shall be 7" min each side as indicated in detail 5/S1-5015.

2-) It is acceptable to increase the thickness of the gusset plate at the top of the kicker to 1-1/2".

T-0873 **BGP - Spandrel Beam Modifications in Area 8** **Closed** **10/30/2013** **10/30/2013** **11/07/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Further to response to RFI T-637 please find attached proposed changes to the spandrel beams in pour Area 8 for location plan see exhibit - A
Exhibit - B shows the plan view of the modification necessary to the spandrel beam on the north and south elevations due to the revised reinforcement width of the foundation wall due to encroachment of the CDSM beams as well as typical cross sections of the revised spandrel beams.
RFI T - 724 shows the extent of the modification to the foundation wall on the north and south elevations of Area 8.

Please confirm that this modification as outlined at these locations is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
11/6/2013
RESPONSE:
Contractor proposed modifications to the Lower Concourse spandrel beams within Area 8 are acceptable. Proper lap splices shall be provided where the beam rebar is transitioned from the spacing in the construction drawings to the modified spacing at the encroached wall sections.

T-0874 **BGP - Spandrel Beam Modifications in Area 9** **Closed** **10/31/2013** **11/10/2013** **11/12/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Further to response to RFI T-637 please find attached

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

proposed changes to the spandrel beams in pour Area 8 for location plan see exhibit - A
Exhibit - B shows the plan view of the modification necessary to the spandrel beam on the north and south elevations due to the revised reinforcement width of the foundation wall due to encroachment of the CDSM beams as well as typical cross sections of the revised spandrel beams.
RFI T - 742 shows the extent of the modification to the foundation wall on the north and south elevations of Area 9.

Please confirm that this modification as outlined at these locations is acceptable.

11/11/2013
RESPONSE:
Contractor proposed modifications to the Lower Concourse spandrel beams within Area 9 are acceptable. Proper lap splices shall be provided where the beam rebar is transitioned from the spacing in the construction drawings to the modified spacing at the encroached wall sections. Note that Area 9 foundation wall thinning shown in RFI T-0874 (2-3/8") and RFI T-0742 (2") are not consistent. Contractor to reconcile the discrepancy and prepare/update shop drawings accordingly.

T-0875 **BGP- Trestle piles No 20 & 21 in comflict with beams at Lower Concourse level** **Closed** **11/01/2013** **11/11/2013** **11/07/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Following a review and discussion with Thornton Tomasetti on the trestle pile locations, it has been noted that trestle pile numbers 20 and 21 (see sketches attached) are in conflict with beams (B4A) at the escalator pits on the lower concourse slab elevation between gridline 11-12, D-F. The contractor is proposing to blockout a section of slab as shown on the sketch, this blockout section would then be infilled once the trestle pile has been removed.

The contractor is to insure that the appropriate reinforcement lap splices are present between these concrete pours.

Please confirm if this option would be acceptable

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
11/7/2013
RESPONSE:
Contractor proposed approach is acceptable. Note that the trestle pile also encroaches on the pit slab as well and will have to be addressed.

Include proposed reinforcement in rebar submittal for review.

T-0876 **RFI T-0876 BGP- Trestle piles No 10,12 & 14 are in conflict with a step in the slab a Closed** **11/01/2013** **11/11/2013** **11/27/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Following a review and discussion with Thornton Tomasetti on the trestle pile locations, it was noted that trestle pile numbers 10, 12 and 14 (see sketches attached) are in conflict with a step in the slab on the lower concourse elevation between gridline 06-08, E-F. Thornton Tomasetti noted it may be possible to move this step clear of the trestle pile blockout locations.

Please confirm if this option on moving the step location is still possible.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
11/26/2013
RESPONSE:
The plan location of the drop shall remain. In order facilitate temporary conditions, such as support of the slab transition without shoring, Detail 2/S1-3501 may be modified increasing the distance "6D" to allow additional reinforcing bars to replace bars interrupted by the blockout in the temporary condition. Additional simplifications to the temperature steel continuity may be allowed. The specific details of the blockout shall be provided by the contractor in accordance with General Note GR-9 on S-0005 and shall provide continuity of longitudinal and temperature steel in the final condition.

T-0877 **SSS - Light Column Blockout at GL 23** **Closed** **11/04/2013** **11/14/2013** **11/08/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference sketchs: SK1 and SK2

1. Please supply the angle to locate the anchor bolts as referenced in SK1
2. Please supply the material grade of the stiffeners, shear tabs, and welded shear keys as referenced in SK1
3. Please confirm a 6"x6" corner clip is acceptable or supply the dimensions as referenced in SK1
4. Please confirm a 2" set back from the edge of the base plate to the edge of stiffener plate is acceptable or supply the dimension.
5. Please supply oversize hole criteria as referenced in SK2

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Question 1: Angle as indicated in SK1 = 8.18 degrees
Question 2: Material grade of stiffeners, shear tabs, and welded shear keys as referenced in SK1 is ASTM A572 Gr. 50
Question 3: 6" x 6" corner clip as referenced in SK1 is ok
Question 4: Set back from the edge of the base plate to the edge of stiffener plate is 2" (note: as shown in dim. line on 3/S1-6008).
Question 5: As referenced in SK2, oversized hole diameter = 6-1/2"

T-0878 **BGP - All of Lower Concourse Slab Edge Dimension Discrepancies** **Closed** **11/04/2013** **11/14/2013** **11/19/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Please refer to similar RFI T-0838 and T-0838.1.

The structural drawings for the lower concourse (Sl-2202 through Sl-2207, framing plans) do not include dimensions for the slab openings. Scaled dimensions from these drawings conflict with many of the dimensions provided on the architectural slab edge plans (Al-2842 through Al-2847).

Please see attached for observed conflicts (highlighted). Please confirm that the dimensions shown on the architectural plans at the slab openings are correct.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
11/18/2013
RESPONSE:
The attached SKAs are provided to clarify and confirm current slab openings as well as setting out of couplers at the Lower Concourse Level.

1. For setting out of slab openings at the Lower Concourse Level, refer to the Lower Concourse Level Slab Edge Plans (SKA-2916 to SKA-2923).

2. For Setting out of PH1 walls at the Lower Concourse Level, refer to the Lower Concourse Level Zone Plans (SKA-2900 to SKA-2907) and Enlarged Plans (SKA-2924 to SKA-2945).

3. For setting out of couplers for PH2 walls, refer to the Lower Concourse Level Wall Plans (SKA-2908 to SKA-2915).

Note: The "Wall Plans" show wall starter couplers installed in the Below Grade Package, however the "Wall Plans" provide coupler setting out dimension for Phase 2 walls only. For coupler setting out for walls and curbs constructed in Phase 1, refer to the wall types and dimensions shown on the Lower Concourse Level Zone Plans.

T-0879 **BGP - Elevator Opening Embed Conflicts with Future Walls** **Closed** **11/04/2013** **11/14/2013** **11/19/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please refer to attached Detail4 on Sl-7630, attached Al-2202 thru Al-2205 and Al-2207. The following drawings are for reference Sl-2202 thru Sl-2205 and Sl-2207, Sl-7130, Sl-7132, Sl-7134, Sl-7136 and Sl-7139.

Please confirm no conflict exists between embed Detail 4 on S1-7630 and future walls highlighted on attached architectural drawings.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
11/18/2013
RESPONSE:
The elevator embed is at the edge of the elevator shaft opening. A curb is being provided for the elevator shaft walls. The embed and end of the beam are within the curb zone.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Contractor shall coordinate sequence of construction of work between trades so that the beam and embed will be cast into the curb for the shaft wall.

T-0879.1 **BGP - Conflict of Elevator Opening Embed and Future Walls** **Closed** **11/25/2013** **12/05/2013** **12/09/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

SCCI is in receipt of RFI response T-0879. TT's response does not fully address the conflict brought up in the original RFI. TG06.0 contract drawings do not show a curb at the edge of the elevator openings at the lower concourse level.

Please address and provide details regarding the embed in question in RFI T-0879.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
12/6/2013
RESPONSE:
As indicated in the response to RFI T-0879, the end of the beam and the embed will be cast into the wall curb. The sketches provided with the response to RFI T-0879.1 illustrate the relationship of the beam and the future wall curb. The concrete curb on the elevator shaft walls in Phase 1 will be extended under the future W-5 cladding and its supporting walls in Phase 2. The HSS rail support embed is within the concrete curb zone for both phases.

Refer to the following attached SKAs:

1. SKA-2958 to SKA-2962 - Lower Concourse Zone Plans showing locations of the Service and Passenger Elevators.

2. SKA-2963 to SKA-2967 - Enlarged Plans of Service and Passenger Elevators showing Partition Types with Concrete Curbs.

3. SKA-2968 - Section Detail at Service Elevator Shaft at Pit showing HSS elevator rail support beam.

4. SKA-2969 - Concrete Curb Schedule.

T-0880 **BGP - Receptacle Requirements at Elevator Pits Near GL 19/E and 20/G** **Closed** **11/04/2013** **11/14/2013** **11/13/2013** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please refer to drawing E1-2024 and E1-2025

There are elevator pits in the mat slab at approximate grid lines 19/E and 20/G. The drawings E1-2024 and E1-2025 do not show any receptacles being supplied to these pits. Please confirm this is correct.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
11/13/2013
RESPONSE:
These receptacles are not required within the BGP package. The only active elevator in Phase 1 is PE203 at the west end. The elevator pits in question will be provided with power in Phase 2. Provisions have been made to run conduit at that time.

T-0881 **BGP - Vehicle Ramp Wall Embedded Supports** **Closed** **11/05/2013** **11/15/2013** **11/18/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please reference attached detail6 S1-3203, attached detail10 S1-3204, RFI Response T-0453.1, RFI Response T-0835 and attached SKA-2863.
RFI Response T-0835 confirmed that the vehicle bike ramp wall intersects the foundation wall at a 97 degree angle. Where this ramp wall intersects the foundation wall, embeds per detail 6 on S 1-3203 and detail 10 S 1-3204 are required. SCCI and its embed supplier has a constructability concern with these embeds. A similar constructability concern was brought up in RFI T -0453.1, stating that if an angle
member of such thickness is bent to achieve an angle other than that member's stock angle, it will structurally stress that member.

1. Please confirm it is acceptable to weld two (2) 8"x24"x1" plates together in order to achieve angle prescribed in RFI Response T-0835. Reference SKA-2863 for the acute and obtuse angles required. Forthcoming shop drawings will show all welds.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
11/17/2013
RESPONSE:
Contractor proposal to weld 2 plates to create an angle is acceptable as presented in the RFI.

T-0882 **BGP - Column Tie Change from T9 to T12** **Closed** **11/05/2013** **11/15/2013** **11/13/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Please refer to drawing S1-3304 to S1-3306.

Please confirm if it is acceptable to replace the typical T9 column ties (90° or 135° bend on either end) with Tl2 ties (135° bends on both ends). See the attached SCCI sketch SK-101 for further details.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
11/12/2013
RESPONSE:
It is acceptable to replace T9 column ties with T12 for Column Types C1 and C2. Note that the location of the second cross-tie from each end is not shown correctly in SK-101. In SK-101, these two cross-ties shall be flipped to clear the shear plates for the steel column base plate at Lower Concourse Level. Refer to Sheet S1-3304 of the construction drawings where the column reinforcement details Type A1 (for Column C1) and Type A2 (for Column C2) are shown. Refer to Sheet S1-5051 of the construction drawings for information on steel column base plate details.

T-0883 **SSS - Brace Beam Connection Details** **Closed** **11/05/2013** **11/15/2013** **11/18/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please review sketch CD RFI 059 SK1 and details 1/S1-5016 and 1/S1-5018 for type 1 - drag connection details on brace beams at the Bus Deck Level framing plan.

1). Please verify the bottom flange of brace beams noted in detail 1/S1-5016 can be cut flush to the beam web on both sides of web allowing beam to be erected between the shop welded connection plates on the cast node.

2). Verify the diagonal bracing beam web connection plate noted in detail 1/S1-5018 can be shifted to the acute angle side of the connection as indicated in the attached sketch and bottom flange cut flush to the web to allow beam to be dropped into location in the field.

3). Please provide welding details for the relocated web connection plate to the supporting grid beam as connection plates will overlap at these locations.

4). Please verify if additional bolts are required connecting the flange plate where the dimension to the plate edge and

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

RESPONSE:
1) Acceptable. See response to RFI T-0869 for the extents of the bottom flange cope.

2) Moving the web connection plate on the other side of the beam is acceptable however, the shear plate shall still be welded to the north-south girder not the east-west running beams as shown in SK1 of this RFI. With this modification, the diagonal beam centerline will not coincide with the connection work point. This eccentricity shall be minimized as permitted by the connection geometry and shall not exceed 1". The question regarding flange coping is not clear, please provide a sketch that shows the intended coping. Note that there are bolted flange plates top and bottom.

3) Use of PJP welding (full web thickness) is acceptable where the shear plates are welded to the girder web. See also response to 2nd question.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

the last row of connection bolts exceeds limitations noted in the 13th Edition (AISC) manual section 16.1-J3, Item 5a.

4) Additional bolts are not required.

T-0883.1 **SSS - Brace Beam Connection Details** **Closed** **12/11/2013** **12/21/2013** **12/16/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Per the response to question # 2 on T-0883 (SK RFI # 092) requesting clarification of the beam flange cut refer to sketch CD RFI 059A.1 SK1 and confirm the bottom flange cut flush to the beam web as shown.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed the bottom flange cut flush to the beam web is acceptable.

T-0884 **BGP - Column Dowels at GL 5/H** **Closed** **11/06/2013** **11/06/2013** **11/13/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please refer to attached drawing S1-2022 and SCCI sketch SK-102.

The dowels for the column near gridlines 5/H were not installed to the required D4-1 configuration and has been casted in concrete. 4EA perimeter vertical bars were omitted from the column but the spacing/grid was maintained per the D4-1 layout. In addition, 16EA dowels were installed at the interior of the column as depicted in SK-102.

Please advise on how to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
11/12/2013
RESPONSE:
At Column C3 near GL 5/H, design works despite the 4 dowels Contractor did not install (shown as "X" in the RFI). Therefore, it is acceptable to construct the column without these 4 bars. The extra dowels inadvertently installed by Contractor at the column interior (bars not in Construction drawings) are not needed and shall be abandoned.

T-0885 **BGP - Field Realignment of Concrete Reinforcement per CRSI** **Closed** **11/06/2013** **11/16/2013** **11/19/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

SUGGESTION:

ANSWER:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Accept Suggestion: ☐

Please refer Contract Specification Section 03 20 00-3.1.A.6.b and attached excerpt from CRSI Chapter 11

Contract Specification 03 20 00-3.1.A.6.b states, "No field bending of bars partially embedded in concrete is permitted, unless specifically approved by the TJPA Representative and tested by Independent Testing Laboratory for cracks."

1. Please clarify if the statement applies to field realignment as defined in CRSI Chapter 11.
2. Please confirm if it is acceptable to field realign bars per the parameters described in CRSI Chapter 11.

George Metzger
11/17/2013
RESPONSE:
Field bending, including field realignment, of partially embedded reinforcing shall be subject to the approval of the SEOR on a case-by-case basis.

T-0886 **BGP - Round Column Tie-Hook Modification** **Closed** **11/07/2013** **11/17/2013** **11/15/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please refer to drawing S1-3304.

In the round columns (type Al, A2, A3, Bl, B2 and B3), Gerdau proposes to change the 90° hooks to 135° hooks in order to allow for more room to install the vertical bars and their couplers. Please refer to attached SCCI sketch SK-RFI-373 for reference of proposed detail.

Please confirm if this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
11/14/2013
RESPONSE:
Proposed 135 degree hooks are acceptable for the columns indicated in the RFI. The hooks shall be "Seismic hook" per ACI 318-08 and overlap min 6" as called out in Construction Drawings (See Sheet S1-3304).

T-0887 **SSS - Moment Beam to Column Web Connection Clarifications** **Closed** **11/07/2013** **11/17/2013** **11/19/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please refer to the moment beam to column web connection details on 5/S1-5012, 10/S1-5013, and 2/S1-5019 in regards to the following:
1) Please confirm the dimensions and weld prep noted are acceptable. [Reference CD RFI 080 SK1]

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

RESPONSE:
1) Confirmed.

2) Typically (unless otherwise noted), moment frame continuity plates are per Detail 5/S1-4202 and

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

2) Confirm the increased thickness and placement of the continuity plate are acceptable to allow for beam over roll. [Reference CD RFI 080 SK1]
3) Please confirm the continuity plate dimensions noted on CD RFI 080 SK2 are acceptable. Note that the "a" dimension shown is defined as ½(bf-tw).
4) Please confirm the dimensions and weld prep indicated for the Type 4 Drag connection are acceptable. [Reference CD RFI 080 SK3]

continuity plate thickness match the thickness of the moment frame beam flanges as shown in relevant details in Sheet S1-4201 and S1-4203. However, at joints GL 32.4/D.4 and GL 32.4/E.6 at Second Level where Detail 5/S1-5012 is called out, continuity plates at the beam bottom flange (bottom continuity plate) shall be 2 1/2" thick. In addition, at GL 32.4/D.4 locate the bottom continuity plate such that top of the continuity plate is aligned to top of the bottom flange of the BU40 Moment Frame Beam. At GL 32.4/E.6 locate the continuity plate such that bottom of the continuity plate is aligned with bottom of the bottom flange of the BU 40 moment frame beam. The reason this is needed is that although the moment frame beam is 40" deep in both cases, the perpendicular beam sizes are different at GL32.4/D.4 (W40x294, d = 40 3/8") and GL32.4/E.6 (W40X199, d = 38 5/8") therefore continuity plates need to be thick enough to pick up both the moment frame beam and the perpendicular beam bottom flanges.

3) Confirmed.

4) Confirmed.

T-0887.1 **SSS - Moment Beam to Column Web Connection Clarifications** **Closed** **12/11/2013** **12/21/2013** **12/16/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

After reviewing the response to item 2 on SK RFI 104 we believe a thickness increase should be allowed for the bottom continuity plate to allow for mill tolerance of rolled sections as per AISC Table 1-22(attached).

1) Due to mill tolerances the actual depth of a beam can over run in depth from -1/8" to +1/8" at the beam centerline.
2) Due to mill tolerances the axis of the flanges in relation to the beam web can have an out of square effect of as much as 5/16" from toe to toe of the beam flange.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed that it is acceptable to increase the bottom continuity plates by 1/4"

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Increasing the continuity thickness provides a reasonable land for back up material for the fill penetration weld required in the field (see attached sketch SK1 for clarification)
Please confirm it is acceptable to increase the bottom continuity plates by 1/4".

T-0888 **SSS - Rebar Holes and Headed Stud Details** **Closed** **11/07/2013** **11/17/2013** **11/14/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please reference detail 9/S1-3701 and the noted grid lines G.9.9 and G.10.1 on S1-2303 and provide clarification on the following items. Refer to CD RFI 105 SK1 through SK3 for additional information.
1) Confirm the headed studs in the transfer girder per 11/S1-3701 may be located as shown.
2) Confirm the slope of MFB 6 is 1.097° as indicated in CD RFI 105 SK2 or advise otherwise.
3) Provide the vertical dimension indicated on CD RFI 105 SK2 to located PL 1 ½" x 14" x 2'-6" (added in ASI 106).
4) Confirm it is acceptable to locate the first row of holes 6" above the underside of the transfer girder as indicated in CD RFI 105 SK2.
5) Provide the vertical dimension required to locate the row of 3" dia. holes indicated in CD RFI 105 SK2.
6) The hole indicated fouls the stiffener as shown in CD RFI 105 SK3. Confirm the spacing may be reduced to 5" at this location to clear the stiffeners and weld for the stiffeners to the beam web.
7) The two holes indicated on CD RFI 105 SK3 are located directly adjacent to the stiffeners with no clearance. Please advise if this condition is acceptable or if the holes are to be shifted to avoid the stiffeners.
8) Provide the vertical dimension required to locate the 3" dia. holes as indicated in CD RFI 105 SK2. Please verify the other holes in this row are to be located per the angle and spacing in items 2 & 7.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

TT's response:

1). Confirmed

2). 1.06 degree

3). Center line of the plate at EL.15.66 (for bottom bars in 48' deep beam)

4). Confirmed

5). Center line of the holes are at EL. 14.66 (for bottom bars in 60" deep beam).

6). Confirmed

7). Confirmed that the holes are to be shifted to clear the stiffeners.

8). The 2 holes in column can be shifted as noted in item 7). The holes in this row may be located per items 2 & 7 (following the slope of the concrete beam, center line of the hole at 1.75" above the bottom of the MFB6.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0889	SSS - Rebar Hole Clarifications For TR11	Closed	11/08/2013	11/18/2013	11/15/2013	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please reference grid G.11 on S1-2303 and provide clarification on the following items per detail 8/S1-3702.

1) Provide the vertical dimension required to locate PL 1 ½" x 14" x 2'-6" in alignment with the lenton couplers as indicated in CD RFI 107 SK 2.
2) Provide the vertical dimension required to locate the hole indicated in CD RFI 107 SK2, which is shown to be 3" from the end of TR11. Please confirm the other holes in this row are to be located per the spacing shown and the angle confirmed in item 3.
3) Confirm the slope of MFB 5 is 1.057°as indicated in CD RFI 107 SK 2 or advise otherwise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

RESPONSE:
1). Center line of the 2 1/2" plate at EL. 15.58" (4" above the bottom of the 48" concrete beam).

2). Center line of the hole is at EL. 15.476" (1.75" above the bottom of the 48" concrete beam).

3). Slope is 1.09 degree. Slope shall be calculated based on the top of concrete slab elevation shown on the drawings, not relying on the Revit model or other electronic files.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0890	SSS - Rebar Hole Clarifications for Transfer Girders	Closed	11/08/2013	11/18/2013	11/14/2013	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please reference grid C.9 & C.11 at the ends of the transfer girders shown on S1-2303 and provide clarification on the following:

1) Confirm the noted angle (1.23°) is the correct slope of MFB1 & MFB12 (per Revit Model). If not, provide the correct angle.
2) Provide the vertical dimension indicated on CD RFI 109 SK2 required to located the first hole and confirm the remaining holes are to be located per the angle noted in item 1 and the spacing indicated on detail 6/S1-3702.
3) Confirm the 3" dimension shown to locate the first hole is acceptable or provide an alternate dimension.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). Confirmed.

2) The center of the bottom holes are to be 1.75" above the bottom of the 48" concrete beam.

3) Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0891	SSS - Detail Clarifications for TR to MFB1 at C.9.9	Closed	11/08/2013	11/18/2013	11/14/2013	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please reference grid C.9.9 and C10.1 for the transfer girder to moment beam connection shown on S1-2303 and provide clarification on the following:
1) Confirm the noted angle (1.2°) is the correct slope for MFB 1 (per Revit Model). If not, please provide the correct angle. [Reference CD RFI 110 SK1 & SK2]
2) Confirm the depth of MFB1 is 48" at this location in accordance with 6/S1-3600. [Reference CD RFI 110 SK2]
3) Confirm the noted elevation. [Reference CD RFI 110 SK2]
4) Provide the width and length of vertical slots to be provided at the 18" stiffeners. [Reference CD RFI 110 SK2]
5) Provide the vertical dimension required to locate the #10 bar shown and subsequently the 2" dia. holes through the beam web (SK3), the vertical slots through the 18" stiffeners, and the 3" diameter holes through the 2'-9" stiffeners.
6) Confirm the bar indicated represents the beam top bar and that the dimension indicated (3 1/16") is correct. Note this dimension is based on 5/S1-3600. [Reference CD RFI 110 SK2]
7) Confirm detail 6/S1-3705 accurately reflects the number of headed studs and spacing required. Otherwise, please provide the requested A, B, C, & D dimensions.
8) Detail 4/S1-3705 indicates that 3-3" diameter holes are to be provided in the web stiffeners on each side while only two #10 bars with terminators are indicated to be provided. Further, the section cut 6/S1-3705 (issued with ASI 106) calls for #9 bars at this location. Please clarify the intent of this detail as it pertains to the rebar configuration and stiffener hole details.
9) Provide the dimension required to located the first 2" dia. hole from the end of TR9.9 and TR10.1 and confirm the spacing of the remaining holes is to be 8" OC as noted on 6/S1-3705.
10) Confirm the dimensions indicated are accurate or provide the required dimensions at this location. The dimensions shown are based on detail 5/S1-3600 and should be confirmed based on the answer provided in Item 8.

1). The slope shall be 1.30 degree at Grid 9.9 and 1.16 degree at Grid 10.1 per top of concrete slab elevations noted on the plan. Revit model (and other electronic files) shall not be used for establish dimensions.

2). Confirmed that the MFB1 is 48" deep per beam schedule on S1-3600.

3) Top of concrete is at 17.59 at Grid 9.9 and 17.55 at Grid 10.1

4). The bottom of the slots are at 2" from the bottom of the concrete beam to allow the beam bottom bars to go through.

5). The center line of the beam bottom bars shall be at 2.375" above the bottom of the concrete beam (1 1/2' cover + diameter of the ties + 1/2 of the longitudinal bar diameter).

6). The dimension shall be 3.8125" per 5/S1-3600 (2 3/4" cover+ tie diameter+ 1/2" longitudinal bar diameter)

7). A=15", B=5, C= 12", D= 16".

8). Only one hole each side is needed in vertical stiffeners to allow the #10 bars to go through. See 6/S1-3705 for locations of the hole.

9). First hole is 6" from the end of beam. The holes are at 8" on center to match with the tie spacing noted on beam schedule.

10). The 2 9/16" dimension noted shall be changed to 3", the 1'-07/17" dimension shall be changed to 1'-0" (for a total beam width of 30" as noted in the beam schedule).

T-0892	**level B bracing - Concourse Slab elevation conflicts gridline 1- 9**	**Closed**	**11/08/2013**	**11/18/2013**	**Potentially**	☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:**

Co-Author:

REQUEST:

Further to email from the design team (Lee Ishida of Thornton Tomasetti) dated 09/03/13) "the design team wants to pursue with option on SK-2, provided the layout of the pin-pile columns has been coordinated with the moment frame beams so that the block-outs indicated in the sketch do not interfere with the moment frame beams" this option on SK-2 will be used where the strut support beams of the trestle and the internal bracing system are in conflict with the concourse slab, on the other conflicts around the perimeter CDSM wall where the lookout supporting the walers are in conflict with the waterproofing lap length requirements, the lookouts will be relocated above the walers to achieve the necessary lap requirements.

Please confirm if this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T-0892.1 **BGP Level B bracing - Concourse Slab elevation conflict gridline 1-9** **Closed** **11/13/2013** **11/23/2013** **12/04/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

The answer to RFI T-0892 does not answer the intended question, it was not a question on waterproofing requirements, the intended question was to confirm that the design team wish to proceed with the preferred option on sketch SK-2 i.e. to moving the conflicting Level B internal bracing elements to the revised location above the struts or walers whichever is applicable, if this is an acceptable solution, WOJV will proceed and engage the contractor and the Engineer of record for the bracing system to elaborate on this design and install these fixes in the field.
WOJV have already established the waterproofing lap length requirements in coming up with these fixes.

Please confirm that this is the preferred solution.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
11/19/2013
RESPONSE:
Having been provided with only schematic representations of the proposed excavation bracing relocation, SK-2 appears to be a preferred solution. Excavation shoring design is a contractor provided item and it is up to contractor to determine the particular temporary configuration that will produce the finished structure as designed. This includes due regard to number and location of block-outs which should not encroach upon the moment frame beams. To this point, we note that pin-piles 19-22 are in close proximity to gridlines (and moment frame beams). This also may be the case for pin-pile 6 and 18. Note that past discussions also included the possibility of removing pin-pile 8 prior to Lower Concourse construction. In any case, any change to the excavation bracing shall be formally submitted for

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

review.

T-0893 **BGP - F15 Fixtures on Dimmeable or Non-Dimmeable Lighting Circuits** **Closed** **11/11/2013** **11/21/2013** **11/13/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Webcor/Obayashi Joint Venture Bob Garcia

REQUEST:

Please refer to drawing E-0006.

General Note N on DWG E-0006 states in part: "Allocate a maximum of three dimmable lighting branch circuits (multiwire) per conduit home run. Allocate a maximum of six non-dimmed lighting circuits per conduit home run." The type F15 fixtures used throughout the job on the train platform level are fed from, Panels designated "EDMH," which are dimming panels.

Are the circuits feeding these lights considered dimmable lighting branch circuits? Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
11/12/2013
RESPONSE:
Confirmed, circuits feeding type F15 fixtures are dimmable circuits. Provide separate neutral for each branch circuit per requirements of specifications 26 05 19 par. 3.1.I.

T-0894 **SSS - Double Angle Connection Conflicts Along GL** **Closed** **11/11/2013** **11/21/2013** **11/22/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference CD RFI SK1 to SK3 indicating the plate on the transfer girder which typically fouls the beam to transfer girder connections along grid lines C.3 and F.7. This is typical at the following locations at Ground Level: 2/C.3; 4/C.3; 5/F.7; 6/C.3; 8/C.3; 9.9/C.3 (see SK2 & SK3); 10.1/C.3 (see SK2 & SK3); 12/C.3; 14/C.3; 16/C.3; 19.9/C.3; 20.1/C.3; 21/C.3; 23/C.3; 23/F.7; 24/C.3 & 24/F.7

Please confirm that the response and details provided in W/O RFI T-0820 can be applied at these locations, thus shear plates may be used in lieu of double angle connections. (W/O RFI T-08020 response is attached for

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed. Shear plate connection details provided in the response to the RFI T-0820 may be used in lieu of double angle connections at the locations noted in the RFI where the intermediate transfer girder plate fouls the double angle connection. For W16 and deeper beams, the total number of bolts at a shear plate connection shall be per schedule on 2/S1-5011. Provide two bolts in the top shear plate and remaining bolts in the bottom shear plate. For W14 and shallower beams provide two bolts with only the top shear plate. Bolt edge distances, shear plate thickness and welds shall be per 2/S1-5011 with the exception of W40 beams where the vertical bolt edge

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

reference.)

distance may be reduced to 1 3/4".

T-0895 **BGP - Concrete Curb Schedule on Drawing A-0022** **Closed** **11/18/2013** **11/22/2013** **11/22/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

ASI #107 released updates to drawing set A1-2122 to A1-2127 with the changed note at the top right of page. Previously, CC= concrcrete curb were stated as "CC-Cone curb not in TG06." In ASI 107, this note was revised to "Cone curb ref to A-0022 for cone curb schedule. Ref to struct dwgs for coupler details".

1. Drawing sheet A-0022 is not a part of issuance in ASI 107. Please provide referenced drawing for coordination.

2. Please provide details on how to install CC in Area 3 where the concrete has been placed with no coupler/ dowels.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
11/218/2013
RESPONSE:

AAI Response:
1. Refer to Attached SKA-2950, which is based on A-0022, showing the Concrete Curb Schedule.

TT Response:
2. Refer to Detail 2 of S1-3002 for curbs where concrete has been placed without couplers or dowels.

T-0896 **SSS - Shear Connection detail at Transfer Girder** **Closed** **11/11/2013** **11/21/2013** **11/22/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Gregory Kemerer

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please refer to detail 2/S1-5011 and CD RFI 147 SK 1 and clarify the following:

1) Provide the stiffener plate thickness and confirm the back-up stiffener is required at every shear plate location.
2) Confirm weld "F" is to be applied to the stiffener plates.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Stiffener plate thickness to match shear plate thickness provided in the same detail. Back-up stiffener is required with the exception of GL 3/F. At GL 3/F, there is a shear plate connection on one side of the transfer girder and there is a double angle connection on the other side, therefore a back-up stiffener is not required.

2) Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0896.1	SSS - Shear Connection detail at Transfer Girder	Closed	12/12/2013	12/22/2013	12/26/2013	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

The response to RFI T-0896 confirmed that a full depth back-up stiffener will be required at every shear plate location with the exception of a few locations. Along grid 10.1, between grids D.8/E there are full depth connections for a W33 and W24 staggered on either side of the Transfer Girder that are 4" C/C of beams.

1. Please verify if it is acceptable not to provide a back-up stiffener at these locations? See CD RFI 147.1 SK1 & SK2.
2. If back-up stiffeners are not required at these locations, please provide a max offset dimension where stiffeners can be omitted for similar conditions. See CD RFI 147.1 SK1 & SK2.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Backup stiffener can be waived if there is another full depth shear plate on the opposite side of the connection plate within a distance not more than 6".
2) See Response to 1).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0897	SSS - NE Coordinate Accuracy	Closed	11/12/2013	11/22/2013	11/19/2013	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Reference is made to drawing C-0100, "TTC Grid and Alignment Control." The northing and easting coordinates are provided with only two decimal places, producing a considerable amount of calculated error between the coordinates and the gridline dimensions. Please provide the N/E coordinates with at least four decimal places to reduce the calculated error from the gridline dimensions.

Additionally, the N/E coordinates provided at Grid 2/W appear to intersect with Grid 2/G. Please advise if these grid lines intersect and if the N/E coordinates provided also apply to 2/G.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

RESPONSE:
Two decimal places are adequate. Assume there are an infinite number of zeros after the two decimal digits.

The N/E at the intersection of grids 2/W also apply to the intersection of grids 2/G.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0898	SSS - Weld Access Hole and Weld Tab Sizes at CJP	Closed	11/12/2013	11/22/2013	11/22/2013	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Gregory Kemerer

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please reference detail 4/S1-4205 indicating the EBF Link

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1a) Modifying the weld access hole geometry is not

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Beam cross section, also detailed in OIW sketch 2770-SKTH01 attached.
1) The specified 1" x 5" weld access hole does not allow for weld runoff tabs to be added as specified in AWS D1.8 paragraph 6.11.1.
a. Please confirm that the 1.5" x 5' weld access holes detailed in OIW SK 2770-SK-TH01 are acceptable to accommodate the 1" weld tabs.
b. Please confirm that the weld tabs are to remain after welding as allowed by AWS D1.8 paragraph 6.11.

2) The specified CJP weld using a backing fillet and welded substantially from one side increases weld distortion compared to a balanced weld. Please confirm that the proposed double bevel CJP weld is acceptable.

acceptable. At this location, weld ends can be cascaded as shown in Figure C-6.3 of AWS D1.8, similar to continuity plate welding details.

1b) Weld tabs not required, see response to 1a.

2) Double bevel CJP weld (DCW) as proposed by the contractor is acceptable.

T-0898.1 **SSS - Weld Access Hole and Weld Tab Sizes at CJP** **Closed** **12/06/2013** **12/16/2013** **12/20/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Per the response to Webcor/Obayashi RFI T-0898 (SK 146), weld tabs are not required for stiffeners at EBF girders and it is acceptable for weld ends to be cascaded down as down in Figure C-6.3 of AWS D1.8.

In accordance with this response, please reference SK-TH01 attached and confirm that the "extent of CJP weld/UT testing" and "cascaded weld area" detailed are acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed

T-0899 **BGP - Electrical Room Dimensions in RFI 778.1,780.1,781.1 & 782.1** **Closed** **11/12/2013** **11/19/2013** **11/15/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

The AAI mark ups included in the responses to RFI 778.1, RFI 780.1, RFI 781.1 and RFI 782.1 do not reflect dimensions in the latest ASI 107 documents or submittal

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
11/14/2013
RESPONSE:

review comments in the Comprehensive Mat Slab Drawings in submittal drawings package TG0600-0103.

For example, the face of wall of Electrical Room B2460 per Response to RFI 780.1 is shown as 4'-0" from GL 15, however the latest drawing issued in ASI 107 A1-2124 shows the face of wall to this room as 3'-7 5/8" from GL 15. Shimmick has poured this area(Area 8) per ASI 104 which shows this dimension to be 3'-8". The next area to be impacted by these discrepancies will be placed on 11/24/2013.

This discrepancy is present in all of the dimensions issued in the mark-ups included in the RFI responses (attached) and the rooms shown in RFI 781.1 and 782.1 are scheduled to pour on 11/24/13.

Please provide a conformed drawing that shows the current layout for the following Electrical Rooms: B2640, B2461, B2441, B2560.

The attached SKAs clarify and confirm current layouts/dimensions of Electrical Rooms mentioned in RFI T-0899 as well as setting out of all other PH1 walls at the Train Platform Level.

1. For setting out of PH1 walls above the Train Platform Matt Slab Level, refer to the Zone Plans (SKA-2871 to SKA-2878) and Enlarged Plans (SKA-2893 to SKA-2894).

2. For Setting out of knee walls under the Train Platform Level, refer to the Train Platform Level Slab edge plans (SKA-2885 to SKA-2892) and Detail Section (SKA-2895).

3. For setting out of couplers for PH2 walls, refer to the Train Platform Level Wall Plans (SKA-2879 to SKA-2884).

Note that Detail Section 1 on SKA-2895 shows that for the platform MEP rooms, the edge of slab, dimensioned on the Train Platform Level Slab Edge Plans, aligns with the face of wall for the room. However, the face of the knee wall below is set 4" outside of the Platform Level Slab. This step is to provide a key for the future train platforms.

The Wall Plans were included in the TG06 Below Grade Package specifically for the setting out of wall starter couplers. The Wall Plans should not be used for the setting out rooms to position electrical equipment etc. The Zone Plans are more appropriate for this purpose

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0900	SSS - Weld Test Requirements for Castings	Closed	11/13/2013	11/23/2013	11/21/2013	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

The cast node material is not a prequalified base material, thus a PQR test for all welds to the cast material is

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Ground, Bus Deck and Roof Castings are welded to 32" diameter pipes therefore per Table 4.1 of AWS,

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

required. The cast node manufacturer, Bradken, has indicated that all test materials will be supplied in flat plate form only. While AWS D1.1 Table 4.1, Note b qualifies that pipe diameters greater than or equal to 24" may be tested on
flat plate, AWS D1.1 Table 4.1 requires that all pipes under 24" must be tested in tubular form. Please confirm it is acceptable to perform all PQR testing for castings less than 24" in diameter, including the 16" diameter castings at the Light Column, on flat cast plate material.

PQR can be performed with flat cast plate material. For the light column upper cast node which connects a 28inch tube with a 16inch tube, we confirm that the PQR can be performed with flat cast plate material.

T-0901 **SSS - Edge of Slab Support Clarifications** **Closed** **11/13/2013** **11/23/2013** **11/26/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

1) Please confirm the weld indicated is intended to be an overhead weld from the outstanding leg of the L5x5x3/8 angle to the underside of the bent plate.
2) Provide required weld size and minimum weld lengths as indicated in CD RFI 112 SK1.
3) Confirm it is acceptable to hold the L5x5x3/8 angle 1" back from the edge of slab.
4) Provide minimum required size of gusset plate and welding information as indicated in CD RFI 112 SK1.
5) Confirm it is acceptable to typically locate the bolts 3" from the edge of the gusset plate as shown on CD RFI 112 SK1.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.
2) Use a 3/16" double sided fillet weld between the gusset plates and beam web/flange. Weld shall be provided for the entire length of the gusset plate in contact with the wide flange beam.
3) Confirmed. Note that the 1:1 slope requirement on the kicker angle supporting the cantilevered portion of the slab is not required.
4) Provide a top gusset plate with a minimum length of 5" and
a) the centerline line of the kicker angle intersects the center of the gusset plate length at the top of the plate. Provide 3/16" double sided fillet weld between the top gusset plate and beam flange. Provide bottom gusset plates with minimum dimensions of 5"x 5". A minimum bolt edge distance of 1.5" shall be provided at the kicker angles with the bolts centered on the angle legs.
b) edge distance to the bolt is 1.5" min on all sides.

T-0902 **BSE - Repair of damaged column rebar at Area 7 south of the trestle** **Closed** **11/13/2013** **11/23/2013** **11/14/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Stacy Wilson

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

During level D bracing removal in area 7, a column rebar dowel was bent, as shown in the attached photograph.

BBII proposes to:

1. Abandon the bent rebar

2. Drill and Hypoxy

3. Leave the dowel as is, couple the bar onto it and bring it back in line as the bar continues vertically. Place an additional equal size bar along side the damaged bar as a replacement, possibly a 90 degrees hook at the base (Sketch 1 attached)

4. Concrete around the rebar to be removed.The bar would be cut and a bar lock would be used to couple the rebar .(Sketch 2 attached)

Please advise on which option is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractor to resubmit RFI with all information contained. RFI was submitted for review to the Design Team and then Contractor requested to add additional information.

T-0902.1 **BSE - Repair of Damaged Column Rebar at Area 7 south of the Trestle** **Closed** **11/18/2013** **11/28/2013** **11/21/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

During level D bracing removal at area 7,a column rebar dowel was bent, as shown in the attached photograph.

Please see below repair options:

1. Abandon the bent rebar leave it in its current position projecting 5' above the mat slab, place and additional equal size bar alongside the damaged bar as a replacement with possibly a 90 degrees hook at the base

2. Leave the dowel as is, couple the upper section of the bar onto it and bring it back in line as the bar continues vertically

3. Drill and epoxy in a new same sized bar beside the damaged one, the slab would have to be scanned for

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Option 3 is acceptable with the following notes:

1. Damaged rebar shall be cut off at slab level.

2. New starter bar to be doweled with approved adhesive.

3. New starter bar shall be placed as close as possible to original bar location and bar location to be approved by SEOR.

4. Remaining column starter bars and mat reinforcing shall be avoided.

5. Mat cover concrete may be removed locally to abandoned bar.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

rebar location and new location pick to avoid damaging the existing reinforcement.

4. Concrete around the rebar to be removed the bar would then be cut and a new bar welded to it.

5. Concrete around the rebar to be removed .The bar would be cut and a barlock would be used to couple the rebar this could be difficult to achieve due to congestion with the top mat reinforcement and the depth required for the bar lock to be fitted

Please advise on which option is acceptable.

6. Minimum embedment shall be 45".

7. Starter bar to be shop bent no greater than 1:6 (sim 4/S1-3001) so that column reinforcing geometry is resumed per S1-3304.

T-0903 **SSS - Location of Roof Beams for W-1 Glazing** **Closed** **11/14/2013** **11/24/2013** **11/19/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

1) The W-1 glazing system wireframe transmitted by Webcor/Obayashi locates the beams that back up the W-1 glazing system supports. At the roof level on S1-2602 to S1-2607, refer to sketches CD RFI 133 SK1 to SK6 and verify the clouded dimensions in red which locate the beams in question based on the structural wireframe model transmitted.

2) Once the beam locations in question are confirmed, it is requested that any revisions that impact the location of any beam be addressed in a written or marked up formation in lieu of a revised wireframe model. Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

RESPONSE:
1) RFI is not the correct format for the Design Team to review this information. Please submit shop drawing submittal of this work to allow for a thorough submission and review of this scope of work.

2) The proposed method of future beam revisions in this RFI is not acceptable. Please provide information per Project Database Administration in Division 01 specifications and architectural drawings A-0008 and A-0009.

T-0903.1 **SSS - Location of Roof Beams for W-1 Glazing** **Closed** **12/06/2013** **12/16/2013** **12/09/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Gregory Kemerer

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Per the discussion at the Structural RFI Meeting 12/5/13,

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

RFI voided. Dimensions to be reviewed and

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

please provide a revised response to the following RFI:

1) The W-1 glazing system wireframe transmitted by Webcor/Obayashi locates the beams that back up the W-1 glazing system supports. At the roof level on S1-2602 to S1-2607, refer to sketches CD RFI 133 SK1 to SK6 and verify the clouded dimensions in red which locate the beams in question based on the structural wireframe model transmitted.

2) Once the beam locations in question are confirmed, it is requested that any revisions that impact the location of any beam be addressed in a written or marked up formation in lieu of a revised wireframe model. Please confirm this is acceptable.

confirmed via submittal.

T-0904 **SSS - W-1 Glazing Connection Clarifications** **Closed** **11/14/2013** **11/24/2013** **12/04/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Reference is made to the W-1 glazing support connection details indicated on 1 &4/S1-8001 and CD RFI 136 SK1 to SK3 in regards to the following:
1) Confirm the hole locations for the W-1 glazing "CP1" locations are acceptable as shown or supply alternate locations.
2) Confirm the holes for W-1 glazing connections are to be 1 9/16" dia.
3) Confirm the hole locations for W-1 glazing "CP2" locations are acceptable as shown or supply alternate locations.
4) Confirm the holes for the W-1 glazing connections are to be 1 9/16" dia. as indicated.
5) The 1" plate located between the beam web and the 2 ½" plate has been detailed to terminate 5" below and above the beam flanges as indicated in 7/S1-8001. This places the edge of the plate near the center of the W1 "CP2" connection bolts as shown on CD RFI 136 SK3. Please confirm this is the intent for the 1" plate at this location.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Location of the holes shall be as shown in the sketch SKS 0302 enclosed.
2. See response #1.
3. See response #1
4. Confirmed.
5. The 1¿ plates are to be welded (1/2¿ double fillet weld) to the beam top and bottom flange as shown in detail 1A/S1-8001

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0904.1	SSS - W-1 Glazing Connection Clarifications	Closed	12/12/2013	12/22/2013	12/30/2013	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

As a follow-up to Webcor/Obayashi RFI T-0904 (SK RFI 182), please see attached CD RFI 136.1 SK1 and SK2 in reference to the following:

1) T-0904 Item 5: The response references the stiffener in detail 1A/S1-8001, while the question is regarding the 1" plate wedged between the BU-Beam web and the 2 ½" thick plate per detail 7/S1-8001. The top and bottom edges of the 1" plate are close to the bolts as shown on SK2. If this is the intent, confirm items 1a and 1b on SK2:
a. Confirm the 1" edge distance is sufficient.
b. Confirm it is acceptable to notch the 1" plate with partial 1 9/16 dia. holes at 4 locations to accommodate the bolts.

2) T-0904 Item 2: The response does not clarify the requested hole diameters. Please confirm the holes are 1 9/16" diameter for "CP2" connections.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) No, the 5" dimension shall be changed to 1".
2) Hole diameter shall be 2 1/16" to allow 1/2" erection tolerance. Also, refer to Detail 1/S1-6097 for the center line of the bolt group.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0905	BGP - Light Column Anchor Bolts Conflict with Rebar	Closed	11/15/2013	11/25/2013	11/27/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please refer to attached drawing S1-3009, S1-6008.

SCCI encountered potential conflict between anchor bolts of light column (layout depicted in 2/S1-6008) with light column rebar as shown in 1/S 1-3009. Please find attached model depicting conflict between bundles of 2 ea rebar #11@16" OC with the layout of the anchor bolt.

Please advise and provide parameters with which the rebar may be moved to clear the anchor bolts.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
11/25/2013
RESPONSE:
In order to avoid conflict with the light column anchor bars detailed on S1-6008, the bundled #11 bars depicted in Section 1/S1-3009 may have their number take precedence over spacing. Any bundle may be moved from the typical 1¿-4¿ module by up to 11-7/8¿. The minimum clear spacing between any two adjacent bundles shall be 1-3/8¿. The maximum spacing between any two adjacent bundles shall be 23-3/4¿.
The particular arrangement of bundled bars is at the contractor¿s option per the rules described above. One potential allowable arrangement is presented in the Sketch SKS-0299 (attached).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0906	BGP - Omitting the Grout Port at all Applicable Column Base Plates	Closed	11/15/2013	11/25/2013	12/12/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference column base plate details on Sheet S1-5051.

SCCI proposes to permanently remove the grout ports used to grout the column base plate as shown in A/S1-5051 . SCCI believes the 2" grout holes and 3" perimeter clearance is sufficient to grout voids underneath and around the base plate and shear keys. The blockouts will be grouted from the holes and/or perimeter and the hose removed as the voids are filled up.

Please confirm it is acceptable to remove the grout port depicted in A/S1-5051, typical at applicable column base plates.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
11/19/2013
RESPONSE:
Contractor proposed grout procedure is acceptable, pending on the successful grout procedure mock up.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0907	BGP - Haunch Reinforcement Embedment Detail in Area 9	Closed	11/15/2013	11/25/2013	11/20/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Scott Bunnell

REQUEST:

Please refer to drawing S1-3201 and attached SCCI sketch SK-RFI-383.

The haunch bars in Area 9 were fabricated to a shorter length than required. Per discussions with TT Engineer in the field, Gerdau proposes to raise the lowest point of the haunch bar 6" from the designed location. As a result, the haunch would have a 64" embedment into the mat slab and 29" minimum embedment into the foundation wall. Refer to attached sketch for further details.

Please confirm the revised haunch reinforcement detail in Area 9 as depicted in the attached sketch is acceptable .

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
11/18/2013
RESPONSE:
The reduction in length is acceptable for use in Area 9 with the following conditions:
1. The top of bar embedment into the wall shall comply with RFI T-0702 and T-0716.
2. The bottom of the bar shall be chaired as required above the lower mat.
3. Embedment into the mat shall conform to RFI T-0710 and T-0762.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0908	BGP - Column Base Plate Shear Key Block-out DImension	Closed	11/15/2013	11/25/2013	11/20/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: City and County of San Francisco Sheryl Bregman

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please refe to attached detail A on sheet S1-5051.

Please confirm it is acceptable to reduce the overall 14" shear key block-out dimension to 10"; therfore, allowing for 2-inches of clearance all around the shear key as discused and coordinated during the 11/12/2013 mock-up review. See attached detail A/S1-5051 for mark-ups.

Please note the revised column base plate block-out is typical for Type I and II.

George Metzger
11/18/2013
RESPONSE:
Acceptable

T-0908.1 **BGP - Concrete Beam Top Bar Spacing and Layering** **Closed** **11/22/2013** **12/02/2013** **12/04/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please refer to drawing S1-3400 and RFI T-0908.

In order to clear the 10" shear key block-out as approved in RFI T-908, please confirm it is acceptable to place the additional short bars in a typical concrete beam in a second layer. Also, please confirm it is acceptable to increase the space between the top and short bars near the center of the beam to 10".

Please reference the attached photo for more details.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
12/3/2013
RESPONSE:
- This response addresses Lower Concourse Level concrete beams framed to concrete columns with steel columns above only. Reinforcement information for these beams is provided in Sheet S1-3400.

- Where the beam has more than 6 top bars over the column, place the top bars in 2 layers. A minimum of 6 bars (long bars placed first) shall be placed in the top layer and the remaining bars shall be placed in the 2nd layer. When the concrete beam and the steel column centerlines coincide or slightly offset from each other, It is acceptable to increase the space between concrete beam top bars to 10" to clear the shear key block out.

- For beams B30, B66, B71 and B76 provide 6-#11 Right End Top LONG Bars and 6-#11 Right End Top SHORT Bars. Place short bars in second layer, with a clear distance of 1" or db, whichever is greater.

- All other conditions shall be reviewed separately.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0909	BGP - Cast-In Place Plumbing Fixtures on Concourse Level	Closed	11/15/2013	11/25/2013	11/25/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Webcor Construction LP Spencer Sayles

REQUEST:

As discussed in the 10/28/2013 ASI 104 Concourse Plumbing design meeting, this RFI is requesting confirmation that it is acceptable for the Early Below Grade Package (TG06) contractor to block out the concourse slab where plumbing fixtures are shown to be embedded in concrete.

General notes in TG06 drawing P-0005 call for sleeves only in elevated slabs in the EBGP. However, for the future main package plumber to be able to install the cast in place floor sink and floor drain fixtures, larger openings and structural details are needed. The contractor is proposing to install square blockouts sized larger than these fixtures so that they can be installed and grouted in a later date by the main package plumber. The desired benefit of this proposed logic is that concourse plumbing will be installed by one trade contractor who will provide a single source warranty for the work. Also, the later installation allows for more precise coordination of fixture rim elevations.

If this proposed sequence is not acceptable, CIP plumbing fixtures will need to be supplied and installed by the BPG (TG06) contractor. If this proposal is acceptable, please provide blockout size, rebar trim details and rebar doweling details for floor sinks and also floor drains. Sample product data for the fixtures are attached for reference and for sizing of openings.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
11/22/2013
RESPONSE:
We confirm that installing block-outs for the floor drains and floor sinks (to be installed later) is the acceptable solution. The size of the block-outs has to be determined by the contractor, it is part of the means and methods as a temporary condition.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0909.1	BGP - Cast-In Place Plumbing Fixtures on Concourse Level	Closed	12/11/2013	12/21/2013	12/19/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Webcor Construction LP Spencer Sayles

REQUEST:

Reference response to RFI 909.

For floor sinks (FSK) shown cast into Lower Concourse structural slab CM/GC proposes to block out 18"x18" square centeredon center of fixture. Propose using detail 1/S-3501 for trimming rebars through this blockout (TG06 contractor). Fixture to be placed and grouted back in as

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
12/18/2013
RESPONSE
It structurally acceptable to blockout the Lower Concourse sinks and drains as indicated in the RFI, following Detail 1/S1-3501. Suggest blocking out concrete only and leaving reinforcing to be interrupted

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

part of main package (TG-10.2) plumbing scope installation. Doweling and pourback details to be designed by TG-10.2 plumbing trade contractor.

For floor drains (FD) shown cast into Lower Concourse structural slab CM/GC proposes to block out 12"x12" square centered on center of fixture. Propose using detail 1/S-3501 for trimming rebars should they encroach into the blockout. Fixture to be placed and grouted back in as part of main package (TG-10.2) plumbing scope installation. Doweling and pourback details to be designed by TG-10.2 plumbing trade contractor.

Please confirm the above proposed scope is structurally acceptable.

un-cut until the time of fixture installation when the bars can then be cut to a close fit. This method will eliminate potential required dowels to support the grout and mitigate the number of bars required to be cut should there be small changes in the location of the fixture. Contractor shall coordinate the sizes and locations of all blockouts with the actual fixtures selected and the approved drawings for that scope of work.

T-0910 **BGP - Mechanical Couplers at Top of Partition Walls** **Closed** **11/18/2013** **11/28/2013** **12/02/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please refer to attached drawing excerpts from sheet S1-2052 and 4/S1-3205.

The typical wall section shown on S1/-2025 for the tank walls directs the reader to section 4 on S1-3205. When reviewing this section the design calls for mechanical couplers at the tops of the walls per detail 6/S1-3001. The formsaver coupler depicted within this detail is a threaded product that will not support a hooked or bent bar because the specific orientation of the hook is not possible.

Please provide direction on how to proceed.

SUGGESTION:

1. To maintain the formsaver coupler but modify the male bars with hooked ends, potentially use HRC 555 heads
2. Eliminate the coupler and use a drill and dowel method of installation for the follow on bar into the soffit
3. Modify the vertical bar from contract TG06 to extend out of the concrete with the desired hooks oriented correctly for the follow on contract work.
4. Modify the coupler type by using a formsaver style coupler that attaches the male dowel with epoxy adhesive. This would provide no extension of the bar above the TG06 contact line and provide a pre-determined layout for the follow on bars with the ability to orientate the hooks as required.

ANSWER: **Accept Suggestion:** ☐

RESPONSE: RFI T-0910 BGP - Mechanical Couplers at Top of Partition Walls

George Metzger
11/27/2013
RESPONSE:
At the tops of the water tank walls, maintain the formsaver couplers in anticipation of headed reinforcing in lieu of hooks.

T-0911 **BGP - Seismic Joint Specification Clarifications** **Closed** **11/18/2013** **11/24/2013** **11/25/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference Specification Section 07 09 16 - 2.6.A.1.

The aforemention section states, "Provide joint assemblies in single lengths between changes in direction with vulcanized, mitered comers where joint changes directions or abuts other materials."

1. Please confirm that this is in reference to the Omega Seal gasket, and not the clamping system and embedded steel.
2. Please confirm that it is acceptable to use clamping components with 4'-0" maximum lengths with butt joints not to exceed 1/8".
3. Please confirm that it is acceptable to use 14' max lengths on steel embed with butt joints not to exceed 1/8".

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
11/25/2013
RESPONSE:

AAI Response:
1. Confirmed. The Specifications Section 07 09 16-2.6.A.1 refers to the Seal gaskets and not the clamping system and embedded steel.
2. For Clamping component lengths, contractor to coordinate with manufacturer of Double Seismic Joint Seal complete with clamping assembly.

TT Response:
3. Acceptable.

T-0912 **SSS - GFRC Drawings** **Closed** **11/18/2013** **11/28/2013** **12/04/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On the Type 2 (M) Drag connection per detail 1/S1-5017 refer to sketch CD RFI 117 SK1 for the GFRC question below. Note 4 references GFRC drawings. The connections in the clouded areas cannot be completed until the GFRC information is issued. Please supply the necessary information.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

"For Reference Only" see the attached "In-Progress & Draft" 3D Digital files containing geometry control information and related 2D drawings. These documents may be updated prior to issue and will be issued for construction in the future, however the CMGC can use the data to coordinate the work of adjacent trades.

T-0913 **BGP - Seismic Joint Detail Clarifications** **Closed** **11/18/2013** **11/24/2013** **11/25/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference details 7/A1-8881 (ASI #107) and 4/S1-3010 (ASI #100).

1. Detail 7/A1-8881 calls for a "neoprene gasket compressed by bar and bolt typ." Please provide sizes for

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

AAI Response:
1. For size of tabs and bolts for the neoprene gasket, refer to Specification Section 07 09 16 - Seismic Joint Assemblies - Below Grade Package. Fastening device types and sizes required are to be engineered to suit

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

tabs and bolts. Also, provide welding instructions (if necessary).
2. The same detail shows pipe penetrations through the seismic joint at both levels. Plumbing drawings show a 4" "SAN/ AD" running parallel to the seismic joint. Please confirm this pipe penetrates the joint. If so, provide locations off of grid and pipe sleeve dimensions. Also, provide details on how to seal this penetration (watertight).
3. Detail 4/S1-3010 shows a 3/4" dia Headed Stud at 12" oc, with 6" embed. Is this to be one row as the drawing shows?
4. Detail 4/S1-3010 also calls for 4" diameter hole at 2'-0" oc. What is the purpose of these holes? If the clamping system is continuous, then what will support the rod at the hole locations? Please clarify.

and ensure compliance with the specification. Contractor to coordinate components specified under this section, including Double SJ Seal c/w Clamping Assembly, SJ Cast-in Galv Steel Frame and Stud Assembly, and Waterproofing Assembly, which are closely integrated with materials and assemblies specified in other Specification sections and require close trade coordination to complete the overall Seismic Joint Assembly.

2. For Seismic Joint Drain locations, refer to SKA-2949. Pipe sleeves are not required around the pipe penetration. Drains to be provided with clamp frames / flanges for clamping the waterproofing system, creating a seal around the pipe penetration at the Seismic Joint.

TT Response:
3. Confirmed.

4. The holes are to ensure that concrete fills all the way up to into the curb and allows for the use of a concrete vibrator. Refer to Double Seismic Joint Seal with Clamping Assembly Manufacturer for bolt spacing. Coordinate concrete fill holes to avoid interference with bolts of the clamping system.

T-0914 **SSS - Detail Clarifications for Edge of Slab Supports** **Closed** **11/18/2013** **11/18/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Gregory Kemerer

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please reference details 2, 3, 7, and 9 on S1-5001 and CD RFI 120 SK1-SK2 for the following items:
1) Details 2 & 7/S1-5001 appear to indicate the same condition, however the required deck angle supports are different. Detail 2 shows the configuration of 3/8" bent plates while Detail 7 shows a different configuration. of L6x4x5/16 angles. Please confirm it is acceptable to proceed with the deck supports per detail 7.
2) If detail 7/S1-5001 is acceptable, confirm the deck

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Detail 2 shows deck support at exterior column while Detail 7 is to show the slab reinforcement. However, for deck support, either the deck support shown on detail 7 can be used to replace the 3/8¿ angle shown on Detail 2 at contractor¿s discretion.
2) Confirmed
3) Horizontal leg to have a dimension so that the edge angle will have 1 ½¿ bearing similar to detail 8/S1-5000.Vertical leg shall be not less than 4¿.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

support angles can be held back 1" from the edge of slab.
3) If detail 2/S1-5001 is preferred, please provide additional information on the indicated members with horizontal and vertical leg dimensions.
4) Details 3 & 9/S1-5001 appear to indicate the same condition, however the required deck angle supports are different. Detail 3 shows the configuration of 3/8" bent plates while Detail 9 shows a different configuration. of L6x4x5/16 angles. Please confirm it is acceptable to proceed with the deck supports per detail 9.
5) If detail 9/S1-5001 is acceptable, confirm the deck support angles can be held back 1" from the edge of slab.
6) If detail 3/S1-5001 is preferred, please provide additional information on the indicated members with horizontal and vertical leg dimensions.

4) Confirmed
5) Confirmed
6) See response to item 3.

T-0915 **SSS - Connection Clarifications For Beam Cope** **Closed** **11/18/2013** **11/28/2013** **12/04/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

At sample locations on S1-2303 along line 9 between grids D & F and refer to sketches CD RFI 118 SK1 to SK3 for items 1, 2 & 3 for beam cope clearance.
1) The 1/2" max clearance per 1/S1-5010 is not sufficient to clear the k of the W40x183. Confirm it is acceptable to increase the clearance to 1 11/16" to avoid coping the beam inside the k.
2) The 1/2" max clearance per 12/S1-5010 is not sufficient to clear the k of the W24x68. Confirm it is acceptable to increase the clearance to 15/16" to avoid coping the beam inside the k.
3) Confirm it is typically acceptable to increase the 1/2" max clearance at other similar connections on this project to avoid cutting the beams inside the k.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Acceptable.
2) Acceptable.
3) Acceptable at other similar connections where 12/S1-5010 applies.

T-0916 **SSS - Clarifications for Typical Deck Support at Wet Column** **Closed** **11/18/2013** **11/28/2013** **12/04/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Refer to detail 4/S1-5001 and CD RFI 133 SK1 for the following items:
1) Per the response to bid question TG07.1-0140, a "wet" column is any column which has a vertical plumbing line running along it. Please confirm that, according to this response, any column with one or more round slab openings close to it on the Edge of Slab plans is to be detailed as a "wet" column.
2) The deck support angles are shown continuous over the beam flanges with the vertical leg of the angles pointing down, causing the vertical leg of the angle to foul the beam. Please clarify the orientation of the deck support angles for the "wet" columns per detail 4/S1-5001.
3) Please confirm the deck support angle on the column flange required only the one-sided fillet indicated or clarify additional welding requirements.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Yes. However, we are not clear on the meaning of ¿detailed as a wet column¿ and why wet column will need to be detailed differently.
2. Where the vertical leg of the angle foul the beam, the vertical leg can be clip off to clear the beam flange (horizontal leg bear on the beam flange).
3. Confirmed.

T-0917 **BGP - Concrete Column T-Head Clearance from Lower Concourse Slab (Mock-Up I** **Closed** **11/18/2013** **11/18/2013** **11/25/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please refer to drawing detail 2/S1-3301.

Please confirm it is acceptable to have a clearance of up to 7-1/2" from the top of the concrete columns T-head to the top of lower concourse slab as discussed by TT field personnel during the mock-up review.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The maximum allowed clear distance from the top of the concrete column vertical reinforcement t-head to the top of lower concourse moment frame beam is 7-3/4".

T-0918 **SSS - Connection Clarifications for Offset Beams** **Closed** **11/18/2013** **11/18/2013** **12/04/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On S1-2503 along line 9 between grids E & F refer to sketches CD RFI 124 SK1 & SK2.

With the beam spacing per S1-2503 (SK1), there will be a 3" offset between the noted beams. The double angle

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The W21x50 beam between GL E.2 and E.6 may be moved to align with the W24x68 on other side of GL 9 as shown on SK2. However note that the location of the W24x68 beam east of GL 9 and between E.6 and F is incorrectly shown on SK2. The W24x68 beam is

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

connection per S1-5010 will not work as the bolts will foul the beam web on the opposite side. We propose to relocate the beam per the proposed dimensions shown or connect these beams with shear plates per S1-5011. Please
review and advise how to proceed.

7' 6" from GL F and is aligned with the W21x50 on the west side of GL 9. Similarly, the W24x68 and W24x55 beams on the two sides of GL 9 between GL D.4 and D are aligned.

T-0919 **SSS - Beam Bottom Flange Bracing Connection** **Closed** **11/18/2013** **11/28/2013** **12/04/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Refer to the beam bottom flange bracing connection detailed on 8/S1-5015 and CD RFI 127 SK1 & SK2 for the following items:
1) In order to support erection requirements, please confirm it is acceptable to:
a. Typically locate the bolts shown 3" from the underside of the top flange and 3" from the face of the beam web as indicated in CD RFI 127 SK2.
b. Typically locate the bolt 3" from the top of the flange indicated.
c. Typically locate the bolt outside the beam profile as shown to make the brace erectable.
2) Confirm the stitch plates should be ½" thick to match the ½" thick gusset plates at each end.
3) Please confirm that it is acceptable to provide slotted holes in the brace at the end connections.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) It is acceptable to typically locate bolts as shown in SK2. However, the slope of the kicker angle shall be such that the centerline of the angle should pass through the centerlines of the beam web and flange similar to that shown in 7/S1-5015 at both top and bottom ends.
2) Confirmed.
3) Slotted holes are not acceptable.
Bottom flange bracing detail 8/S1-5015 applies only at beams with the "dashed arrow" symbol (See Note 1 on 8/S1-5015). Bottom flange bracing of 2nd floor and bus deck level spandrel beams is to be provided per S1-8020 as noted on typical sheet notes on S1-2402 and S1-2502 (See Note 3).

T-0919.1 **SSS - Detail Clarification at Angle Brace** **Closed** **12/31/2013** **01/10/2014** **01/13/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

The braces per detail 8/S1-5015 have been added in the model for the area between grids 1.4 to 19.9 as shown on attached SK2. Please see attached CD RFI 127.1 SK1 & SK2 for items 1 & 2:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). From the comment on T-0919, the clouded dimension shall be equal to 0.

2). Detail dimensions for the gusset plate is the responsibility of the steel detailer.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

1.) Work with SK1 & SK2 and confirm the request in the response to RFI T-0919 (SK 173 & CD 127) item 1 to have the work points for the braces located at the intersection of the top/bottom of beams on center of beams.

2.) If the response to item 1 above is yes, please supply the size of the gusset plates as the dimensioning proposed in CD RFI 127 will not work with the revised work point locations.

T-0919.2 **SSS - Detail Clarification at Angle Brace** **Closed** **02/06/2014** **02/16/2014** **02/14/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

This is a follow-up to Webcor RFI # T-0919.1 (SK RFI # 173.1 & CD RFI # 127.1)

Per the conference call discussion on 1/16/14 with Webcor, Skanska & Thornton Tomasetti, Candraft was to layout the bracing work points to the underside of the top beam flange superseding the response to locate the work at the top of the beam. Please review the attached two sketches CD RFI 127.2 SK1 & SK2 showing the revised work point locations and confirm this is the intent of the design parameters. Note that the bracing work points are not indicated on 8/S1-5015 and we feel that the original sketch CD RFI 127 SK2 (Relabeled CD RFI 127.2 SK3) conforms to the design with the bolt closer to the inside profile of the beam members and would like to use as modeled.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed that the work points shown on CD RFI 127.2 SK1 and SK2 are the design intent. The work points shown on CD RFI 127.2 SK3 previous submitted are also acceptable. There shall be no cost and time increase for this one.

T-0920 **SSS - Kicker Connection Clarification** **Closed** **11/18/2013** **11/28/2013** **11/22/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Refer to sketches CD RFI 126 SK1 to SK3 for items 1 to 4:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Acceptable.
2) Acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

1) Confirm it is acceptable to locate the brace at the bevel shown to fit the steel framing in lieu of the 2:1 bevel per 5/S1-5015.
2) Confirm it is acceptable to locate the brace at the bevel shown to fit the steel framing in lieu of the 2:1 bevel per 5/S1-5015.
3) Confirm it is acceptable to increase the thickness of the full depth shear plate to 1" per 5/S1-5015 and connect the kicker brace to the full depth shear plate as shown.
4) Confirm that it is acceptable to typically apply item 3 at other similar conditions.

3) Acceptable.
4) Acceptable.
One general comment that is applicable to all sketches include in this RFI is that where shallower beams are supported by deeper girders. Coping the bottom flange of the shallow beam is not allowed per details 1/S1-5010 and 1/S1-5011.

T-0920.1 **SSS - Kicker Connection Clarifications** **Closed** **12/11/2013** **12/21/2013** **12/26/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Per the response to Webcor RFI T-0920 (SK RFI # 172) it was confirmed acceptable to increase the full depth shear plate from 3/8" to 1". Upon further review of this location there would be an issue where a 1" thick shear plate would foul the bolts connecting the top flange of the Transfer Girder to the Cruciform column base plate.

1). Please confirm it is acceptable to center the 3/8" shear between the bolts and move the beam 5/8" south from its original location.

2). Please confirm the 1" gusset plate welded to the bottom flange of the beam can be moved off the center line of the beam to line up with the 3/8" full depth shear plate. The gusset would move 7/16" from the centerline at this location.

3). If it is acceptable to line up the gusset with the full depth shear plate, there will be a 5/8" discrepancy between the two plates. Please confirm if stitch plates with varying thicknesses can be used to make up the difference.

4). Confirm that it is acceptable to typically apply the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.
2) Confirmed.
3) Confirmed.
4) Confirmed.
5) See responses to 1) through 4). Further comments may be provided on a case by case basis during shop drawings review

above items at other similar conditions.

5). If any of the above suggestions will not work, please provide an alternate detail for these conditions.

T-0920.2 **SSS - Kicker Connection Clarifications** **Closed** **12/16/2013** **12/26/2013** **01/02/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Per the response to Webcor RFI T-0920 (SK RFI # 172) clarification is required regarding the last statement where "Coping the bottom flange of the shallow beam is not allowed" and also per the response to Webcor RFI T-0934 (SK RFI # 187) clarification is required regarding the last statement where coping the bottom flange of the shallow beam shall not exceed 1" from the end of the beam.

1). Per detail 1/S1-5010 where there is a double sided beam connection, the bottom flange is required to be coped in the shallow beam in order to allow for installation of the bolts from the shallow beam side. Note the bolts cannot be torqued if erected from the other side and would also foul the shallow bottom beam flange in question. On the attached sketches CD RFI # 126.1 SK1 to SK4 show some typical sample conditions illustrating the clearance required. The beam flange cope lengths required will range from 4" long in most cases to 4 1/2" at larger web thicknesses. Please verify the shallow bottom beam flanges can be coped for bolt clearance and erection of the beams as noted on SK2 to SK4.

2). Per detail 9/S1-5010 where the WT on the top of the beam flange is required to extend to the end of the beam please verify the beam flange can be coped back to the "k1" of the beam in order to get full bearing and weld for the WT and to clear bolts as noted on SK2.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). Coping the bottom flange 4- 4 1/2" long will affect the block shear of the connection design in some cases. Contractor shall prepared the shop drawings satisfying the require tightening clearance and cloud the coped area requesting approval by the Engineer on a case by case basis.

2) Confirmed.

T-0921 **SSS - Detail Clarifications For Edge of Slab Supports** **Closed** **11/18/2013** **11/28/2013** **11/25/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Per details 8 & 10/S1-5001, refer to sketches CD RFI 121 SK1 for items 1 & 2:

1) Confirm the noted area indicates that the concrete slab is not required and the edge plates may be terminated as shown.
2) Confirm the noted area indicates that the concrete slab is not required and the edge plates may be terminated as shown.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The noted area does require concrete slab. Note that this detail is for the slab reinforcement at an edge column condition and the detail note references to ¿see typical slab edge details for additional information¿. Refer to detail 2/S1-5001 for additional info regarding edge of deck at exterior columns.

The noted corner area does require concrete slab. Note that this detail is for slab reinforcement at a corner column condition and the detail note references to ¿see typical slab edge details for additional information¿. Refer to detail 3/S1-5001 for additional info regarding edge of deck at exterior corner columns.

T-0922 **SSS - W-1 Support Connection Clarifications at Bus Deck** **Closed** **11/18/2013** **11/28/2013** **12/12/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Refer to CK RFI 125 SK1, SK2A, SK2B, SK3, and SK4 requesting clarification at the Bus Deck level on the following:
1) Confirm the noted connection should be a moment connection.
2) At the noted location, two supports for CP5 connections are required adjacent to Grid 9. Based on the CP5 detail requirements, a 1 ¼" horizontal stiffener should span from shear plate to shear plate per 1B/S1-8003; however, because these two connection points span the same beam, the horizontal stiffener would foul the incoming beam to shear plate connection, as there is a horizontal stiffener welded on both sides of the shear plate. Please provide a solution for this condition.
3) Confirm the vertical spacing of the 1 ¼" horizontal stiffeners is acceptable to accommodate the connection bolts on the incoming beams.
4) In the beam connection shown in detail 1/S1-8003, the required shear plate will foul the 2" web reinforcement plate required per 1/S1-5017. Please confirm the shear plate is to be welded to the 2" web reinforcement plate with a ½"double fillet weld per 1/S1-8003 or provide an

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Yes, the connections shall be a moment connection as shown on Detail 1/S1-8003 and as denoted on the plans.
2. The horizontal plates shown on 1B/S1-8003 are eliminated (see ASI 109).
3. See response to item 2)
4. Is this question related to the vertical shear plate? If so, Confirmed that the shear plate may be welded to the 2" web reinforcement plate with 1/2" double fillet weld as shown.
5. 3/4" partial pen weld at the bottom flange called out may be replaced by a partial penetration weld with an 3/4" fillet weld overlay built-up.
6. Confirmed.
7. Confirmed.
8. Confirmed.
9. See ASI 109 for bolt hole dimensions.
10. Use 2 1/16" holes for 1 ½" bolts to allow for ½" field tolerance.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

alternate connection detail.
5) A CJP weld is required at the flange connections shown on CD RFI 125 SK2A and SK2B; however, the indicated flanges are out of alignment per the dimensions shown. Please advise on the welding or connection requirements at this condition.
6) Confirm the noted 1" stiffener plate per 1/S1-8003 may be welded to the 2" web reinforcement plate as shown in SK2A and SK3.
7) Due to the placement of the 1/14" horizontal stiffener plates and required ½" fillet weld, the bolts for the beam connections will not be erectable. Please confirm it is acceptable to clip the horizontal stiffener plates as shown to accommodate the erection bolts or supply an alternate solution.
8) Confirm it is acceptable to cut the 1 ¼" horizontal stiffener plates as shown to avoid fouling the 2" web reinforcement plate or supply an alternate solution.
9) Confirm the hole locations for the W-1 glazing system per 1/S1-8003 are acceptable as shown or supply alternate locations.
10) Confirm 1 9/16" dia. holes are acceptable or provide alternate hole size.

T-0922.1 **SSS - W-1 Connection Clarifications** **Closed** **01/17/2014** **01/27/2014** **02/06/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

This is a follow-up RFI to RFI T-0922 (SK 171 CD 125)
See attached CD RFI # 125.1 SK1 to SK4 for items 1 to 3:

1.) The 2" stiffener per 1/S1-8003 (ASI 109) and the beam connection shear plate foul each other as shown. Confirm it is acceptable to offset the 2" stiffener as required and use it as the shear plate for the beam connection. If not, supply an alte rnate solution.

2.) Please supply missing dimensions.

3.) The noted dimensions per 1/S1-8003 in ASI 109 (SK4) will result in the bottom holes fouling the beam flange.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). The 2" vertical stiffeners are to be located 1'0" from the center of the W1 connection as shown in Detail 1/S1-8003 in order to make to the W1 connection. Where the beam connection shear plate fault the 2" plate, the 2" plate may be used as the shear plate.
2). See 12/S1-6091 for bolt spacing.
3). Change the 4" dimension to 3 1/4", and change the 8" dimension to 6 1/2".
4). The 3/4" PJP weld at the top flange may be replaced with CJP weld to allow for fit up tolerance. The weld at the bottom flange may be changed to a double fillet weld as shown on the attached sketch

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Please issue revised hole locations to suit the beam sizes.

SKS-324.

See attached CD RFI # 125.2 SK1 to SK3 for item #4:

4.) The RFI T-0922 item 5 instruction to supply a PJP weld with a 3/4" fillet weld on top as shown is not possible as there
is only 9/16" of material remaining on top as shown. A PJP weld requires a 0" gap which is not possible as there is no erection clearance. Please supply an alternate weld.

T-0922.2 **SSS - W-1 Connection Clarifications** **Closed** **01/17/2014** **01/27/2014** **01/21/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Webcor Construction LP Gregory Kemerer

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

This is a follow-up RFI to RFI T-0922 item 5 (SK 171 CD 125)

See attached CD RFI # 125.2 SK1 to SK3:

The RFI T-0922 item 5 instruction to supply a PJP weld with a 3/4" fillet weld on top as shown is not possible as there is only 9/16" of material remaining on top as shown.

Also, a PJP weld requires a 0" gap and this is not possible as there is no erection clearance.
Please supply an alternate weld.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Combined with RFI T-0922.1

T-0923 **SSS - W-1 Glazing System CP6 Connections** **Closed** **11/19/2013** **11/29/2013** **12/11/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Refer to CD RFI 128 SK1 through SK4 in response to the following regarding the W-1 glazing system connection "CP6" at the bus deck level:
1) The indicated CP6 connections foul the beam

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. The double stiffeners (1" thick) shown on 4/S1-8003 will be revised to single 1 ½" thick stiffener (centered to the W1 support). If the connection for the beam supporting crash rail posts fouls the stiffener and

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connections as indicated in SK3A and SK3B. Please provide a solution to this condition.
2) Confirm the holes for the "CP6" connections may be typically located as shown in SK4 along Grids B & H.
3) Confirm the connection holes for "CP6" are 1 9/16" diameter or provide the required hole diameter.

kicker for W1 support, adjust the beam supporting the crash rail post slightly (less than 3") so it is in line with the W1 support. In this case, the kicker is no longer needed.

2. The center line of the bolt shall be 2'- 0 1/8" from the top of the beam (2'-0 ¼" shown on SK4). The vertical spacing of the bolt shall be 10 ½"(10" shown on SK4) and the horizontal spacing of the bolt shall be 5 ½"(4 1/2" shown on SK4).

3. Confirmed that 1 9/16"dia. hole is fine for 1" bolt to allow for field tolerance.

T-0923.1 **SSS - Dimension Clarification for W-1 Glazing** **Closed** **01/06/2014** **01/16/2014** **01/14/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 128.1 SK1 & SK2:

RFI T-0923 SK4 was submitted with the center of "CP6" down 2'-0 1/4 from the top of steel. The 2'-0 1/4 dimension was taken from the Rhino model. The response to RFI T-0923 item 2 has changed the 2'-0 1/4 dimension to 2'-0 1/8.
1) Confirm the 2'-0 1/4 dimension from the Rhino model is correct.
2) Confirm the locations for all connections for the W-1 glazing system on the Bus Level may be taken from the Rhino model.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Per RFI T-0923 the center line of the bolt shall be 2¿- 0 1/4¿ from the top of the beam.

2. The Rhino model is the geometry control for the W-1 elements as defined in the Contract Documents.

T-0923.2 **SSS - W-1 Glazing System CP6 Connections** **Closed** **05/13/2014** **05/23/2014** **05/27/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 128.2 SK1 & SK2 for items 1 & 2:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Confirmed.

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1) The 1 1/2" thick plate per 4/S1-8003 with the 1/2" fillet welds will interfere with the "CP6" bolts if the beam is placed on the center of the CP6 connection per RFI T-0923 (SK1). Confirm it is acceptable to place the 1 1/2" thick plate on the center of the "CP6" connection and off-set the beam accordingly.

2) Detail 4/S1-8003 calls for the PL 1 1/2" to be 9" wide. Confirm it is acceptable to make the PL 5 1/2" wide as shown to avoid interference with the bolts for the safety handrail post.

2. Proposed change of the stiffener is not acceptable. The stiffener shall be welded to the beam web and flange as shown on the contract document. Adjust safety handrail post as needed to avoid conflict.

T-0924 **BGP - Column Stirrups and Ties at Top of Concourse (Mock-Up Review)** **Closed** **11/19/2013** **11/19/2013** **11/22/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please refer to drawing S1-3304, 3305 and 5051.

Please confirm that it is acceptable to install the top column stirrups and tie at 12.5" from the top of concrete at concourse level for the concrete columns with anchor base plates.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
11/22/2013
RESPONSE:
Installing all column stirrups and tie starting at 12.5" from the top of concrete is not acceptable. It is acceptable to eliminate/lower the column ties that interfere with the key blockout. Note that proposed 12.5" would not be sufficient to clear column stirrups/ties from the key blockout at some locations (Base Plate Types 1B and 1C in Sheet S1-5051, base plates embedded within the concrete).

T-0925 **BGP - Moment Frame Beam Top Tie 180-degree Hook (Mock-Up Review)** **Closed** **11/19/2013** **11/29/2013** **11/22/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please refer to attached drawing 2/S1-3600.

In order to clear the additional top bars in the top layer of

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
11/22/2013

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moment frame beam, Gerdau proposes change one end the moment frame beam top tie hook from 135° to 180°. The opposite end of the tie will remain as a 90° hook.

Please confirm if this is acceptable.

RESPONSE:
Confirmed that it is acceptable to change lower concourse beam top tie 135 degree hook to a 180 degree hook.

T-0926 **BGP - Anchor Bolt Conflict with Column Reinforcement** **Closed** **11/19/2013** **11/29/2013** **12/02/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please refer to drawing S1-3300 and attached SCCI sketch SK-RFI390

SCCI has located a potential conflicts with the column rebar and the column anchor bolts as depicted in the attached sketch. Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
11/27/2013
RESPONSE:
The conflicts between the column ties and anchor bolts indicated in the RFI can be resolved with modifications to column ties as outlined in Sketch SKS-0300.

T-0927 **BGP - Injection Hose Testing Criteria** **Closed** **11/21/2013** **12/01/2013** **12/04/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Webcor Construction LP Jackson Tukuafu **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Scott Bunnell

REQUEST:

Please reference attached Grace/DeNeefTechuical Letter, Submittal TG0600-0025, and Spec Section 03 15 00, 3.4, A.

Spec Section 03 15 00, 3.4, A states, "After concrete has cured for a minimum of 30 days, test the integrity of the entire hose system by compressed air. Ensure that a positive pressure can be maintained for at least 5 minutes."

Page 14 of the "Applicator Manual" included in Submittal TG0600-0025 states that "each section of INJECTO should be pressure tested with water to a minimum pressure of I 00 psi, to insure migration of water through

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
1/29/2013
RESPONSE:
Air is specified, rather than water because the injection hose is flanked with hydrophilic water stops. If the hose leaks, it will activate the water stops and the leaks in the hose will go undetected.

Contractor shall use air to test the hoses as specified.

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the entire joint. If excessive water leakage out of joint is observed, this may indicate the presence of honeycombs or voids and should be noted on job report..."

In addition, the attached Grace/DeNeef Technical Letter also notes that the INJECTO should be tested with water (not air).
.
Please confirm that it is acceptable to test the integrity of the INJECTO hoses with water as required by the manufacturer.

T-0927.1 **BGP - Injection Hose Testing Criteria** **Closed** **01/06/2014** **01/16/2014** **01/21/2014** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference attached Grace/DeneefTechnical Letter and RFI #T-0927 response.

RFI T-0927 response states that "contractor shall use air to test hoses as specified," but the specifications call out several different types of injection hoses. Although, air testing may be suitable for other products specified, Grace/Deneef requires water testing for the INJECTO Tube system. The attached technical letter from Grace/Deneef states that "INJECTO is an open system, and any air pumped in will begin to flow immediately through the 35 micron filter and polypropylene mesh out into the concrete."

Please review and confirm that water testing is acceptable for the Deneef INJECTO Tube system on the TTC project.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
1/17/2014
RESPONSE:
H&B does not disagree with deNeef that air will flow into the concrete. We also assume that water will also flow as readily into the concrete as air. What is the water test intended to demonstrate? The requirement in the specifications was in response to a Webcor comment during the design phase on the system and specification.

The reason air was specified, rather than water is that the injection hose is flanked with hydrophilic water stops. If the hose leaks, it will activate the water stops and the leaks in the hose will go undetected.

T-0927.2 **BGP - Injection Hose Testing Criteria** **Closed** **02/18/2014** **02/28/2014** **02/19/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Per conference call with design team, please confirm that it is acceptable to test the waterstop injection hoses with water as recommended by manufacturer.

Confirmed.

T-0928 **RFI T-0928 SSS - Detail Clarification at Cast Node Connections** **Closed** **11/22/2013** **12/02/2013** **12/04/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please reference the cast node connection details 2/S1-4354 and 2/S1-4355 shown on CD RFI 131 SK1 and verify the following.
1) Confirm the indicated 4'-0" radius is acceptable or provide alternate dimension.
2) Confirm the indicated 4'-0" radius is acceptable or provide alternate dimension.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) 4 ft radius is confirmed.

2) Radius = 2 ft

T-0929 **SSS - Connection Clarification at Edge of Slab GL 11** **Closed** **11/22/2013** **12/02/2013** **12/06/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Refer to S1-2403 for locations near grids D.11 and F.11 indicated on CD RFI 135 SK1. As detailed in CD RFI 135 SK2, the L5x5 connection angles required per detail 1/S1-5010 will extend beyond the edge of slab by 3/16". Please confirm this is acceptable or provide an alternate detail for this condition.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Shift the W21x50 beams so that they are 6" from edge of slab and the connection angle legs are inside the edge of slab.

T-0930 **SSS - Scope Confirmation at Stairs** **Closed** **11/22/2013** **12/02/2013** **11/25/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Gregory Kemerer

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Per the response to TG07.1R-0041, "the scope of work for stair posts, landing framing, stringers, and checkered plate

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The referenced response to TG07.1R-0041 applies to details 1,3,4,5,6,8, & 10 on S1-7601. This response

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tread and riser will be included in a future bid package."
In accordance with TG07.1R-0041, please confirm this response applies to the entirety of the TG07.1R scope including, but not limited to, drawings S1-7001 through S1-7016.

applies to other drawings, including S1-7001 through S1-7016, to the extent that those details are referenced.

Reference Exhibit A Section IV.C.1.e and Section IV.C.2.e for clarification on stair support framing included per contract.

T-0931 **SSS - Connection Clarifications at Isolation Bearings** **Closed** **11/22/2013** **12/02/2013** **11/26/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please refer to the isolation bearing details on S1-5021 and CD RFI 138 SK1 & SK2 attached for the following items:
1) Please provide dimensions required to located bolts.
2) Confirm the cap plate may be welded as indicated in the attached sketch.
3) Please provide dimensions required to located bolts.
4) Please provide dimensions required to located bolts.
5) Please provide dimensions required to located bolts.
6) Please provide dimensions required to located bolts.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Align the bottom bolts with top bolts.
2) Acceptable.
3) Locate bolts per workable gauges provided for wide flange beams in AISC 360-05. Top and bottom bolts shall be aligned to each other.
4) Provide a 3" offset between the bolts and the centerline of the rubber bearing.
5) Provide a 3" offset between the bolts and the centerline of the rubber bearing.
6) Provide a 3" offset between the bolts and the centerline of the rubber bearing.

T-0931.1 **SSS -Connection Clarifications at Isolation Bearings** **Closed** **01/22/2014** **02/01/2014** **02/03/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please refer to the isolation bearing details on SK1 & SK2 attached for the following items:
1) Please provide the bolt pattern & size connecting the isolation bearings to the W12x65 & W8x31.
2) Please provide the bolt pattern & size connecting the isolation bearings to the 3" steel plate & C15x40.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Total 4 bolts shall be provided at the top and bottom of each rubber bearing with a 3" offset between the bolts and the centerline of the bearing (square pattern) as noted in response to RFI 931. All bolts are to be 3/4" diameter A325N bolts as noted in the detail.

2) See response to 1).

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Note that the 1/2" plates attached to the rubber pads at top and bottom shall have female holes to "lock" the threaded bolts.

T-0932 **SSS - Detail Clarification at Hanger Support** **Closed** **11/22/2013** **12/02/2013** **11/26/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Refer to S1-2503 near grid 9.9/C and CD RFI 139 SK1 & SK2 which indicate that the W12x65 hanger support beam fouls the skewed W40x327. This same condition occurs at Grid 9.9/G.

Please confirm it is acceptable to trim the bottom flange of the W12x65 beam to maintain a ½" gap between the beam flanges.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed that the contractor's proposal of trimming the bottom flange of W12x65 is acceptable

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T-0933 **SSS - Slab Opening Discrepancy at F.5** **Closed** **11/22/2013** **12/02/2013** **12/09/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

The slab opening near grid F.5 indicated on drawings S1-2302 and 2/S1-7101 (SK1 & SK2) does not match the location indicated on drawing A1-2862 (SK3). Please clarify the correct slab opening location and provide dimensions to locate the slab opening and perimeter steel.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Slab opening on S1-2302 and 2/S1-7101 will be updated to match the slab opening per A1-2862 in the Concrete IFB Addendum #1 drawings that will be issued soon.

T-0934 **SSS - Beam Connection Clarifications** **Closed** **11/22/2013** **12/02/2013** **12/06/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please refer sketches CD RFI 141 SK1 to SK7 for beam to beam connection clarifications required per items 1 to 4

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Acceptable.
2) Acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

below:

1) On S1-2505 between grids 1.4 & 2, the required (9) bolts per 1/S1-5010 will not fit in the W33 due to the size of the supporting BU beam. Confirm (8) bolts as shown are acceptable or supply an alternate solution. See SK1 & SK2.
2) On S1-2505 near grids 24.9/E, the required (9) bolts per 1/S1-5010 will not fit in the W33 due to the size of the supporting BU beam. Confirm (8) bolts as shown are acceptable or supply an alternate solution. See SK3 & SK4.
3) On S1-2507 near grids 33.2/E, the required (10) bolts per 1/S1-5010 will not fit in the W36 due to the size of the supporting BU beam. Confirm (8) bolts as shown are acceptable or supply an alternate solution. See SK5 & SK6.
4) On S1-2403 at grids 8/D.8, the required (8) bolts per 1/S1-5010 will not fit in the W30 due to the size of the supporting BU beam. Confirm (7) bolts as shown are acceptable or supply an alternate solution. See SK7.

3) Acceptable.
4) Acceptable.
One general comment that applies to all sketches included in this RFI is that where shallower beams are supported by deeper girders, coping the bottom flange of the shallow beam shall not exceed 1" from the end of the beam.

T-0935 **BGP - Lower Concourse Typical Moment Frame Beam Dimensions** **Closed** **11/22/2013** **12/02/2013** **11/25/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please refer to drawing S1-2204 and S1-2205.

Plan sheets S1-2204 and S1-2205 show 8 Moment Frame Beams (MFB) from GL 14 to GL 20.1 designated as typical. There are no section views of these beams which show the dimensions, as the other MFB have.

Please provide both the Width and Depth of the typical MFB in the lower concourse level.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
11/22/2013
RESPONSE:
Typical lower concourse moment frame beam details are in Sheet 1/S1-3600. Corresponding cross-section detail is in Detail 2 of the same sheet. Beam width and depth info are provided in the cross-section detail.

T-0936 **SSS - HSS Hanger Connection Clarification** **Closed** **11/22/2013** **12/02/2013** **12/04/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Refer to S1-2403 (CD SK1) which indicates the edge detail between grids 8 & 9.9 is to be constructed with an L5x5x3/8 angle per 9/S1-5000. Please confirm it is acceptable to extend the W24x68 beam to the edge of slab, eliminate the L5x5x3/8, and connect the HSS 5" hanger to the W24x68 similar to the detail shown on 1/S1-5020 or provide an alternate detail for this connection.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Not acceptable. Provide the edge of slab support detail per 9/S1-5000 except:
1) Weld the gusset plates to the HSS column
2) Stop the 3/8" bent plate short at the HSS column face. The 3/16" field weld at the bent plate edge is not required
3) Coordinate with RFI T-0901 for information missing on 9/S1-5000
Note that the back span kicker angle is not required at posts or columns as noted on 9/S1-5000.

T-0937 **SSS - SMRF Flared End Connection** **Closed** **11/22/2013** **12/02/2013** **12/02/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Refer to the SMRF flared end connections detailed in CD RFI 144 SK1 to SK5 and clarify the following:

Detail 9/S1-4202 indicates that the flared beam flange is to be the same width as the column flange while detail 5/S14202 does not match this detail and indicates a narrower flared beam flange. Please confirm that the beam flange width is as noted on the elevation drawings and the flange width shall increase at the flared ends to match the column width per detail 9/S1-4202.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed that the beam flange width is as shown in elevation drawings. Flared beam flange is 6" wider (3" flare on each side) than the beam flange width shown on elevation drawings. Therefore, depending on the location, flared beam flange width is either equal to the column flange width or smaller.

T-0938 **BGP - One-Way Slab Shrinkage and Temperature (S&T) Bars at Columns** **Closed** **11/22/2013** **12/02/2013** **11/25/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Webcor Construction LP Jackson Tukuafu **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please refer to drawing S1-3500

In order to alleviate congestion in a condition where columns cross lower concourse support beams, please confirm that it is acceptable to eliminate the top and bottom shrinkage and temperature bars for the one-way

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

RESPONSE: RFI T-0938 BGP - One Way Slab Shrinkage and Temperature Bars

George Metzger
11/25/2013
RESPONSE:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

slabs up to 12" from the face of support column.

Contractor's proposal to eliminate the one-way slab temperature & shrinkage bars adjacent to the moment frame beams (up to 12" from the face of the beam) is acceptable.

T-0939 **SSS - Connection Clarifications at Moment Beams** **Closed** **11/25/2013** **12/05/2013** **12/06/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Refer to CD RFI 132 SK1 to SK4 requiring clarification on the moment beam to beam connections per the following.

1) At the location indicated on CD RFI 132 SK1, the continuity plate will foul the bolts if (8) are provided per 1/S15010. Please confirm it is acceptable to provide (6) bolts in the W30x99 as shown on CD RFI 132 SK2.
2) Confirm the continuity plate detailed on CD RFI 132 SK2 is correct as shown with tf and bf per W24x68.
3) Please confirm it is acceptable to provide one continuity plate with a slot 1/8" larger than the beam web and the 3 ½" beam cope as indicated on CD RFI 132 SK2 to allow for a continuous CJP weld of the continuity plate.
4) At the location indicated on CD RFI 132 SK1, the continuity plate will foul the bolts if (11) are provided per 1/S1-5010. Please confirm it is acceptable to provide (8) bolts in the W40x277 as shown on CD RFI 132 SK3.
5) Confirm the continuity plate detailed on CD RFI 132 SK3 is correct as shown with tf and bf per W30x99.
6) Please confirm it is acceptable to provide one continuity plate with a slot 1/8" larger than the beam web and the 3 ½" beam cope as indicated on CD RFI 132 SK3 to allow for a continuous CJP weld of the continuity plate.
7) At the location indicated on CD RFI 132 SK1, the continuity plate will foul the bolts if (9) are provided per 1/S15010. Please confirm it is acceptable to provide (8) bolts in the W33x118 as shown on CD RFI 132 SK4.
8) Please confirm it is acceptable to provide one continuity plate with a slot 1/8" larger than the beam web and the 3 ½" beam cope as indicated on CD RFI 132 SK4 to allow for a continuous CJP weld of the continuity plate.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Acceptable.
2) Confirmed.
3) Confirmed.
4) Acceptable.
5) Confirmed.
6) Confirmed.
7) Acceptable.
8) It is acceptable to use a single plate with a slot, however, coping of the beam bottom flange is not allowed at this (or similar) location(s) since there is bottom flange bracing (see 6/S1-5015). It is acceptable to locally cope the beam web for the slotted continuity plate.
9) Confirmed.
10) It is acceptable to apply solutions provided in 1 through 9 at similar locations at Bus Deck Level along GLs 9.9, 10.1, 19.9 and 20.1 only. For all other locations submit a separate RFI for each case.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

9) Confirm the continuity plate detailed on CD RFI 132 SK4 is correct as shown with tf and bf per W30x99.
10) Confirm the response to items 1 to 9 may be typically applied at other similar conditions/locations or provide a typical solution for the condition where the required continuity plate extends into the double angle connection of a deeper beam.

T-0939.1 **SSS - Connection Clarifications at Moment Beams** **Closed** **12/19/2013** **12/29/2013** **12/30/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

At beam to beam moment connections as noted in RFI # T-0939 and other similar locations please confirm if the continuity plate is required when the nominal depth of the beam shown as dimension "X" is 3" or less as per CD RFI 132.1 SK1.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed that the continuity plate is required as shown on Detail 4G/S1-5010.

T-0940 **SSS - Shear Plate Dimension** **Closed** **11/25/2013** **12/05/2013** **11/26/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please confirm that the dimension indicated on CD RFI 130 SK1 at the Type 1 Drag Connection per detail 1/S1-5016 is to be taken from the Thornton Tomasetti Tekla Model.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

No, the distance in question as shown on CD RFI 130 SK1 is to be determined based on the contract document Detail 1/S1-5016 (not based on the TEKLA model). The first row of bolt is to be 6 1/2' min (1 1/2" MIN+1" + 4") from the bottom of the connection pad as detailed.
The contactor shall also note that the cast node work point was incorrectly shown on RFI 130 SK1. It shall be at the same elevation as the center of the beam.

T-0941 **SSS - Beam Connection Details** **Closed** **11/25/2013** **11/25/2013** **12/04/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On S1-
2604 near grids 16/E (near grid 25 sim.) at the Penthouse column base connections refer to sketches CD RFI 146A SK1 & SK2 for items 1a & 1b noted below.

1a) The noted beams connect to the supporting beam with double angles per S1-
5010 but they will not be erectable due to the stiffeners per 11/S1-7630
(SK2). Confirm it is acceptable to use a pulled-out full depth shear plate per 4/S1-5013 at each end.

1b) Similar conditions occur on S1-
2606 about grid 25. Confirm the solution in item 1a may b e applied at other similar conditions.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1a) Confirmed.
1b) Solution in item 1a will be reviewed on a case by case basis. For other similar conditions submit a separate RFI for each case.

T-0941.1 **SSS - PE403 & 404 Framing at Roof Level** **Closed** **03/24/2014** **04/03/2014** **04/04/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Confirm the post to beam connections are acceptable as detailed on SK2 for the 3 varying flange widths.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Acceptable at locations highlighted on SK1. We assume that for type 2 and type 3 connections the base plates are 1 1/4" thick and the HSS is CJP welded to the base plates similar to type 1 connection on SK2. All bolts shall be 7/8" diameter A325 bolts. Provide stiffener plates below HSS columns per 10/S1-7630.

T-0942 **SSS - Shaw Alley Bridge Connections** **Closed** **11/25/2013** **12/05/2013** **12/19/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On S1-
2403 at the Shaw Alley Bridge refer to sketches CD RFI 1 04 SK1 to SK4 for items 1 to 6:
1) Confirm the horizontal long slots in detail 5/S1-5013 apply only at this connection.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.
2) Confirmed.
3) Confirmed.
4) Confirmed the weld is a PJP weld. Root opening and bevel angle at PJP are to be based on the weld

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

2) Confirm the closure plate may be welded as shown in li eu of the requested butt weld.
3) Confirm the closure plate may be welded as shown in li eu of the requested butt weld.
4) Confirm the weld is a PJP weld.
5) Confirm this CJP weld may be welded as shown.
6) Confirm the detail on SK2B is acceptable for 5/S1-2403 Plan A.

procedure used, which is yet to be submitted.
5) The root opening and bevel angle at the CJP weld does not appear to be AISC prequalified. Specify prequalified CJP welds per Table 8-2, AISC 360-05.Contractor to submit information on welding procedures before information highlighted in 4) and 5) can be confirmed.
6) Confirmed

T-0943 **SSS - Light Column Base Details** **Closed** **11/25/2013** **12/05/2013** **12/11/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

1. Please supply the material manufacture(s) for the "SEAL RING" a catalog cut or other information. Additionally, please supply the specifications for the material, size necessary to fit specified tube and other information necessary to install the seal rings.

2. Please provide weld size and weld process indicated on the attached sketch.

3. Please provide omitted dimensions for "CAVITY TUBE" requested on the attached sketch

4. Please confirm that welding the WELDED STEEL TUBE to the SOLID ROUND ANCHOR PLATE is acceptable and the alteration of the A722 plate by the welding process is acceptable.

5. Please confirm missing dimension for anchor bolt projection. Note on 4/S1-6008 states "END OF ANCHOR BAR LEFT AFTER TRIMMING MUST BE LONG ENOUGH TO ALLOW RE-TENSIONING LATER". Skanska will provide projection of ½ coupler length to attached stressing rod at future date. Please confirm compatibility with TJPA's stressing system used later may be different than Contractor's stressing system.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Seal ring is to stop grout from entering steel tube as well as to limit spread of corrosion protection. This requires a rubber O-ring or possibly just denso tape to seal the gap. Additionally, please add a second seal ring between the PE-Tube and the shrinkable tube, to also inhibit the spread of corrosion protection.

2. These are non-structural welds. Min. fillet size is all that is required.
2e. Please note that there should be no weld here. The plastic PE-Tube cannot be welded to the steel cavity tube.

3. Dimension has been added, see marked-up sketch.

4. Only the threadbar is Grade 150 ASTM A722 Type II. Anchor plate and steel tube are ASTM A572 Gr. 50. Steel tube should be welded to anchor plate prior to installation, so no welding is done near threadbar.

5. Min. length above nut to be determined by contractor based on his means and methods of pre-tensioning. Final length of threaded rod above nut must be long enough to allow re-tensioning at a later date, which must equal thread length of jack used + elongation of threadbar.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Additional comments:
- Please delete bitumen tape at end of shrinkable tube from shop drawings. Bitumen tape must be applied at end of PE-Tube.

T-0944 **SSS - Beam Connection Clarification at Edge of Slab** **Closed** **11/25/2013** **12/05/2013** **12/04/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Refer to CD RFI 169 SK1 and SK2 showing beam connections into slab openings near grid 11/C on S1-2403.

1) The double angle connection required per S1-5010 will extend past the edge of slab as shown on CD RFI 169 SK2. Please confirm it is acceptable to replace these connections with shear plate connections per S1-5011 or provide an alternate solution.

2) Confirm it is typically acceptable to replace the double angle connections with shear plate connections when the double angles extend past the edge of slab.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.
2) Solution in item 1 will be reviewed on a case by case basis. For other similar conditions submit a separate RFI for each case.
Note that for beams that are perpendicular to the slab edge (for example W21x44 beams that support the W12x14 beams on SK1), the distance between the beam end and slab edge should not exceed 1 1/2" typically.

T-0945 **SSS - Connection Clarification at Slab Edge** **Closed** **11/25/2013** **12/05/2013** **12/06/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Refer to S1-2403 near grid 9/E for slab edge support connections as indicated on CD RFI 170 SK1 and SK2. The backup kicker brace detailed on 9/S1-5000 will fit in condition # 1 as indicated, but it will not fit in conditions #2 and #3 due to the limited difference in beam depth.

Please confirm it is acceptable to omit the kicker braces at conditions #2 and #3 or provide an alternate detail for these conditions.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) For condition #2, provide back-up brace per 6/S1-5015 except:
a) Use 1/2" plate, instead of 1¿ plate shown on 6/S1-5015.
b) Weld size for double sided fillet weld is 5/16¿ instead of ¾¿ shown in 6/S1-5015.

2) For condition #3 provide a back-up brace per SKS-0290 submitted with response to RFI T-0824 except:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

a) Provide a 1'-0¿ long WT 4x10.5 CJP welded to the bottom as shown on SKS-0290.
b) Double sided 3/16" fillet weld between the WT stem and bottom flange of the W21 beam .

T-0946 **Dimension Clarification at Edge of Slab** **Closed** **11/25/2013** **12/05/2013** **12/04/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Refer to CD RFI 172 SK1 & SK2 regarding the following question along grid lines C & G on Level 2 at the edge of slab. The dimension indicated in CD RFI 172 SK1 is shown as 7" or 8" on S1-2402, S1-2403, and S1-2404 while detail 1/S15032 shows this as a 6" dimension.

Please confirm the 7" and 8" dimensions currently modeled based on the plan drawings are to be used and the 6" dimension in detail 1/S1-5032 does not apply at specified locations.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed

T-0947 **SSS - Continuity Plate Foul at Column Web** **Closed** **11/25/2013** **12/05/2013** **12/04/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Refer to grids 11/D and 11/F on B/S1-4106 at Level 2 as indicated on CD RFI 173 SK 1 & SK2. The continuity plate required per 4/S1-5012 will foul the WT in the column web at the location indicated on CD RFI 173 SK2.

Please confirm it is acceptable to supply (2) continuity plates, one on each side of the stem of the WT, or provide an alternate detail for this condition.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

At the two locations indicated in the RFI (GL 11/D and 11/F), it is acceptable to provide a single continuity plate placed between the WT and beam bottom flange. Plate to be provided near side and far side (both sides of the column web) and detailed per 5/S1-4202.

T-0948 **SSS - Connection Clarifications at Beams to Transfer Girder** **Closed** **11/25/2013** **12/05/2013** **12/06/2013** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On S1-2303 at grids 11/C @ beams to transfer girder refer to sketch CD RFI 178 SK1:
The bolts thru the column cap plate & Transfer Girder per 4/S1-5052 are fouling the 3" connection plate as shown. Please supply a solution.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The conflict between the base plate bolts and the perpendicular drag beam plate at GL11/C can be resolved per modifications outlined in Sketch SKS-0306.

T-0948.1 **SSS - Connection Clarifications at Beams to Transfer** **Closed** **02/03/2014** **02/13/2014** **02/10/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Per the response to Webcor RFI # T-0948 (SK RFI # 227) the cap plate length was revised to suit a shear plate fouling issue at the cap plate bolts. Please verify the sketch from Thornton Tomasetti SKS-306 can be applied at grids 8/G on S1-2303 and we can adjust the plate length for this similar condition. Refer to sketches CD RFI 178.1 SK1 & SK2 showing a 6 1/4" adjustment at one side of the cap plate.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

At GL 8/G transfer girder, it is acceptable to increase bottom base plate length by 6-1/4" on the north side and 4" on the south side (plate flush with the end of the transfer girder). It is also acceptable to conceptually apply the solution provided in SKS 306 for RFI T-0948. As indicated in this sketch, one of the stiffeners on the north side can be omitted. All other 18" long stiffeners, machined geometry and the bolts to be moved 6-1/4" outwards from the plate center (both on the south and north sides).

T-0949 **SSS - Stair ST304 Framing and Connection Clarifications** **Closed** **11/25/2013** **12/05/2013** **12/19/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

For Stair ST304 refer to sketches CD RFI 179 SK to SK6 for items 1 to 6:
1) The noted beam flange extends into the slab opening for ST304 by 1/2" as shown. Confirm this is acceptable or supply revised dimensions on 1/S1-7008 or A1-2863.

2) This stair post is currently located 1 1/2" from the edge of slab. This does not agree with typical connection detail 1/S1-7600 which shows the stair post extending past the edge of slab 1/2" max. Please confirm this is the intent and supply a new connection detail for the post to the slab or supply revised dimensions for the stair post locations in

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Beam locations and slab opening have been changed in ASI 109 and Concrete IFB Addendum #1 drawings. Beam flange does not extend beyond slab edge.
2) Edge of opening and stair post locations have changed. See updated ASI 109 drawings and SKS-0312 submitted with response to RFI T-0955.
3) See response to 2).
4) See response to 1).
5) See response to 2).
6) See response to 2). Detail 1/S1-7600 shall apply.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

detail 1/S1-7008 or the slab opening location on drawing A1-2863 to conform to detail 1/S1-7600.

3) Similar to item 2 on SK3. Please clarify.

4) The noted beam extends into the slab opening for ST304 by 2 1/2" as shown. Confirm this is acceptable or supply revised dimensions.

5) Please supply a connection detail for the noted stair post as 1/S1-7600 does not apply and 10/S1-7600 will not work as the BU WT will only partially fit on the TR11 flange.

6) Confirm detail 10/S1-7600 may be applied at the noted location to connect the stair post to the supporting beam.

T-0950 **SSS - Stair & Elevator Connection Clarifications** **Closed** **11/25/2013** **12/05/2013** **12/09/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

For typical stair & elevator connections refer to sketches CD RFI 180 SK1 to SK3 for items 1 to 5:

1) Confirm this connection may be applied as shown on SK2B (item 2).

2) Confirm connection as shown is acceptable. All not shown is per 2/S1-7600).

3) Confirm it is acceptable to substitute the L3x3 angle with L5x3 angle. The connection with the L3x3x3/8 angle is not possible as the brace angles will foul the horizontal legs as shown.

4) Confirm the same dimensions may be used when detail 2D/S1-7600 occurs.

5) Confirm this is the correct interpretation of the weld for the angles to the HSS beam.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Acceptable. See 2) for additional notes.
2) It is acceptable to typically locate bolts as shown in SK2B. However, the centerline of the kicker angle should pass through the centerlines of the beam web and flange.
3) Acceptable.The work point of the brace shall intersect the center of the L5 x 3x3/8.
4) Confirmed.
5) Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0951	SSS - Knock-Out Slab Clarification	Closed	11/25/2013	12/05/2013	12/26/2013	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On S1-2303 there is a detail 7/S1-5004 shown near grids F/11 to supply bent plate to support the permanent slab. This is a general bent plate detail for the knock-out areas and does not provide enough detail at the stepped Transfer Girder. Please see the following questions below:

1) Please verify if bent plate is required parallel to the Transfer Girder along grid 11 to support the permanent slab at the knockout areas? If yes, will new beams be needed to support the bent plate and slab? Please provide size and location if new beams are needed at these areas. See RFI 185 SK1 & SK2.

2) Please verify step in slab from grid D to F along grid line 11 will incase the Transfer Girder? Will headed studs be required at the transfer Girder web? If so, please provide size and spacing. See RFI 185 SK1 & SK2.

3) Please verify it is the designs intent to have the edge of the knock-out slab extend past the edge of the Transfer Girder flange at grid line 10.1? If yes, please provide details to support the edge of the permanent slab at these locations. See RFI 185 SK1.

4) Please confirm only steel highlighted in yellow will require bent plate to support the permanent slab? See RFI 185 SK1.

5). Please clarify if any slab support is required for the knock-out slab at the edge of the escalator pit as shown on detail 6/S17660, referenced from the escalator plan on 1/S1-7302? Should the knock-out slab be separated in some way from the curb/wall of the escalator pit? See RFI 185 SK1.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) The low permanent slab and new supporting beams are not required.

2) Step in slab does not need to encase the transfer girder. The top slab stops at the step and is supported by edge of slab detail similar to 9/S1-5000 (See attached sketch SKS-0315). There will be architectural wall between the high and low slabs as shown in the sketch.

3) The edge of knock-out slab is 1' - 9" away from GL 10. With a 36" wide flange of the transfer girder, the edge of knock-out slab is 21- 36/2 = 3" outside of the flange edge. The small overhang of the slab is to be supported per detail 8/S1-5000.

4) Bent plate and edge of slab detail per 8 or 9/S1-5000 shall apply not only at the members highlighted in yellow but also at portion of the W21x50 beams below the escalator pits. Coordinate with response to RFI T-0868.1.

5) See response to 4). Coordinate with response to RFI T-0868.1.

T-0951.1	SSS - Knock-Out Slab Clarification	Closed	03/10/2014	03/20/2014	03/20/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 325 SK1 for items 1 & 2:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) The noted dimension shall be 8".

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

1) Confirm the edge plate per T-0951 (SK 232, CD 185) SKS-0315 terminates 1'-0 from Grid 'D' or supply the missing dimension.
2) Confirm the edge plate per T-0951 (SK 232, CD 185) SKS-0315 terminates 8" from Grid 'F' or supply the missing dimension.

2) Confirmed.

T-0952 **BGP - Use of historical concrete strength test results** **Closed** **11/27/2013** **12/07/2013** **12/05/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author:

REQUEST:

Further to discussion with Thornton Tomasetti field personnel.

WOJV is asking for the remainder of the Mat slab pour, that the requirements per specification Section 31 55 00 1.4J may be deemed satisfied after 14 days to start removing the level D bracing based on historical data of the 284 concrete strength test results completed to date.

Please confirm if this would be acceptable

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
12/4/2013
RESPONSE:
The RFI does not stand as written.
The historical mat slab break data is sufficient only to waive the specification requirement that the TJPA Representative review and approve strength test results prior to removal of bracing (Section 31 55 00 1.4J). It is permissible that Webcor-Obayashi review the 14 day results to determine early brace removal provided they establish and submit acceptance criteria. SEOR is awaiting documentation of the procedure and acceptance criteria, which may take the form of an RFI. Language for this RFI has already been discussed with WO and TCCO.

T-0953 **SSS - Pin & Pipe Connections at Bus Deck Level** **Closed** **12/02/2013** **12/12/2013** **12/20/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On S1-
2505 at grids 21 & 22 refer to sketches CD RFI 149 SK1 t o SK5 for items 1 to 3:

1) The plates for the pin connection per 5/S1-5017 foul the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Do not modify the pin connection. Move the beams away the pin connection slightly to clear the pin connection.
2) Do not cut the beam bottom flange. The erection issue can be resolved by field welding the bottom

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

beam connections. See SK5 and confirm it is acceptable to modify the pin location as shown to avoid fouling the beam connections.
2) The pipe with connections per 5/S1-5017 at both ends will not be erectable without cutting the flanges on the beam stubs. Confirm it is acceptable to cut the bottom flanges as shown on SK5 or supply an alternate solution.
3) The pipe with connections per 5/S1-5017 at both ends will not be erectable without cutting the flanges on the beam stubs. Confirm it is acceptable to cut the bottom flanges as shown on SK5 or supply an alternate solution.

flange to beam web as noted in the detail.
3) See response to item 2)

T-0953.1 **SSS - Pin & Pipe Connections at Bus Deck Level** **Closed** **08/25/2014** **09/04/2014** **09/08/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 149.1 SK1:
The 9'-8 dimension will need to increase to 9'-11 3/4 in order to have sufficient access to insert tension control bolts for the beam connections.
Confirm that is acceptable. Note that the BU beam will extend past the edge of slab.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is not acceptable to increase the 9'-8" dimension to 9'-11 3/4". Instead, change the 1'-3" dimension to 11". Please refer to the blue markup on the enclosed sketch CD RFI 149.1 SK1 submitted with this RFI.

T-0954 **SSS - Beam Connections at Skewed BU Girders** **Closed** **12/02/2013** **12/12/2013** **12/19/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On S1-2506 @ line 26 at the skewed BU girder connections refer to sketches CD RFI 176 SK1 & SK2:

1) The double angle connection per S1-5010 for the noted (3) beams will foul the connection per detail 4/S1-5017 as shown. Confirm it is acceptable to connect the noted (3) beams to the 2" plate in detail 4/S1-5017 using shear plates per S1-5011 or supply an alternate detail.
2) The double angle connection per S1-5010 for the noted beam will foul the vertical stiffener per detail 4/S1-5017.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

A single shear plate (Type 4) drag connection as shown in SKS-0313 shall be provided in lieu of the Type 2 (R) pin connections at the two locations (Total 4 connections) to resolve the issues highlighted in the RFI.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Confirm it is acceptable to connect the noted beam using a shear plate per S1-5011 or supply an alternate detail.

T-0955 **SSS - Stair Post HSS Interference** **Closed** **12/02/2013** **12/12/2013** **12/19/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On detail 1/S1-7008 at grids 11/C at the Stair post refer to sketches CD RFI 175 SK1 & SK2.
The HSS6x6 stair post fouls the BU column as shown.
Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The HSS 6x6 stair post has been moved in ASI 109 drawings so that it does not foul the BU Column. Dimensions to locate HSS columns around Stair 304 have been noted on the attached sketch SKS-0312

T-0955.1 **SSS - Slab Opening Clarification** **Closed** **01/22/2014** **02/01/2014** **02/03/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

This is a follow-up RFI to RFI T-0955 (SK 224 CD 175)
See attached CD RFI # 175.1 SK1 & SK2:
The post locations have been revised with the revised locations provided in RFI T-0955 SKS-0312 (SK 224 CD 175).
Confirm the slab opening as shown on A1-2863 (SK2) remains unchanged.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to Drawing A1-2863, Revision No. 3, issued as part of TG07.2 Concrete Addendum #1 for revised slab opening dimensions.

T-0955.2 **SSS - HSS Stair Framing ST304** **Closed** **02/07/2014** **02/17/2014** **02/21/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

As per response to RFI T-955 dimensions were indicated on TT drawing SKS-0312 to locate the HSS posts and revised drawings were to be provided in ASI 109. Drawing S1-2303 was provided but no dimensions were indicated, drawing A1-2863

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The 6' - 6" dimension is from GL C to the edge of slab at the opening. The 2' - 3 3/8" dimension is from GL C to centerline of HSS 6x6 while the 4' - 8 3/4" dimension is from centerline of HSS 6x6 to centerline HSS 12x6. Refer to attached sketch SKS-0330 for

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

was not provided. The dimensions given to locate the HSS 6x6 post on SK1 conflict with the 6'6" dimension indicated from GL C to the center of the HSS 12x6. Please verify the dimensions to locate the HSS 6x6 indicated on SK1.

reference.

T-0955.3 **SSS - HSS Stair Framing ST304** **Closed** **03/20/2014** **03/30/2014** **04/07/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 175.3 SK1 to SK3 for items 1 to 4:

1) The noted dimension is shown as 12'-6 1/4 in RFI T-0955.1 (SK 224.1, CD 175.1) & A1-2863. Which is correct?
2) Supply a connection detail for the posts below.
3) Work with SK3 and confirm the noted dimensions are correct (to match the slab opening dimensions on the Ground Level).
4) Per S1-2403 the W12x14 beam is shown centered on the HSS12x6 stair posts. With the 5" offset dimension to the edge of slab, the south end of the slab opening will be 12'-4 7/8 from Grid C.3.
Work with SK3 and confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Due to coordination between the design team, the opening dimensions have changed at ST 304. The noted dimension shall be 13' - 2 3/8".
2) Provide connections at the top of the posts per 7/S1-7604.
3) Confirmed.
4) The noted dimension shall be 12' - 1 3/4". The W12x14 beam shall move to maintain the 5" offset from the edge of slab. Note that on structural drawings beam locations are noted from edge of slab and not the other way around.

T-0956 **SSS - Connections at Escalator Areas** **Closed** **12/02/2013** **12/12/2013** **12/19/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On S1-
7303 at the escalator areas refer to sketches CD RFI 177 SK1 & SK8 for items 1 to 6:
1) The elevation of the low beams cannot be determined as the information for the low slab is not shown on A1-2893 (SK2). Please supply the elevation for the low beam as shown on SK3, SK4, SK5 & SK7
2) Confirm the WT on top of the low W18x35 is required at (4) locations as shown.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) See updated drawings submitted with ASI 109. The W18x35 low beam has been changed to a W30x90 beam. T/steel of the W30x90 beam is flush with the bottom of the shim plate per Detail 5/S1-7661. Provide a 1/2" thick shim plate at the locations highlighted in the RFI.
2) Confirmed. See updated drawings submitted with ASI 109.
3) See architectural edge of slab drawings for location

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

3) Supply dimension.
4) Supply dimension.
5) Confirm the edge plate is to extend up to the top of low slab.
6) Supply a connection detail as 1/S1-7604 (SK7) does not represent the actual condition.

and dimension of curbs.
4) See architectural edge of slab drawings for slab step locations and step dimension.
5) Confirmed.
6) Cope the W30x90 beam at the top and provide connection per 1/S1-7604 with 4 bolts.

T-0957 **SSS - Column Flange Plate Thickness Clarification** **Closed** **12/03/2013** **12/13/2013** **12/09/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Reference the sample location indicated on A/S1-4102 (CD RFI 186 SK1) and confirm the thicker flange plates of the bottom column are intended to extend to the column splice locations as noted. Please also confirm this is typical at other similar locations.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Yes, the thicker flanges of the column below are intended to extend to the column splice locations above the Bus Deck Level. We confirm that this is typical at other similar locations.

T-0958 **SSS - Beam Elevations and Locations at Escalator** **Closed** **12/03/2013** **12/13/2013** **12/19/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

At the escalator area at the ground level near grids 10/1/E, refer to sketches CD RFI 188 SK1 to SK3 for the following items

1) Per S1-2303 on Sk1, verify the two noted beam elevations (-0'-1 ½") should read (+0'-1 9/16") to match the underside of the escalator support slab.
2) Reference S1-7302 and A1-2863 on SK2 & SK3 and verify the escalator opening locations should be 2'-7 ¾" from grid line E, not 3'-0 5/8" as indicated on S1-7302. Note these dimensions set the beam locations 8 ¾" from the openings shown on S1-2303.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed. The T/steel of the W21x50 beams should be 19'- 1 5/8".
2) Confirmed. Highlighted dimension should read 2' - 7 3/4". See updated drawings submitted with ASI 109.

T-0959 **SSS - Column Continuity Plate Requirements** **Closed** **12/03/2013** **12/13/2013** **12/19/2013** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On S1-2603 at grid 11/D, refer to sketches CD RFI 189 SK1 to SK3 requesting clarification on the column continuity plate requirements per the following:

1) Detail 5/S1-4202 requires the continuity plate thickness be equal to or greater than the beam flange. Please confirm that the W40x593 beams (replaced with BU plates with 3 ¼" flanges) require 3 ¼" continuity plates per this detail.
2) Due to the continuity plate thickness and double weld preps, please verify the revised corner access hole sizes indicated on SK3 of 2 ½" and 2 ¾" are acceptable.
3) Please confirm the proposed weld indicated on SK3 for the continuity plate is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Continuity plate per 5/S1-4202 is not required at the highlighted location. Provide 1/2" thick horizontal stiffeners plates at the top on each side of the column web. Provide a CJP weld to column flange and web. Provide a three sided double fillet weld "S" = 5/16" at the bottom horizontal stiffener plate as shown on 3/S1-5013.
2) Acceptable.
3) Confirmed.

T-0960 **SSS - Cast Node Weight and Center of Gravity** **Closed** **12/03/2013** **12/03/2013** **12/04/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Webcor Construction LP Jeff Galoyan **Answered By:** Turner Construction Comp Gary Krutsch

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

As per drawing S-0007 Note SS-8 Skanska is preparing our erection procedures. In order to accurately incorporate the cast nodes into our calculations please provide the latest weight and center of gravity (in x, y, z) for each of the cast nodes.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

CCX response complete - see attached file.

T-0961 **SSS - Slab Opening Locations at Roof Park Level** **Closed** **12/04/2013** **12/14/2013** **12/16/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Reference A1-2902 and A1-2903 and provide the slab opening locations for the following items:

1) Provide the missing dimension for the slab opening size as indicated on SK1.
2) Confirm the dimensions noted on SK2 located the west side of the two slab openings.
3) Supply the dimension to locate the north edge of slab

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

AAI response as follows:

1. Refer to attached sketch SKA-2971 for requested dimension.

2. Confirmed

3. Refer to attached sketch SKA-2972 for

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

opening from grid D.8 as indicated in SK2.
4) Supply the dimension to locate the south edge of slab opening from grid E.6 as indicated in SK2.

requested dimension.

4. Refer to attached sketch SKA-2972 for requested dimension.

T-0962 **SSS - Slab Opening Locations at Ground Level** **Closed** **12/04/2013** **12/14/2013** **12/19/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Refer to A1-2862 and CD RFI 195 SK3 which indicate a slab opening which is not shown on S1-2302 and 3/S1-7004.

Please review SK1 through SK3 attached and clarify the slab opening requirement at the location indicated.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Slab opening at ground level per A1-2862 has been added on S1-2302 and S1-7004 in the ASI 109 drawings.

T-0963 **SSS - Edge of Slab Clarifications at Second Level** **Closed** **12/04/2013** **12/14/2013** **12/16/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Reference CD RFI 196 SK1 to SK3 for edge of slab clarifications required at the second level near grid 11.E as follows:

1) The blue dimensions indicated on SK1 are per A1-2883. Please confirm these dimensions are to be used to locate the steel and edge plates on S1-2403.
2) The blue dimensions indicated on SK2 are per A1-2883. Please confirm these dimensions are to be used to locate the steel and edge plates on 2/S1-7302.
3) Please clarify the dimension discrepancy between A1-2883 and S1-7302 as indicated on SK2.
4) Please clarify the dimension discrepancy between A1-2883 and S1-7302 as indicated on SK2.
5) Confirm the built-up walls are 9" thick as indicated on CD RFI 196 SK2.
6) Confirm the green lines indicated on SK3 represent the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.
2) Confirmed.
3) Edge of slab dimension shown on A1-2883 is correct.
4) Edge of slab dimension shown on A1-2883 is correct.
5) The thickness of the built-up wall is determined by the location of the beam relative to the step at these escalator pits. Consider detail 2/S1-7661 that applies at the W21x50 beams north of GL D.4 that are supported by a W36x150 beam on GL 11. The only exception to this detail at these pits is that the lower WT is not required as the lower slabs are supported by beams below. In detail 2/S1-7661 the wall thickness is equal to the distance between the slab step and beam web face.
6) Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

edge of slab on S1-2403.
7) Confirm the purple lines indicated on SK3 represent the edge of slab on 2/S1-7302.
8) The adjustment indicated on SK3 and A1-2883 is not shown on S1-2403. Please confirm the dimensions indicated on A1-2883 are correct.

7) Confirmed.
8) Confirmed.

T-0964 **SSS - Elevator PE202 Dimension Clarifications** **Closed** **12/04/2013** **12/14/2013** **12/19/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

For elevator PE202, refer to sketches CD RFI 198 SK1 to SK3 for the following items:

1) Confirm the noted dimension should read 4'-8 ½" to match A1-2862 as indicated on SK1 in order to have the elevator posts align with the edge of slab.
2) Confirm the noted dimension should read 8'- 2 ½" to match A1-2862.
3) Confirm the noted dimension should read 3'-7" to match A1-2862 to have the elevator posts align with the edge of slab.
4) Confirm the slab opening is per A1-2882 and the elevator posts align with the edge of slab.
5) Confirm the noted dimension should read 8'-6 ½" to mat A1-2892.
6) Confirm the noted dimension should read 4'-8 ½" to match A1-2892 to have the elevator posts align with edge of slab.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.
2) Confirmed.
3) Confirmed.
4) Confirmed.
5) Confirmed.
6) Confirmed.

T-0965 **SSS - Elevator SE401 Dimension Clarifications** **Closed** **12/04/2013** **12/14/2013** **12/16/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Reference CD RFI 200 SK1 which indicates that the slab opening dimensions required to locate elevator SE401 on 1/S1-7113 do not agree with A1-2864. Please confirm the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed, the dimensions shown on A1-2864 are correct and the SE401 elevator posts align with the edge of slab.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

dimensions shown on A1-2864 are correct and the SE401 elevator posts align with the edge of slab.

T-0966 **SSS - Cruciform Column Splice** **Closed** **12/04/2013** **12/14/2013** **12/11/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

At multiple cruciform column locations (S1-4301 thru S1-4308 at Grids C & G), detail 2/S1-4350 has a 24" wide column flange flaring out to 36" flange at the connection to the cast node & transfer girder. It is the preference of the fabricator to utilize a CJP spliced flange plate where the flare (radius) starts. Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is acceptable to use CJP spliced flange plates in the exterior MF Columns (Gridlines C, G, C.3, F.7) at Ground Level, however, the splice plane shall be a minimum of 2dc (dc = MF column depth) away from the top of the cast node. Note that MF column flange width is not always 24", refer to elevations S1-4101 through S1-4116 for MF column sizes. Splices shall conform with the requirements of 1/S1-5050.

T-0967 **Procedure for the removal of the level D bracing** **Closed** **12/05/2013** **12/15/2013** **12/09/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Procedure for the removal of the level D bracing:

Webcor-Obayashi will review the 14 day compressive strength reports issued by the independent test lab (ISI) for the applicable pour area. In the review WOJV is to ensure that the "lower-bound" concrete strength exceeds 3000psi at 14 days. "Lower-bound" will be understood as the mean minus one standard deviation. If the calculated lower-bound strength <3000 psi, the bracing removal would not continue until results are received satisfying the lower bound criteria. Further, If any single compressive strength test is < 2500 psi, the bracing removal would not continue until results are received satisfying the minimum strength criteria.

Please confirm if this would be acceptable

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
12/6/2013
RESPONSE:
Confirmed

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0968	SSS - Light Column Cast Node Weld Prep	Closed	12/06/2013	12/16/2013	12/16/2013	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Following discussions on the light column cast node weld prep, please confirm approval for use of joint B-U4a-GF in the flat position as a shop weld and that this joint is not prohibited under clause 2.18 - Prohibited Joints and Welds.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

As per AWS D1.1, clause 2.17, flat position V-groove or U-groove welds are practicable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0969	SSS - Filler Metal Usage on Group IV Grade HPS70W Material	Closed	12/06/2013	12/16/2013	12/20/2013	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Observation: Job specifications and Code AWS D1.1, Table 3.1, matching strength filler metal combinations for Group IV material, specifies for use an E91XTX for FCAW and F9XX for SAW process(s).

Concern: ASTM A709GR 70W material hardening during welding (alloying up) as each weld layer is deposited (in 2" to 4" material thickness). An increased hardness value is expected and the actual concern is that, in this instance, the E91XX specified will create an overmatching filler metal condition during the welding process.

Review: The AWS D1.1 2008 edition in table 3.1 for ASTM A709 Grade HPS70W specified a minimum of 70 ksi Yield Point and 90-110 ksi Tensile Range. In comparison, the AWS D1.1 2010 edition, a revision was made on this same material and the Tensile Range was dropped to 85 ksi minimum and maximum to remain at 110 (85-110).

Research: Currently for seismic application, the filler metal companies have seismic testing certificates for E81XX and F8XX electrodes. The Tensile test range for AWS D1.8 requirements is 80ksi minimum, but the manufacturers' test results consistently come in at 88 to 95 ksi, which would meet the 85-110 ksi range for the material. The two manufacturers contacted, ESAB and Lincoln, are willing to do seismic testing (test data) for the purpose of supplying AWS D1.8 seismic certificates to meet the E91XX requirements. However, when reviewing the current test data from the manufacturer, the test tensile range is 90-110 ksi, but the results are 97-110 ksi.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The proposed under match the base material and filler metal is not acceptable. The AWS electrode specification A5.29 for FCAW doesn't change, so the electrode classification as noted by the D1-code committee (E9xxx) shall stay. The contractors supplier is welcome to certify-by-test their electrode E8 as a E9 and provide the documentation as-such and submit it for approval.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Conclusion: TMF and their welding consultants believe that starting with a near Minimum Tension ksi (under match in classification/specification) that allows the use of E81TXX or F8XX electrodes with current seismic certificates would be best for the welding of the A709 HPS70W material due to the 2-4" thickness in this application.

Please confirm this proposal is acceptable.

T-0970 **SSS - Pretensioned Rods at Moment Columns** **Closed** **12/09/2013** **12/19/2013** **12/19/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please refer to drawing S1-5052 and S1-5050.

Refer to attached sketches CD RFI 099 SK1 & SK2 for items noted below.

3) To allow sufficient clearance to position a hydraulic tensioning device we require a dimension of 30"h instead of the 24"h indicated on 3/S1-5050, please confirm this is acceptable.

5) Confirm Section C shows the 3" thick plate only.

6) Confirm the 2 1/2" thick bearing plate is shaped as shown.

7) Confirm the 2 1/2" thick plate is welded on 3 sides as shown. Supply the welding requirement for the 2 1/2" thick plate to the WT below if required.

10) To allow sufficient clearance to position a hydraulic tensioning device we require a dimension of 30"h instead of the 24"h indicated on 3/S1-5050, please confirm this is acceptable.

12) Provide the weld requirements for the 4" plate to the column web.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

3.) Please consider the option of pre-tensioning from the bottom. This item may be discussed further in next structural issues conference call.
5.) Confirmed.
6.) Confirmed.
7.) Confirmed. No welding required to WT, direct bearing. WT surface shall be milled as called out in the detail.
10.) See our comment to RFI Question #3.
12.) No welding required.
13.) Confirmed. Note that the coupler should clear the base plate by a minimum of 1-1/2 inches.
14.) It is acceptable to use larger washers at Contractor's option.
15.) Use of 2-1/2" dia rods is acceptable at the Contractor's option, pretension shall be kept the same. Note that there are some steel rod vendors that can provide larger jacking force for 1-3/4 diameter rods. One example is Dywidag, which shows a jacking force of up to 330 kips in their catalogue for 1-3/4¿ diameter rods.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

13) Confirm it is acceptable to increase the 12"h dimension shown on 3/S1-5050 to 18"h to allow for the installation of the coupler below the built up TT only

14) Confirm it is acceptable to provide 8x8x2"h plate washers to allow sufficient base for the hydraulic tension device.

15) 1-3/4"h dia rods are required to be tensioned to 200kip at two locations. We are unable to find a tensioning system to achieve 200kip. The max capacity for a device used on 1-3/4"h rod is 172kip. We request to use 2-1/2"h dia rods at these two locations.

Please confirm this is acceptable.

T-0970.1 **SSS - Pretensioned Rods at Moment Columns** **Closed** **01/16/2014** **01/26/2014** **01/28/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Following the response to RFI T-0970 and after further review of #3 & 10, we agree the rods can be pretensioned from the bottom. Candraft have run a sanity check at several locations to confirm there is adequate clearance for the tensioning device and will continue to do so as other locations are detailed. Any interference will be addressed in future RFIs.

Please confirm it is acceptable to use a standard flat washer in lieu of the plate washer as the holes are not oversized and this will also allow
for easier workability during the pretensioning operation fr om the bottom (see Dyson catalog cut attached).
If this is acceptable the 24" dimension indicated from bottom continuity plate to top of built up T & TT (on 3/S1-5050) and the 6x6x2" plate washer under the top nut will not require to be changed (as per #3, 10 &14 RFI T-0970).

Please confirm this proposal is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Acceptable to use standard flat washer at the bottom of the pretension rod.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0971	SSS - Column Side Plates Dimension Increase	Closed	12/09/2013	12/09/2013	12/11/2013	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Arup Rich Coffin

REQUEST:

Please refer to drawing S1-2203 and S1-5050.

On S1-2203 at grids 9/C refer to sketches CD RFI 161 SK1 & SK2 regarding anchor bolts at column side plates. For the column side plates per detail 4/S1-5050 and anchor bolts it is not possible to insert the nuts & plate washers for the
anchor bolts with the 3'-0" side plate dimension.

Confirm it is acceptable to increase the noted dimension to 3'-5" or supply an alternate solution.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The detail referred in the RFI (4/S1-5050) is for column W14X730-SP, which is constructed using a rolled W14X730 as a base and welding side plates on it. However, the decision was that the below grade steel columns will be constructed using plates (built-up shapes), they won't be rolled shapes. Equivalent built up shapes for all rolled shape column types shown on Lower Concourse Plans are provided in Detail 6/S1-5050. These equivalent built up shapes do not require the side plates shown in Detail 4/S1-5050.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0972	SSS - Stair Post Base Detail at GL 11/D	Closed	12/09/2013	12/09/2013	12/26/2013	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Arup Rich Coffin

REQUEST:

On S1-2303 near grids 11/D at the Stair post base refer to sketches CD RFI 174 SK1 & SK2 for items 1 & 2:

1) Skanska (Candraft) have reviewed the Architectural & Structural drawings and have been unable to verify the offset dimension of the built up WT from the center of the W27x84. The built up WT is shown on SK2 as per the revit model,
please confirm this is correct or provide the required dimensions.

2) If the location is correct confirm it is acceptable to shop weld the BU WT to the supported beam and field weld the remaining piece to the supported beam.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) The built-up WT is centered on the post. The stair post and beam location have changed in ASI 109. Coordinate with ASI 109 drawings and sketch SKS-0312 submitted with response to RFI T-0955. Detail 10/S1-7600 shall apply even if the post lands on two beams.
2) Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0973	SSS - Transfer Girder Kicker Brace Connection	Closed	12/09/2013	12/19/2013	12/20/2013	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Robert Kjome

Co-Author: Arup Rich Coffin

REQUEST:

For the angle brace connection per detail 5/S1-5015 see sketches CD RFI 061 SK1 & SK2 for items noted below.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Yes, bracing is required at all locations specified on plan. Provide bracing per 6/S1-5015 at all transfer

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

1) For the Transfer Girder bottom flange bracing connection, confirm if bracing is required when the dimension from the bottom flange of the framing member to the top of the transfer girder bottom flange is less than 1'-3". See SK2 grid line 3/D.4 as an example.

If bracing is required please provide typical details.

girder brace locations where the distance between the bottom flange of the beam and the top of the transfer girder flange is less than 1' - 3".

T-0974 **SSS - Pin Details in Drawing 1/S1-5017** **Closed** **12/09/2013** **12/19/2013** **12/11/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Arup Rich Coffin

REQUEST:

For Drag connections per detail 1/S1-5017 refer to sketches CD RFI 123 SK1 & SK2 for the following items noted:

1) Confirm the size of the hole required thru the beam web, web stiffeners and shear plates is the diameter of pin +1/32". Confirm if any additional tolerance is allowed for hot dipped galvanized pins.
3) Confirm flanges can be cut flush to the beam web. Note that the flanges need to be cut flush only to the web stiffeners for erection access purposes.
4) Confirm if a radius is required when cutting the flange flush to the beam. If required confirm a radius of 1-1/2" is acceptable.
5) On RFI T-0737 Skanska requested to provide a cotter pin to further secure the nuts from backing off. Please confirm it is acceptable to provide one nut with the cotter pin as detailed on SK2.
6) Confirm the material grade for the pins and nuts is A668 Class M.
7) Confirm all pins and nuts are to be hot dipped galvanized.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

TT's response (the original RFI does not use #2, the responses are in the same order as the original RFI):

Tolerance shall be 1/32" per Specification 05 10 00, paragraph 3.2.B.2.

It is contractor's option to either cut the flange flush with beam web or flush with the web reinforcement plate for erection purpose.

Confirmed.

2 nuts shall be provided as detailed in the contract documents.

Confirmed.

Confirmed.

T-0974.1 **SSS - Nut Material Grade** **Closed** **03/05/2014** **03/15/2014** **03/06/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

The contract documents do not contain a specific material grade for the nuts for large diameter pin connections (6, 7 and 8" diameter pins). In SK RFI 169A (T-0974), our detailer asked for clarification on the material grade for these nuts. It was confirmed that A668 Cl. M would be acceptable. Given the function of these nuts are to hold the pin in place and not apply a clamping force to the assembly, we do not consider that these nuts need to be a high strength forged material. Please refer to AISC Table 15-8 which shows a thin cap plates for pins overs 10" in diameter which reinforces this position.

Please confirm it is acceptable to use A572 Gr.50 plate to fabricate these nuts.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

T-0975 **SSS - Vertical Clearances at Tapered Girder Kicker Connections in S1-5015** **Closed** **12/09/2013** **12/19/2013** **12/26/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Arup Rich Coffin

REQUEST:

Please refer to drawing 4/S1-5015, S1-2602

Please refer to sketch CD RFI # 071 SK1 - SK3 for items 1 & 2:
1) As shown, 11-3/8" is the minimum vertical clearance required to provide the kicker brace connection per 4/S1-5015. Please confirm criteria as shown is acceptable.

2) Per item 1 on CD RFI 071 SK1, detail 4/S1-5015 cannot be applied in the noted case on SK3 and other similar cases when the vertical clearance is less than 11-3/8".

Please confirm if bracing is required at these locations, if so supply a typical alternate detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Providing a 3' clear distance between the gusset plate shown on SK-1 may be reduced to 1", hence the minimum clearance (11 3/8") required to provide the kicker brace per 4/S1-5015 may be reduced further.

2) Brace is required. The vertical clearance shown on SK3 corresponding to the location shown on SK2 is not correctly determined. The tapered girder is much deeper (about 54" deep) at the brace location shown on SK2. Note that the tapered girder depth increases from 40" at the ends to 60" at the mid span per S1-4200.

T-0976 **SSS - Transfer Girder Kicker Connection Conflicts** **Closed** **12/09/2013** **12/19/2013** **12/26/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Arup Rich Coffin

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Please refer to drawing 5/S1-5015.

For the Transfer Girder angle connections see sketches CD RFI 063 SK1 to SK4 for items 1, 2, 3 & 4 noted below.

1) The kicker angle fouls the vertical stiffener, this is typical at similar locations. We propose notching the leg of the fouling angle and using a two bolt connection in lieu of welding or provide a typical solution.
2) Due to welding access issues we propose to use a two bolt connection, typical at similar locations. Confirm this is acceptable.
3) The kicker fouls the stiffener and the kicker gusset is too close to the stiffener for welding access. Similar conditions occur at other locations on the Ground Level. Please provide a typical solution.
4) The kicker gusset fouls the stiffener plate. Similar conditions occur at other locations on the Ground Level. Confirm it is acceptable to use the stiffener as the kicker gusset and increase the gusset thickness at the other end to
match or provide an alternative detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) It is acceptable to typically notch the leg of the fouling angle and provide (2)- 1 1/2" A490X bolts to connect the kicker angle to the bottom gusset plate at the location highlighted in the RFI on SK3 and at other similar locations. Provide a spacing of 3" between the bolts and a bolt edge distance of 2.5". The bolts shall be centered on the kicker angle legs.
2) Submittal shall address all access issues for field welding. It is acceptable to typically provide (2)- 1 1/2" A490X bolts to connect the kicker angle to the bottom gusset plate at the location highlighted in the RFI on SK3 and at similar locations where weld access is not possible. Bolt apacing and edge distance shall meet the requirements in AISC. The bolts shall be in line with the centroid of the kicker angles.
3) Shift the beam to the south so that the same solution in 4) could be applied.
4) Confirmed.

T-0977 **SSS - Handling Holes at Basket Column Pins** **Closed** **12/09/2013** **12/19/2013** **12/19/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

The clevis pins for basket columns detailed on S1-5133 do not provide means to safely handle the material during manufacturing, coating, and field assembly. To aid in these processes, please advise if it is acceptable to drill and tap 1-8 x 2" deep in the center of the pins at both ends.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please submit a detailed drawing(s) of your proposal to allow us to evaluate the question. The written description is not adequate for us to evaluate the question.

T-0977.1 **SSS - Handling Holes at Basket Column Pins** **Closed** **12/30/2013** **01/09/2014** **01/02/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

The clevis pins for basket columns detailed on S1-5133 do not provide means to safely handle the material during manufacturing, coating, and field assembly. To aid in these processes, please advise if it is acceptable to drill and tap 1-8 x 2" deep in the center of the pins at both ends.

As requested in the response to RFI T-0977, please see the sketch attached for the proposed handling holes.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The proposed handling hole in pin is acceptable.

T-0978 **SSS - Clevis Pin Material at Roof and Bus Deck** **Closed** **12/09/2013** **12/09/2013** **04/01/2014** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Gregory Kemerer

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Reference drawing S-0007, General Note SS-2, which requires that all clevis pins meet ASTM A668 Class M. Oregon Iron Works is requesting approval to supply these pins from round bar AISI 4340 NQ&T (normalized, quenched, and tempered), produced to ASTM A434 grade BD. Please confirm if this is an acceptable material for clevis pins at the following locations:
1. Roof Level pins for type 71 and 72 castings shown on sheets S1-5131, S1-5132, S1-5133.
2. Bus Deck pins detailed on S1-5017 Detail 1 for Type 2M connections.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This RFI has been withdrawn by Skanska

T-0979 **SSS - Curved Connection Detail at Light Column** **Closed** **12/09/2013** **12/09/2013** **12/11/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On S1-2305 at grids 23/E, refer to sketch CD RFI 103 SK1 and supply a detail showing how to splice the curved W27x84 beams.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The curve beams are to be connected together with a single shear plate connection (see 1/S1-5011).

T-0979.1 **SSS - Curved Connection Detail at Light Column** **Closed** **01/17/2014** **01/27/2014** **02/03/2014** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

The response to WOJV RFI T-0979 indicated that the curved W27x84 beams shown on S1-2305 at grid 23/E are to be connected together with a single shear plate connection per 1/S1-5011.

The referenced detail shows a beam to beam "T" connection, rather than two rolled shapes butting up to each other. Please clarify how the connection shown on 1/S1-5011 is to be applied to curved beam connections.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Use a 3/8" single shear plate with 2 rows of 7/8" dia A325N bolts (14 total), connecting 2-W27 at web.

T-0980 **SSS - BU Girders Connection Clarifications at Ground Level** **Closed** **12/09/2013** **12/19/2013** **12/16/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

The W40x503 beams along grids C & G on the Ground Level have been substituted with BU beams per RFI # T-0704.1. This changes the flange copes in details 3 & 7/S1-4350. Please refer to attached CD RFI 162 SK1 & SK2 for the following items:

1) Please confirm it is acceptable to extend the web plate above the BU beam and cut the top flange plate flush to the web plate as shown. Confirm the CJP weld indicated is acceptable to weld the top flange to the web plate. The web to flange fillet welds per RFI T-0704.1 will be applied beyond the shown CJP welds.

2) Confirm it is acceptable to stop the bottom flange plate of the BU WT short as shown, extend the web plate of the BU WT to the web plate of the BU beam and weld as shown. The web to flange fillet welds per RFI # T- 0704.1 will be applied beyond the shown CJP welds.

3) Confirm it is acceptable to have a continuous 4" vertical bolt spacing in lieu of the pattern interruption as shown in detail 3/S1-4350 to avoid cutting the bottom flange of the BU beam. This may mean that the holes for the 1 1/2" dia. bolts near the WT to BU beam web weld will have to be drilled after the weld is made.

4) Confirm it is acceptable to have a continuous 4" vertical

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed. Weld joint detail will be reviewed during shop drawings stage after the weld procedure has been submitted and approved.

2) Confirmed. Weld joint detail will be reviewed during shop drawings stage after the weld procedure has been submitted and approved.

3) Confirmed.

4) Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

bolt spacing in lieu of the pattern interruption as shown in detail 7/S1-4350 to avoid the bolts fouling the web to flange fillet welds. This may mean that the holes for the 1 1/2" dia. bolts near the WT to BU beam web weld will have to be drilled after the weld is made.

T-0981 **SSS - Cast Node Erection and Fabrication Work Points** **Closed** **12/09/2013** **12/19/2013** **12/13/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

It is requested that work points be added to the Cast Connex machine drawings and Bradken Cast Nodes as outlined on the marked up Cast Node drawings attached. These external "physical" work points will be used to reestablish the "non-physical" internal work points set during the pre-machining of Cast Nodes at Bradken. These external work points will be used to aid the following construction activities:
1) Shop fabrication of shear plates and pipe columns
2) Shop trial assembly and QC dimensional inspections
3) Field assembly and final QC dimensional inspections

Please confirm each work point will be precision punch marked and highlighted with paint marker for easy identification.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Webcor needs to liaise with Bradken to determine if they are willing and able to punch these marks on the castings, and what (if any) the cost and schedule impact would be. If Bradken can complete the work, then Cast Connex is willing and able to update the machining drawings (at Skanska¿s cost). The cost for Bradken¿s additional work will have to be taken care of between Skanska and Bradken and not the TJPA.

T-0982 **SSS - Elevator Rail Support Connection Clarifications** **Closed** **12/09/2013** **12/19/2013** **01/10/2014** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please refer to Elevator Rail Support drawings S1-7130 through S1-7139 and provide clarification on the following:
1) At locations where the HSS members span two equally sized support beams, please confirm connection detail 1/S1-7630 typically applies and the HSS member is to be located direction under the beams. Refer to SK1, SK2, SK5, SK6, and SK7 for reference.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached comments on RFI sketches, RFI_T_0982 sketches w comment.pdf

1. See TT comments on RFI sketches.
2. When HSS is to connected to bottom of W beam use detail 1/S1-7630. At the end where HSS is framed into the web of a beam, provide a double angle

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

2) At locations where the lower HSS member spans two unequally sized beams, it is assumed that the HSS member will connect to the shallower beam per detail 1/S1-7630. Please confirm and provide a typical connection detail for the HSS member to the deeper beam. Reference SK1, SK2, SK5, SK6 for reference.
3) Confirm the HSS beams indicated on SK1, SK2, and SK7 are located flush with the top of slab per 1/S1-7630.
4) Confirm the plates indicated on SK3 & SK4 may be cut as shown on details 1&4/S1-7630 to achieve an effective weld along the full length.
5) Provide a connection detail for the HSS 12x6 to the W21, W24, and W36 beams at the locations indicated on SK7.
6) Provide the elevation of the lower HSS 12x6 indicated on SK RFI 239 SK2 and the connection details required at each end.
7) Confirm the elevation of the W21s indicated on SK5.
8) Provide a connection detail for upper and lower HSS12x6 to HSS12x6 at locations with no floor slab on SK5.
9) Provide a connection detail for upper and lower HSS12x6 to W16 at locations with no floor slab on SK5.
10) Provide a connection detail for HSS12x6 at the W21 indicated on SK5 where there is no edge plate as shown on detail 1//S1-7130.

connection with 3- 1" dia A325 bolts (with pipe spacer inside the HSS). Alternatively, a welded connection similar to 1/S1-7630 may be used.
3. See TT comments on RFI sketches.
4. Confirmed.
5. See TT comments on RFI sketches.
6. See TT comments on RFI sketches.
7. See TT comments on RFI sketches.
8. See TT comments on RFI sketches.
9. See TT comment on RFI sketches.
10. See TT comment on RFI sketches

T-0983 **SSS - ST201 and PE201 Anchor Bolt Clarifications** **Closed** **12/09/2013** **12/19/2013** **12/27/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Refer to CD RFI 203 SK1 to SK3 requesting clarification on Stair ST201 and Elevator PE201 per the following:

1) Refer to detail 4/S1-7605 and CD RFI 203 SK1 indicating the ½" dimension between the washers and the HSS column. When considering the 5/16" fillet weld at this location, there is only 3/16" clear between the plate washers and the HSS column, which is not sufficient to allow for anchor bolt as-built variations to suit the 13/16" dia. oversize holes. Please confirm it is acceptable to

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Acceptable.
2) Confirmed.
3) See 4/S1-7605 and attached sketch SKS-0322 for anchor bolt detail at W14x311 columns.
4) Confirmed.
5) Confirmed.
6) Confirmed.
7) Confirmed.
8) Confirmed.
9) Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

increase the 2" typ. dimension indicated to 2 ½".
2) It is not clear what is meant by "SIM." Please confirm detail 4/S1-7605 may be applied at all HSS columns at Stair 201/Elevator PE201.
3) Please provide an anchor bolt detail for the noted two WF columns.
4) Confirm the underside grout elevation is 23.42'.
5) Confirm the underside grout elevation is 24.08' (3 locations).
6) Confirm the underside grout elevation is 22.42' (4 locations).
7) Confirm the underside grout elevation is 22.92'.
8) Confirm the underside grout elevation is 22.42'.
9) Confirm the underside grout elevation is 22.92'.
10) Provide the underside grout elevation at the location indicated.

10) Underside of grout elevation is 22.42'.

T-0984 **SSS - W33 Connection at GL 11** **Closed** **12/09/2013** **12/19/2013** **12/20/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On S1-2303 there are two W33x118 beams between grids D.8/E.2 that connect to the stepped Transfer Girder along grid line 11. These connections should be typical double angle shear connections, but due to the location of the stiffeners for the Moment frame column cap/base plate there is a fouling issue. Please see the following questions

below:
1) Please verify a partial full depth shear plate connection similar to detail 2/S1-5011 can be provided at these locations in lieu of the double angle shear connections. The shear plate cannot be full depth as it will foul the bolts connecting the Transfer Girder bottom flange to the column cap/base plate. See CD RFI 204 SK1 to SK3.
2) If a shear plate connection is acceptable at these locations, please verify plate thickness & welding per 2/S15011. See CD RFI 204 SK1 to SK3.
3) The numbers of bolts in a single row per the schedule on 2/S1-5011 cannot be provided if bolt spacing and edge distance are to be maintained due to the difference in

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Acceptable.
2) Acceptable.
3) Acceptable. Provide 3" horizontal spacing between the two vertical bolt columns.
4) Provide plates welded to the transfer girder bottom flange and the W33x118 beam web as shown in attached sketch SKS-0314 in lieu of the angle braces at the two W33x118 beams highlighted in the RFI.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

elevation between the Transfer girder and W33 beam. Please verify if it is acceptable to provide a double row with a total of 12 - 1" A325N bolts. See CD RFI 204 SK1 to SK3.
4) On S1-2303 there is bracing shown at the end of the W33 beams to the Transfer Girder. These brace members cannot be provided as the bottom of the W33 beam and the bottom of the Transfer Girder flange nearly line up, there will be nothing to connect the braces to. Please verify that the braces shown per plan are not required at these locations. See CD RFI 204 SK1 & SK2.

T-0985 **SSS - Elevator Connection Clarifications** **Closed** **12/09/2013** **12/19/2013** **12/26/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Refer to detail 6/S1-7630 and advise how the vertical posts are intended to attach to the double horizontal HSS10x10 as no bolts or welds are indicated.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The vertical HSS is welded to the L3x3x1/2 with a three sided 5/16 fillet weld at the vertical leg of the L3x3x1/2. Provide the same three sided weld between the other leg of the L3x3x1/2 and horizontal HSS. Note that there are two L3x3x1/2 per vertical post as noted in detail 6/S1-7630.

T-0986 **SSS - Connection Clarifications at Bus Deck Level** **Closed** **12/09/2013** **12/19/2013** **12/20/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

At a sample location on S1-2503 near grid 10.1/C, refer to CD RFI 197 SK1 & SK2 requesting clarification on the following:

1) The double angle connection per S1-5010 for the W12x40's fouls the connection from the W30x99 to the column. Confirm it is acceptable to connect the W12x40's to the W30x99 with shear plate connections per S1- 5011.

2) This condition occurs at grids C/9.9, G9.9, G/10.1,

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.
2) Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

C/19.9, C/20.1, G/19.9, and G/20.1. Please confirm the solution for item 1 may be applied at these locations.

T-0987 **SSS - Elevator PE202 Dimension and Connection Clarifications** **Closed** **12/09/2013** **12/19/2013** **01/09/2014** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Refer to CD RFI 199 SK1 requesting clarifications for dimensions and connections at Elevator PE202 as follows:

1) Detail 8/S1-5004 shows the edge of slab is to be 1'-0" from the toe of the WF beam, but based on the dimensions shown on S1-2502, the 1'-0" requirement is met only on the west side of the elevator opening. The north, south, and east sides do not meet the 1'-0" requirement. Confirm the dimensions to locate the elevator opening WF perimeter beams are correct as indicated on S1-2502.

2) Please supply the missing dimensions to locate the HSS 12x6x1/2 on four (4) sides of the elevator opening.

3) Please clarify how the HSS12x6x1/2 perimeter members are supported and connected to each other at the corners.

4) Confirm edge plate per 8/S1-5000 is required on 4 sides of the elevator opening as none are indicated on detail 8/S1-5004.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). Please refer to the attached A1-2892 2014JAN06 for the dimension of the raised elevator cap and EOS
2). See the green markups on the sketch submitted with RFI T-0987
3). The HSS 12 x 6 shall be supported by W16 at the south and W27 at the north. The TOS for the HSS 12 x 6 shall be at 1-1/4" below the TOP of the W27. Use double angle bolted connection (L 4x4x3/8" with 3-1" dia A325 bolts, which pipe sleeve inside the HSS to allow for pretension). Similar double angle connections may be used to connect the HSS at the corner, except one side of the double angle shall be welded to the face of the HSS with 5/16" fillet weld with 5/8" return.
4). Confirmed

T-0987.1 **SSS - Elevator PE202 Dimension and Connection Clarifications** **Closed** **07/18/2014** **07/28/2014** **07/31/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 199.1 SK1 & SK2 for items 1 to 4:
1) The noted dimension per S1-2502 places the beam inside the slab opening.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) The noted dimension shall be 6'.
2) See attached sketch SKS-0375 for correct dimensions.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please provide the location of the beam to suit the slab opening per A1-2892 (SK1).
2) Confirm dimensions per T-0987 are still correct with revised opening location/size on A1-2892 or supply new dimensions.
3) Confirm dimensions per T-0987are still correct with revised opening location/size on A1-2892 or supply new dimensions.
4) Confirm the connection details as shown are correct at the noted locations.

3) See attached sketch SKS-0375 for correct dimensions.
4) Confirmed.

T-0988 **SSS - W21 Full Depth Connection at Transfer Girder** **Closed** **12/09/2013** **12/19/2013** **12/16/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On S1-2303 there is a W21x50 beam just south of grid D that connects to the Transfer Girder along grid line 10.1. There is a similar W21x50 along 10.1 north of grid F that is shown with a full depth shear connection to the Transfer Girder.

Please advise if the W21x50 near grid D should also be a full depth shear plate connection. See CD RFI 207 SK1.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The connection of the W21x50 beam at the transfer girder near GL 10.1/D shall be a double angle connection per 12/S1-5010. A shear plate connection specified for the W21x50 beam near GL 10.1/F is to avoid conflict with the stiffener plates at the transfer girder that are required for the WF column below.

T-0988.1 **SSS - W21 to Transfer Girder Connection** **Closed** **12/30/2013** **01/09/2014** **01/13/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Per the response to Webcor RFI # T-0988 (SK RFI # 258), on S1-2303 the double angle beam connection near grids 10.1/D will foul stiffener plates at the Transfer girders, same as near grid 10.1/F. On sketch CD RFI 207.1 SK1 shows the stiffener plates at this location on line 10.1 north of grid line D. Please verify a shear plate can be used as request ed or provide an alternate connection.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed that a shear plate can be used as requested.

Webcor/Obayashi Joint Venture

PROJECT MANAGEMENT - REQUEST AND ANSWERS LOG

30100 - Transbay Transit Center Project

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0989	SSS - Beam to Column Connection at Bus Deck	Closed	12/09/2013	12/19/2013	12/20/2013	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

1) On S1-2503 at grids 11/C "H < D" indicating that detail 5/S1-5011 would apply. Based on the "H" and "D" dimension indicated on SK2, please verify detail 4/S1-5011 can be used at this condition as noted on sketches CD RFI 208 SK1 & SK2.
2) Based on a review of the project conditions, please verify that detail 5/S1-5011 will only be applied at grids 20.1/C, 20.1/G, 21/C, 21/G, 22/C & 22/G at the Bus deck level per note # 3 on 4/S1-5011.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Acceptable.
2) Detail 5/S1-5011 applies not only at 20.1/C, 20.1/G, 21/C, 21/G, 22/C & 22/G but at other locations as well. For example, it is applicable at 3/D.4, 3/E.6, 4/D, 4/F, 16/C, 16/G, 32.4/C, 32.4/G. Note that the bottom continuity plate shown in detail 5/S1-5011 corresponds to the shallower of the MF beams at the MF column. For example at GL 3/D.4 H=30" corresponding to the BU 30 MF beam and D = 32.9 resulting in H

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0990	SSS - Skewed Beam to Beam Connection	Closed	12/09/2013	12/19/2013	12/26/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Reference sketches CD RFI 193 SK1 & SK2 indicating one specific location where the bolt spacing provided in detail 8/S1-5010 will not work as the bolts will foul each other. In the specific case shown on SK2, the "H1" dimension will need to be increased to 7 1/2" to avoid the fouling issue. Please confirm it is typically acceptable to increase the "H" or "H1" dimensions as required to allow sufficient clearance between the bolts for installation and tightening. If not, supply an alternate solution.

NOTE: RFI #T-0976 item 4 requested permission to typically move the shear plate to the opposite side of the skewed beam from what is shown in 8/S1-5010 to allow erection access for the skewed beams.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed that in concept, it is typically acceptable to increase the "H" or "H1" dimensions as required to allow sufficient clearance. Final approval of this change will be provided during submittal review.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0991	SSS - Tapered Girder Flange Plate Connection	Closed	12/09/2013	12/19/2013	12/26/2013	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On S1-2603 at grids 9.9/B, 10.1/B, 9.9/H & 10.1/H shown on sketches CD RFI # 211 SK1 & SK2, the spacing for the Tapered girder flange plates per detail 7/S1-5032 will foul the W24x68 beam web.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed that the bolt spacing may be adjusted as proposed in this RFI.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please verify the bolt spacing can be adjusted to 5 1/4" to clear the incoming W24 beam webs as indicated on CD RFI 211 SK2.

T-0992 **BGP - Column at GL 16.9/G Coupler Stagger** **Closed** **12/10/2013** **12/17/2013** **12/12/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please refer to drawing S1-3304 and S1-3301.

Detail 2/S1-3301 requires the couplers of adjacent column vertical bars to be staggered with a vertical distance of 24" or more; however, at gridlines 16.9/G there is a column dowel that should have been a shorter bar (L) but was installed as a longer bar (H) and casted in the mat foundation concrete. This does not allow for the stagger pattern as required. See the attached sketch SK-RFI-114 for more details. Gerdau proposes to leave the bar as-is.

Please confirm if this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
12/11/2013
RESPONSE:
Confirmed.

T-0993 **SSS - Deck Support at Columns** **Closed** **12/10/2013** **12/20/2013** **12/16/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Detail 9/S1-5000 provides a typical detail for slab edge supports. However, no detail is provided for slab edge support at columns. On S1-2403 @ sample grid locations 10.1/C & 10.1/D for slab edge supports, refer to sketches CD RFI 219 SK1 to SK4 for items 1 & 2:

1) Confirm the connections for the angles to the column flange are acceptable as shown or supply a new detail. Note all not shown is per 9/S1-5000 & RFI T-0901.

2) Confirm the connections for the angles to the column

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Detail @Grid C (SK-2) shall be similar to SK-3, with the outrigger angle at the edge of the slab, not at the flange of the column.

2) Confirmed.

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web are acceptable as shown or supply a new detail. Note all not shown is per 9/S1-5000 & RFI T-0901.

T-0994 **SSS - Lateral Bracing Clarifications at Ground Level** **Closed** **12/10/2013** **12/20/2013** **12/30/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

At the Lateral brace detail 3/S1-3503 refer to sketch CD RFI 213 SK1 for items 1 to 3:

1) Since detail 3/S1-3503 does not occur along grid 'C' and does at grid 'G', confirm the correct detail reference should read 1/S1-5022.
2) Referenced detail 8/S1-5015 does not show a full depth stiffener at the brace to beam connection. Confirm it is acceptable to proceed with the connection as shown in 8/S1-5015 & RFI T-0919. If not, supply the thickness and width of the full depth stiffener including welding for the stiffener.
3) Confirm the gusset dimensions as shown are acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed

2) Confirmed

3) Confirmed

T-0995 **SSS - Concrete Beam to Drag Beam Detail** **Closed** **12/10/2013** **12/20/2013** **12/16/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

1) Per details 1 & 4/S1-5022 shown on sketch CD RFI 214 SK1, please confirm the noted 1" stiffeners on detail 4/S1-5022 are also required in detail 1/S1-5022 along grid 'G'.
2) Please provide the weld for the 1" stiffeners indicated on detail 4/S1-5022.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The note calls for 1" stiffener plates in Section 4/S1-5022 should be deleted. No stiffener is required for both Section 1 and 4/S1-5022.

T-0996 **SSS - Beam to Beam Connection Clarification** **Closed** **12/10/2013** **12/20/2013** **12/19/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On S1-2403 at grids 11/C refer to sketches CD RFI 156 SK1 & SK2.
After applying the double angle connection per S1-5010 for the W12x14 to the W30x99, there is insufficient room to connect the W30x99 to the column flange per 8/S1-5012.
Confirm it is acceptable to connect the W12x14 to the W30x99 using a shear plate per S1-5011 or supply an alternate solution at this location.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The W12x14 beam has been moved as shown in ASI 109 drawings so that the double angle connection of the W12x14 does not conflict with the shear plate connection of the W30x99.

T-0997 **SSS - Steel Framing Clarification** **Closed** **12/10/2013** **12/20/2013** **12/26/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On S1-2604 near grids 16/D refer to sketches CD RFI 158 SK1 & SK2 and confirm the (3) W16x26 beams are not required and may be deleted as the edge of slab is located only 1'-3" east of grid 16 per A1-2904 as shown on SK2.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The three highlighted W16 beams have been removed in ASI 109 drawings.

T-0998 **SSS - Thread Diamter at Pretensioned Rod Detail** **Closed** **12/10/2013** **12/20/2013** **12/30/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Arup Rich Coffin

REQUEST:

Please refer to drawing S1-5052.

On 3/S1-5052 @ the Pretensioned Rod detail refer to sketches CD RFI 229 SK1 & SK2.

The actual major thread diameters of the pre-tensioned rods in detail 3/S1-5052 do not equal the nominal diameters shown. See the actual diameters on SK2 and confirm the holes in all elements that the anchor rods pass thru as shown in details 2 & 6/S1-5052 will be 1/16" over the major thread diameter.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For the elements that the rods pass through, the proposed hole diameter of rod diameter + 1/16" is acceptable in concept. Contractor to verify the actual hole size for allowing the rod to stretch during pre-tensioning.

We cannot comment on the Dyson bars included in this RFI as it has not formally submitted for approval. Note that we cannot locate RFI SK 086 (CD RFI #053) which is referred from this RFI. In future, include all referred information within the RFI.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-0999	SSS - Stair Detail Reference Clarification	Closed	12/10/2013	12/10/2013	12/26/2013	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On detail 3/S1-7008 refer to sketch CD RFI 164 SK1 and review the noted detail reference does not appear to be the correct detail at the noted location. Should this read 6/S1-7601 and not 3/S1-7601? Please clarify.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Detail 3/S1-7601 shall apply as called out on 3/S1-7008. Detail 3/S1-7601 has been updated in ASI 109 drawings to reflect the condition at that location.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1000	SSS - Machine Lower Nozzles Perpendicular to Pipe	Closed	12/10/2013	12/10/2013	01/13/2014	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Stacy Wilson

Co-Author: Arup Rich Coffin

REQUEST:

Please refer to drawing S1-5111 thru S1-5133.

In recent meetings, Webcor/Obayashi has made it clear that the same Bus Deck Cast Node geometry will be used at multiple locations even though the angle of the lower Basket Columns changes at each Node. This adds a level of complexity and cost to the joint between the Cast Node and Basket Column Pipe due to the kink imposed on that joint as a result of the following:

- The Lower Pipe Columns will be required to be "miter cut" instead of a traditional square cut end. (Please note Spec Section OS 10 00, paragraph 3.2.M.1 states "Bearing ends of columns shall be milled or sawn square perpendicular to axis of the column.")
- Miter cut Pipe will have an ellipse cross section and will not match the circular Casting Node.
- Backing bars used to full pen weld the Pipe Column to the Cast Node would need to be custom machined to match the ellipse Pipe and circular Node to eliminate weld gaps. This significantly increases the complexity and risk for successfully welding the joint, and reduces the adjustability for fit up of these joints in the shop and the field.

This kink can be accommodated either by machining the nozzle of the Cast Node to be perpendicular to the pipe, or by machining the pipe end at a mitered angle to match the Cast Node.

Since this joint on the Cast Node is already being machined, Skanska/OIW believes that the more desirable

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The contract drawings at bid time clearly showed that the centerline of the pipe is not in line with the centerline of the cast node nozzle, that the same cast node is to be used at multiple locations, and that the cast nodes were not miter cut to be perpendicular to the incoming pipe. The reference to Spec section 05 10 00 noted in this RFI regarding bearing ends does not apply for this condition as the pipe to cast node connections are not ¿bearing¿ connections, they are a fully welded connections as shown on the contract documents.

This ¿kink¿ between the topside of the ground floor basket column and the bottom-side of the bus deck cast node ¿ resulting from the building¿s geometry and the use of the same cast node type in multiple locations ¿ can be accommodated by either miter cutting the pipe or the cast node. However, the contract documents, including those available during bid, clearly show that the bus deck cast nodes were not going to be miter cut, and so miter cutting of the basket column pipe members by the Steel Contractor is necessary to accommodate the building¿s geometry.

The specified miter angle does not exceed 1.5-degrees in any location. Miter cutting a 32-inch diameter steel pipe by 1.5 degrees results in an elliptical cross-section having a major diameter of 32 / cos (1.5°) = 32.011-inches and a minor diameter of 32-inches. This results in a minimal mismatch in cross-sectional dimension / shape between the

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

and less expensive option is to machine the nozzle ofthe Cast Node perpendicular to the axis of the Basket Column Pipe . As the nozzles will each be custom machined regardless, machining them to match the pipe axis should be a relatively low cost change .

Skanska/OIW requests that the lower nozzle of each Bus Deck Cast Nodes to be machined perpendicular to the axis of the adjoining lower Basket Column Pipe. A negative response will result in a cost increase and a time increase.

outside and inside faces of a mitred pipe member and the cast node. Based on this geometry, a two-inch wide backer bar sized properly would only show a gap of about 2/100ths of an inch, nominally. A split-ring backer bar could also be employed, which would provide some additional adjustability for this joint in the field.

There is no objection structurally or architecturally for the miter machining of either the nozzle of the bus deck cast node to be perpendicular to the pipe, or miter machining the pipe end at an angle to match the Cast Node. However, if Skanska seeks this additional miter machining of the bus deck lower nozzles on the Cast Nodes, all related costs and schedule will be the responsibility of Skanska. Skanska would need to provide the requested miter angle for each Cast Node for incorporation into the casting machining drawings. Additional costs including drawing time would need to be paid for by Skanksa.

Skanska will be responsible for all costs associated with the miter machining of either the nozzle of the Cast Node or the pipe to be perpendicular or coplanar. If Skanska opts to have the lower nozzle ends of the bus deck nodes mitered, Skanksa will need to coordinate with the CM/GC to make an agreement with Bradken for this change to Bradken¿s scope of machining work for the bus deck cast nodes. Skanska will also be responsible to absorb any schedule impact without delaying the overall project schedule. NOTE: If miter cutting the bus deck cast node nozzle is selected, machining would need to be performed by a third party as Bradken does not have this capability. Be aware that those costs for machining, trucking, and for handling the cast nodes would be Skanska¿s. Custom miter cutting each nozzle end would also require additional geometric inspection of the cast nodes, the cost for which would be borne by Skanska.

T-1001	**SSS - Shear Plate Weld Connection Clarification**	**Closed**	**12/10/2013**	**12/20/2013**	**12/26/2013**	**Potentially**	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On S1-2603 at grids 11/D for the W40 beam connections into the column web call for details 3/S1-5011 with 3 & 4/S15013 to be used. On sketches CD RFI 218 SK1 & SK2 please verify the large 2 3/8" single sided PJP weld for the 2 1/2" thick shear plate required at this location.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per Detail 3/S1-5013, the two shear plates highlighted on SK2 in the RFI shall be welded with a 3 sided PJP weld with 1 1/8" effective weld.

T-1002 **SSS - Web to Flange Welds at EBF Girders** **Closed** **12/10/2013** **12/20/2013** **12/16/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Arup Rich Coffin

REQUEST:

Please refer to drawing S1-4205.

Please see Plan Sheet S1-4205 Detail 1 for typical details at EBF Link Beams. The typical arrangement specifies a transition from CJP weld to fillet welds and incorporates a weld access hole to separate the 2 welds. In an effort to reduce the number of weld access holes and the inherent issues that can arise with them, Oregon Iron Works is proposing to extend the CJP welds to the end of the girders thus removing the weld access holes at the weld transition point.

Please see attached OIW sketch 2770-SK-TH02 representing a typical EBF Blank Beam Fabrication. It is Skanska/OIW's intent to extend the UT testing 1'-0" beyond the specified CJP weld zone. The balance of the weld will be MT/VT tested as required by Contract Documents.

Please confirm that the proposed welding and NDE is acceptable for all EBF link Beams at the roof perimeter. There is no cost or time impact with this change.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed that the proposed welding and NDE is acceptable for all EBF link beams at the roof perimeter. Also, please note the special CVN requirements for the weld materials for this EBF link beam CJP weld noted in Specification 05 12 10, paragraph 2.1.C.2.

T-1003 **SSS - Connection Clarification at Sloping Moment Beams** **Closed** **12/10/2013** **12/20/2013** **12/20/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Arup Rich Coffin

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

At a sample location on S1-2503 at grids 9/F refer to sketches CD RFI 150 SK1 & SK2 as noted below.

As the sloping BU beam rises 1/2" above the opposite BU beam, the thickness of the top continuity plate will be increased to 3-1/4". Confirm this is the design intent and should be applied typically at similar conditions.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For the conditions described in the RFI, continuity plate thickness shall be per construction drawings (no need to increase thickness). At the condition described in the RFI (1/2" difference between the top of flange elevations), line the continuity plate up with the non-sloping MF beam. At Bus Deck Level joints at GL 2/D.4, 2/E.6, 3/D.4 and 3/D.6, the difference in elevation of MF beams on each side of the column is 2". At these joints, slope the continuity plate between the top flanges of the two beams (no need to increase thickness).

T-1004 **SSS - Pins at Roof Clevises and Perimeter Bus Deck** **Closed** **12/10/2013** **12/20/2013** **12/12/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please refer to the the following: S1-5017, S1-5131, S1-5132, S1-5133, 05 10 00 - 2.3.J & 3.2.B.2.

Paragraph 3.2.B.2 specifies the holes for the pins shall be no more than 1/32" over the diameter of the pin.
Paragraph 2.3.J specifies the pins to be Hot Dip Galvanized (HDG). This combination will lead to interference at assembly due to the following factors:
1) Tolerance in bored hole diameter of 0.010 (+0/-.010)
2) Tolerance of Pin diameter of 0.010 (+/-.005)
3) Tolerance of galvanize thickness at pin of 0.012 (+/-.006/side x 2)
4) Tolerance in thickness of primer at pin holes of 0.002 (+/-.001/side x 2)
The stack-up of tolerances is 0.034" which is greater than the specified 1/32" maximum clearance.

Skanska/Oregon Iron Works is requesting approval to supply the pins and bored holes to the following nominal values and within the tolerance identified above. These values are measured after machining and prior to coating.
1. 7" diameter pins:
a. Pin diameter = 6.906" (bored holes -1/8")
b. Bored holes = 7.032"
2. 8" diameter pins:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per Specification 05 10 00, the pin is to be measured by a ring gage after galvanizing. The 1/32" tolerance is for pin after galvanizing.
We don't feel a chrome coating is equal to the specified galvanized coanting. Chrome coatings do not have the construction industry track record that galvanizing has. Skanska has not provided a substitution request with technical data showing a chrome coating has the same performance as galvanizing.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

a. Pin diameter = 7.906 (bored holes -1/8")
b. Bored holes = 8.032"
Note that zinc coating is not a hardened material, and the coating on the pins will be prone to galling while attempting to install in a horizontal position. Skanska/OIW suggests investigating alternate pin coatings; for example, a hardened chrome coating has tightly controlled thickness tolerance and will not gall.

T-1004.1 **SSS - Pin Diameter** **Closed** **01/29/2014** **02/08/2014** **02/10/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

We have identified a fit-up issue with the basket column pin connections at roof node and Type 2M drag connections.
Spec section 05 10 00-13 3.2B states that the diameter of the pin hole shall not be more than 0.03125" greater than the diameter of the pin. The response to SK RFI 293 (T-1004) clarifies that the 0.03125" erection tolerance is for the
pin after galvanizing.

Therefore, to make this pin connection work, the pin must be machined below the 8" nominal dimension stated in the

contract drawings (Ref S1-5133).

We have determined the maximum allowable pin diameter as follows;

Data:
Min Bored Hole Diameter: 8.0313 - 0.01 = 8.0213"..... Source: Ref 1
Max Roof Node Bored Holes Concentric Offset: 0.0156"..... Source: Ref 2
Max Galvanizing Thickness: 0.010" (each side)..... Source: Ref 3
Erection Tolerance: 0.03125"..... .....Source: Ref 4

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is acceptable to machine the pin to 7.953" (+0, -0.01"), i.e., 0.047" less than the nominal diameter of the pin diameter specified, however, the specified 1/32" tolerance for the pin hole shall not be exceeded.

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Maximum Allowable Pin Diameter: X (pin must be machined and so we have applied a reasonable industry standard
machining tolerance of +0,-0.010")

Calc (inches):
(8.0213-0.0156) - (X+2(0.01)) = 0.03125
X = 7.953" (+0,-0.010")
Data used above is for 8" diameter pin. Similar for 7" pin (i.e 6.953").
Please confirm it is acceptable to machine the pins to the diameters specified above.

References;
1 - CN-0126 and CN-0127
2 - CN-0126 and CN-0127
3 - The maximum galvanizing thickness was provided by the galvanizing shop that will be coating these pins. Based on
their experience they estimate a minimum of 0.008" and a maximum of 0.02" on the diameter of the pin.
4 - Section 05 10 00-13

Please also note that A153 1.2 states that this specification is intended to be applicable to hardware items that are
centrifuged or otherwise handled to remove excess galvanizing bath metal. This is not practical with an 8" diameter
pin and should be taken into consideration.

T-1005 **SSS - Relocate Beam to Suit Double Angle Connection** **Closed** **12/10/2013** **12/20/2013** **12/26/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On S1-2303 near grids 10.1/F refer to sketch CD RFI 151 SK1 and confirm it is acceptable to relocate the W16x26 per dimensions shown to align the beam with the W21x50 as the double angle connection per S1-5010 will not work with the offset if the EQ/EQ dimensions are maintained as the bolts will foul the beam web on the opposite side. If

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

not, supply an alternate solution.

T-1006 **SSS - Re-Align Beam for Double Angle Connection** **Closed** **12/10/2013** **12/20/2013** **12/31/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please refer to drawing S1-2603.

On S1-2603 near grids 9/F refer to sketch CD RFI 153 SK1 and confirm it is acceptable to align the noted W30x108 with the W30x90 on the south side of PE302. This will give us an off-set of 6 3/4" on the east end between the W30x108 & W24x76, which will allow a double angle connection per S1-5010. If not, supply an alternate solution as a double angle connection cannot be applied with the current beam locations because the bolts will foul the beam web on the opposite side.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed that the W 24x 76 may be moved to be in line with the W30x108 (moving W24, not W30, note that there is a typo in text description of this RFI).

T-1007 **SSS - Framing & Connection Clarifications** **Closed** **12/10/2013** **12/20/2013** **12/30/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Gary Krutsch

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On S1-2303 near grids 12/C refer to sketches CD RFI 221 SK1 & SK2 for items 1 to 4:
1) It appears the plan shows diagonal braces similar to 12/S1-3703 but details 3/S1-3705 & 5/S1-3705 do not show the bracing. Are braces required?
If braces are required, please see items 2, 3 & 4.
2) Supply the location of the braces from grid 'C' considering the dimensions on TR12 shown on SK2 and the connection to the girder per 8/S1-5005.
3) Supply the underside of slab elevation at the brace located per dimension supplied in item 2.
4) Supply the underside of slab elevation at the brace located per dimension supplied in item 2.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Yes, braces are required per 12/S1-3703.

2) Braces may be located at one of the stiffener plate shown on 9/S1-3702.

3) Underside of the slab elevation is 18.24 (T/Slab 19.07 minus 10" slab thickness).

4) see response #3.

Number	*Subject*	*Status*	*Date Created*	*Date Required*	*Date Answered*	*Cost Impact*	*Proceed*
T-1007.1	**SSS - Framing & Connection Clarifications**	**Closed**	**04/17/2014**	**04/27/2014**	**04/30/2014**	**Potentially**	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

This is a follow-up RFI to RFI T-1007:
Per the response to item #1 a dimension of 40' 4-3/4" was provided that differed to the dimension indicated on the
Revit model. Candraft & Skanska have reviewed the Structural and Architectural drawings provided and cannot come
up with this dimension. This is typical at every location where we are required to calculate the slope of the slab to locate the kicker angles connected to the underside of the slab.
Please provide the dimensions indicated on SK1 thru SK4 or clearly direct Skanska as to where to find this information.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) The T/slab elevation is called out at the slab step just north of GL G and west of GL 1. A slope of 1.7% and the direction of the slope is called out on A1-2862. From this information, the T/Concrete elevation can be calculated at the highlighted location.

2) The T/slab elevation is called out at the slab step at GL 2 and south of GL G . A slope of 1.7% and the direction of the slope is called out on A1-2862. From this information, the T/Concrete elevation can be calculated at the highlighted location.

3) The method described in 2) can be applied to get the T/Concrete elevation at the highlighted location. Note that the slope changes from 1.7% to 2% across the step along GL X.

4) The method described in 2) can be applied to get the T/Concrete elevation at the highlighted location.

5) The method described in 2) can be applied to get the T/Concrete elevation at the highlighted location.

6) Confirmed.

7) Confirmed.

8) The method described in 2) can be applied to get the T/Concrete elevation at the highlighted location.

9) The method described in 2) can be applied to get the T/Concrete elevation at the highlighted location.

10) The method described in 2) can be applied to get the T/Concrete elevation at the highlighted location.

11) The method described in 2) can be applied to get the T/Concrete elevation along the B88 beam.

12) There is no perimeter concrete beam. The MFB beams frame into the foundation wall. See 1/S1-3201 for reference. Yes, the foundation wall slopes between GLs. The T/slab elevations at the foundation wall edge between gridlines can be obtained by the method described in 2) or can be interpolated between the

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values shown at gridlines.

13) Three work points are noted on plans along foundation wall edge and offset from gridlines are shown on A1-2110, A1-2103 and A1-2104. The foundation wall curves between the first two work points with a radius of curvature of 637' - 7 1/2" and is a straight line between the second and third work points. From this information the coordinates of the foundation wall edge can be established along the portion of the wall that is not aligned to gridline J and the requested dimension can be calculated. The T/slab elevations are shown on plans at two ends of the MFB beams i.e. at edge of the foundation wall and at the slab step south of GL G. The slab step is dimensioned from GL G on architectural drawing A1-2863. The slope of the MFB beams can be calculated based on the T/slab elevations at these two points and the distance between them.

14) See response to 13).

15) See response to 13).

16) See response to 13).

17) See response to 13).

18) See response to 13).

19) RCS 16 slab is 10" thick. See reinforced concrete slab schedule on S1-3500.

T-1008 **SSS - Framing & Connection Clarifications** **Closed** **12/10/2013** **12/20/2013** **01/25/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On S1-2303 near grids 12/G refer to sketches CD RFI 222 SK1 to SK3 for items 1 to 5:
1) Confirm this dimension is correct (from Revit model) to be used to determine the slope of MFB4. If not, supply

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) The 5'-2" dimension (End of TR12) is confirmed. The 42'-0 5/16" shall be 40'-4 ¾".

2) Location of the braces confirmed.

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the dimension.
2) Work with SK2 and confirm the location of the braces to avoid fouling connection on TR12.
3) Supply dimension (to be used to locate PL 2 1/2 x 9 x 2'-6).
4) Supply the underside of slab dimension at the location of the brace per item 2.
5) Supply the underside of slab dimension at the location of the brace per item 2.

3) Centerline of the 2 ½" plate is 2 5/8" above the bottom of the concrete beam per Detail 5/S1-3600.

4) The elevation of the underside of the slab equal to top of slab elevation minus slab thickness (10").

5) See response #4.

T-1009 **SSS - Shear Plate Connection at Weak Axis Column Web** **Closed** **12/10/2013** **12/20/2013** **12/19/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On S1-2603 near grids 9/D the grid locations for the note indicating to use detail 3/S1-5011 at the weak axis at MF columns is unclear. On sketch CD RFI 227 SK1 please verify detail 3/S1-5011 only applies to grid lines 9/D & 9/F.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Detail 3/S1-5011 applies at beams framing into weak axis of moment frame columns at all North-South gridlines on roof level except otherwise noted. As the note calls out, moment frame columns are either located on GLs D and F or D.4 and E.6. Detail 3/S1-5011 is called out once per sheet on all roof plan sheets S1-2602 through S1-2607.

T-1010 **SSS - Detail Clarification & Locations for Concrete Beams & Plate Connections** **Closed** **12/10/2013** **12/20/2013** **12/30/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

At the ground level for the concrete beam locations and 1" plate requirements refer to sketches CD RFI 230 SK1 to SK7 for items 1 to 5: Note the structural & architectural drawings do not locate these members in question.
1) Confirm all dimensions for the spacing of the concrete are correct as shown.
2) Supply all clouded concrete beam location dimensions.
3) Confirm the intended location for the 1" stiffener plates is correct as shown.
4) Confirm the welding for the 1" stiffeners is acceptable as shown.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Confirmed.
2. For all "clouded" dimensions, refer to architectural slab edge plans for location of the slab openings.
3. The 1" stiffener plates are no longer needed.
4. See response to item 3
5. See response to item 3

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5) Confirm the noted stiffeners are also required in detail 4B.

T-1010.1 **SSS - Concrete Beam Location for Slab Support** **Closed** **01/24/2014** **02/03/2014** **02/13/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

This is a follow-up RFI to RFI T-1010 (SK 287 CD 230)
See attached CD RFI # 230.1 SK1 to SK6 for SK1 to SK6 for items 1 to 9:
1) Shown are concrete beam locations to suit slab opening dimensions on A1-2862. Confirm the dimensions are correct.
2) Shown are concrete beam locations to suit retractable bollard locations on A1-2862 & A1-2863. Confirm the dimensions are correct.
3) Shown are concrete beam locations to suit slab opening dimensions on A1-2863. Confirm the dimensions are correct.
4) Shown are concrete beam locations to suit retractable bollard locations on A1-2864. Confirm the dimensions are correct.
5) There is no information on A1-2864 to assist in locating the noted MFB1. Please supply dimension.
6) There is no information on A1-2864 to assist in locating the noted MFB1. Please supply dimension.
7) There is no information on A1-2865 to assist in locating the noted MFB1. Please supply dimension.
8) Shown are concrete beam locations to suit slab opening dimensions on A1-2865. Confirm the dimensions are correct.
9)There is no information on A1-2867 to assist in locating the noted MFB1's.Please supply dimensions

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Dimensions okay as noted (AAI).

2) Dimensions okay as noted (AAI).

3) Dimensions okay as noted (AAI).

4) Dimensions okay as noted (AAI).

5) Dimension to be 8'-0" (TT)

6) Dimension to be 8'-0" (TT)

7) Dimension to be 8'-0" (TT)

8) Dimensions okay as noted (AAI).

9) Please mark the question on the plan so we know which MFB1 is in question.

T-1011 **SSS - Slab Dimension at Seismic Joints** **Closed** **12/11/2013** **12/21/2013** **12/16/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Plan drawings S1-2503 and S1-2505 indicated a Type S8 floor type at the seismic joints at the Bus Deck level. Based on the Type S8 floor type detailed on detail 4/S1-5003, please confirm the dimensions indicated on CD RFI 202 SK1 for the structural slab and architectural topping thicknesses are accurate.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed

T-1012 **SSS - Connection for BU Girder into W40 Beam** **Closed** **12/11/2013** **12/21/2013** **12/26/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On S1-2503 at grids 9.9/B, 10.1/B, 9.9/H, and 10.1/H, please verify the shear plate connections for the BU girder framing into the W40x277 andW40x297 beams. Reference CD RFI SK1 & SK2 for locations in question.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Connection highlighted in the RFI shall be a double angle connection with 11 bolts per Detail 1/S1-5010 and not a shear plate connection. This applies to connections at GL 9.9/B, 9.9/H, 10.1/B, 10.1/H, 19.9/B, 19.9/H, 20.1/B and 20.1/H.

T-1013 **SSS - Connection Clarification at Braced Beams** **Closed** **12/11/2013** **12/21/2013** **12/30/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Arup Rich Coffin

REQUEST:

Refer to sketches CD RFI # 059B.1 SK1 to SK5 for items 1 to 3:

1) This diagonal beam will typically have to be erected from the top due to the slope of the pipe at the perimeter node connection. This will require the top gusset plate to be shipped loose per CD RFI 059B response and the bottom flange of the beam cut flush to the web to slide past the shear plate on the gusset plate end. Please review attached sketches and confirm.

2) This diagonal beam will typically have to be erected from the bottom due to the slope of the pipe at the perimeter node connection. This will require the bottom gusset plate to be shipped loose contrary to CD RFI 059B response and the top flange of the beam cut flush to the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This RFI is a follow up to RFI T-0883 and 0883.1.
1) Confirmed that the end connecting to the cast node may have the bottom flange cut flush to the web as noted in RFI T-0883. Shipping the gusset plate loose is a means and methods issue.
2) Confirmed that the end connecting to the cast node may have the top flange cut flush to the web as noted in RFI T-0883, shipping the gusset plate loose is a means and methods issue.
3) Confirmed that the top flange of this beam at both ends may be coped to clear the connection plates.

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web to slide past the shear plate on the gusset plate end. Please review attached sketches and confirm.

3) This beam will have to be typically erected from the bottom due to the slope of the pipe at the node connection. This will require the top flange of the beam to be coped at both end the clear the connection plates. Please review and confirm.

T-1014 **BGP - Moment Frame Beam Tie Configuration** **Closed** **12/11/2013** **12/21/2013** **12/12/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please refer to detail 2/S1-3600.

Due to the possibility of limited access during the installation of the individual moment frame hairpins as detailed in 2/S1-3600, SCCI/Gerdau proposes to modify the typical moment frame beam tie configuration to what is shown in the attached SCCI sketch SK-RFI-399.

Please confirm if this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
12/12/2013
RESPONSE:
The proposed configuration containing hairpins with 555 t-heads is acceptable for the 48¿ deep moment frame beams only in regions further than 96¿ from the face of supporting vertical elements. For locations within 96¿, the stirrup configuration may remain as proposed; however, the 555 t-heads shall be replaced with hairpins conforming to those of Detail 2/S1-3600. Note that all ties (including cap ties) which contain both 90 and 135 hooks shall have their hooks alternated for all locations.

T-1015 **BGP - Moment Frame Cap Ties at shear Key Blockout** **Closed** **12/11/2013** **12/21/2013** **12/12/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

In order to avoid the shear key blockout and anchor bolts in the MF joint, SCCI/Gerdau proposes to eliminate up to two cap ties where the spacing is 4" and one cap tie where the spacing is 6". Cap ties will resume at regular spacing no further than 1" from the beyond the anchor bolts or

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
12/12/2013
RESPONSE:
RFI proposal is acceptable for the Type I and Type II column base plates of S1-5051 at Lower Concourse.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

blockout.

Reference the attached photo for more details. Is this acceptable?

T-1016 **BGP - Concourse Slab Elevation at NW Corner of Area 3/Zone 1** **Closed** **12/11/2013** **12/21/2013** **12/12/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please refer to attached drawing S1-2202.

Please clarify the concourse slab thickness in gridline area 1-2 and A-C. It is unclear if the area is marked as RCS8 or RCS1.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
12/12/2013
RESPONSE:
The lower concourse area identified is confirmed to be RCS1 as indicated by slab symbol (reference legend on S-0010) with double arrows which symbolize "extent to edge of deck." The RCS8 slab mark uses single arrows which point to the actual "edge of deck".

T-1017 **SSS - Location Clarification for Lateral Bracing** **Closed** **12/11/2013** **12/21/2013** **12/16/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On S1-2303 (S1-2302 sim.) at the lateral bracing south of line G, the concrete locations cannot be determined using the structural and architectural drawings. Please refer to CD RFI 216 SK1 & SK2 requesting clarification on the following:

1) Provide the requested dimensions X1, X2, X3, X4, and X5 to determine the length and bevel of braces.

2) Provide the requested elevations to the underside of the slab edge to determine the length and bevel of braces X1, X2, X3, X4, and X5.

3) Supply the elevation to the underside of slab at the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Braces are equally spaced between Grids 9 & 9.9.

2) The bottom of the slab is equal to the top of slab elevation minus the slab thickness (10"). Top of the slab elevations may be determined assuming that the slab has a constant slope between the elevation points noted on the plan.

3) See response to item 2)

4) See response to item 2)

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

edge of concrete beam for each brace to determine the length and bevel of the braces between grids 1.4-9 sough of grid G.

4) Supply the information to determine the slope of the slab at each steel to concrete beam brace.

T-1018 **SSS - Perimeter Protection Detail** **Closed** **12/11/2013** **12/21/2013** **12/19/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

In order to comply with OSHA regulation 1926.501 - 'Duty to Have Fall Protection', Skanska has directed our modeling contractor, Candraft, to incorporate holes in new framing members to facilitate installation of the guard rail systems and life lines. Please see the attached sketches, SK 6 A-F, SK 7-8 and SK R-4, which are consistent with the National Institute of Steel Detailing standards for safety holes on beams and columns, and confirm that the EOR takes no exceptions to our proposal.

Particular attention is drawn to the note on our proposal that states 'No Holes or Welded Tabs will be located in the protected zones of the new members.' All open holes will be filled with high strength bolts upon removal of the safety systems.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The holes for erection safety railing are acceptable in concept. The holes shall be detailed on the shop drawings submitted for review as a part of review process. The holes shall not be in any steel exposed to view in the completed design and there may be other areas that are not acceptable once the holes are shown on the shop drawings. Any holes in galvanized steel shall have the galvanized finish repaired.

T-1019 **SSS - Transfer Girder CJP Web-Flange Welds** **Closed** **12/11/2013** **12/21/2013** **12/16/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

In orThe web to flange T-joint CJP welds for the transfer girders shown on drawings S1-4300 to S1-4308 do not indicate that a reinforcing fillet weld is required. Note 1 on 4/S1-4202 calls for reinforcing fillets to T-joint groove welds of SLRS members. Please confirm that a reinforcing fillet weld in not required for the transfer girder

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The T-joint CJP welds for the transfer girders shown on drawings S1-4300 to S1-4308 are double side CJP weld, not requiring reinforcing fillet weld. Detail 4/S1-4202 is for single side CJP weld at beam flange to column moment connection, therefore, Note 1 in Detail 4/S1-4202 does not apply.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

web to flange T-joint CJP welds.

T-1020 **SSS - Type 2 Drag Connection Clarifications** **Closed** **12/11/2013** **12/21/2013** **12/16/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

For Type 2 Drag Connection Clarifications refer to sketches CD RFI 148 SK1 to SK2 for items 1 to 5:

1) Supply erection gap between web reinforcement plate and shear plate on column.
2) Supply erection gap between 2" plate and shear plate on column.
3) Supply erection gap between 1 1/2" web doubler plate and 2" thick plate.
4) Supply erection gap between beam web and shear plate on column.
5) Supply erection gap between 2.5" plate and shear plate on column.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Erecting gaps between plates should be typically 1/16" If wider gap is required at certain locations, submit the gap width for approval.

T-1021 **SSS - Rebar Holes and Headed Stud Details at Ground Level** **Closed** **12/12/2013** **12/22/2013** **12/19/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Refer to sketch CD RFI 105.1 SK1.
The 2 1/2 x 14 x 2'-6" plate has been set per the elevation given in RFI # T-0888 item 3 and the 3" dia. rebar holes have been set at 1 3/4" above the underside of MFB 6 per RFI # T0888 item 8. This results in the plate fouling the rebar holes as shown.

Please advise.

Note: the same occurs at grid 10.1.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

First rebar hole fouling the 2 ½¿ plate may be deleted. This response applies at Grid 10.1 as well.

☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1022	SSS - Headed Stud and Hole Clarifications at Transfer Girders	Closed	12/12/2013	12/22/2013	12/30/2013	Potentially	

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

This is a follow-up RFI to Webcor RFI #T-0890 (SK RFI # 150 & CD RFI # 109)
Refer to sketches CD RFI 109.1 SK1 to SK3. The response in Webcor RFI # T-0890 has been applied at grid 11 as shown on SK2 but the response to T-0890 with the information shown in details 6/S1-3702 & 2/S1-3705 cannot be applied at grid 9 as shown on SK3. There insufficient space to fit the (50) headed studs as requested.

Please supply a new detail for the TR9 location.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For the condition at Grid 9, change the vertical spacing of the studs to 4" so the 3rd row can clear the holes for stirrups. Move the 4th and 5th rows studs to the beam top flange (4" on center in the direction perpendicular to the beam axis, 6" on center spacing in the direction parallel to the beam axis).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1023	SSS - Deck Support Angle Spacing	Closed	12/12/2013	12/22/2013	12/26/2013	Potentially	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

At a sample location on S1-2403 between grids D & F west of line 10 refer to sketches CD RFI 155 SK1 & SK2 for angle spacing question below.

Detail 9/S1-5000 (see SK2) states that the maximum spacing for the deck support angles and bracing is 8'-0. As shown, the spacing of the steel framing on S1-2403 (SK1) exceeds 8'-0. Confirm the framing as shown on S1-2403 is acceptable and no further action is required or supply a revised partial plan to show the revised framing to meet the criteria in detail 9/S1-5000.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed that the framing as shown on S1-2403 is acceptable. No need to add more deck support outrigger and bracing.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1024	SSS - Transfer Girder Studs and Rebar Holes	Closed	12/30/2013	01/09/2014	12/26/2013	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Adamson Associates, Inc. George Metzger **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

At TR8 near grid line G refer to sketches CD RFI 220 SK1 to SK3 for items 1 to 3:
1) Confirm the headed studs as shown are correct (work with item 2).
2) Detail 2/S1-5023 is referenced with a "SIM' designation

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.
2) Head studs placement shall be based on detail shown on SK-2.
3a) Confirmed
3b) Holes are to be on 6" spacing as shown in detail

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

and it is not clear what is required on grid 8 for the additional headed studs shown in detail 2/S1-5023. Confirm the headed studs as shown on SK3 are acceptable or supply a clarifying detail specifically for this location showing the stud locations.
3a) Confirm the 2" dia. hole locations as shown on SK3 are acceptable to clear the bolts in the bottom flange and the stiffeners.
3b) Detail 2/S1-5023 shows the holes at 5" OC but this contradicts the 6" OC shown in detail 7/S1-3701. Confirm the spacing shown in item 3a above is acceptable.
3c) Confirm the 3" dia holes are not required at grid 8 as they are not shown in detail 7/S1-3701. Supply location dimensions if they are required.

7/S1-3701
3c) 3" holes for concrete beam B57 bottom bars are needed per section 52/S1-5023.

T-1025 **SSS - Transfer Girder Stud & Rebar** **Closed** **12/12/2013** **12/22/2013** **12/26/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

At Transfer Girders TR16.9 & TR19.1 near grids C & G @ detail 1/S1-3703 refer to sketches CD RFI 223 SK1 & SK2 for items 1 & 2:
1) Confirm the spacing for the headed studs as shown on SK2 is acceptable or supply spacing.
2a) Confirm it is acceptable to supply 2" dia. holes for the rebar's or supply a diameter.
2b) Confirm it is acceptable to locate the rebar holes 4" up from the top of the bottom flange as shown on SK2 or supply the dimension.
2c) Confirm it is acceptable to locate the rebar holes as shown on SK2 from the end of the Transfer Girders to avoid fouling the stiffeners.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.
2a) Confirmed
2b) Confirmed
2c) Confirmed. It appears that one holes for stirrup will foul the stiffeners. Adjust the hole as needed (not more than 2") to clear the stiffeners.

T-1026 **SSS - Transfer Girder Rebar Hole Locations** **Closed** **12/12/2013** **12/22/2013** **12/16/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

At Transfer girder TR6 refer to sketch CD RFI 224 SK1 and supply the elevation to the rebar holes at the bottom of B57 as the top of B57 is not known.

Top of concrete elevation @ Beam B57 is at EL 20.58. The center of the holes shall be at EL 16.83.

T-1027 **SSS - Deck Suppport at Transfer Girders** **Open** **12/12/2013** **12/22/2013** **12/30/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

At sample locations on S1-2303 @ grid lines 9.9 & 10.1 refer to sketch CD RFI 226 SK1 for items 1 & 2 below regarding deck support requirements.
1) T/Steel at beams = 19'-1 5/8 and the T/Steel for TR9.9 & TR10.1 = 19'-1 7/16 (19.12'). This leaves a difference of 3/16" as shown on SK1. Confirm deck support angles are not required along grids 9.9 & 10.1 between grids D-G.
2) If deck support angles are required, supply welding for the angles as the 1/4" fillet weld per details 8/S1-3705 and 10 & 11/S1-5002 cannot be achieved with the 3/16" elevation difference.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

3" long ¼" fillet weld @ at 12" on center at the top of the angle shown on 10/S1-5002 may be replaced with 6" long 3/16" weld at 12" on center.

T-1028 **SSS - Shaw Alley Bridge End Plates** **Closed** **12/12/2013** **12/22/2013** **12/12/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Webcor Construction LP Jeff Galoyan **Answered By:** Webcor Construction LP Gregory Kemerer

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please confirm the 14 ½" long end plates shown in 5/S1-5004 are not in TG07.1R scope as the plates are welded to reinforcing steel supplied by others and so could only be installed by future concrete trade subcontractor. See attached referenced drawing S1-5004.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

These plates are included in the TG07.1R scope.

Please reference Exhibit A, Section IV, C.1.f - Metal Decking and Studs, which states Trade Subcontractor shall complete the Steel Floor Decking, including, but not limited to, end closure and cantilever plate and reinforcement at the edge of slab, in accordance with the Contract Documents.

T-1029 **SSS - Pretensioned Rod at Cruciform Columns** **Closed** **12/12/2013** **12/22/2013** **12/30/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Gary Krutsch

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On 2 & 6/S1-5052 @ the Pretensioned Rod details refer to sketches CD RFI 228 SK1 & SK2 for items 1 & 2:
1) The WT surface below will be milled to bear against the 2 1/2" thick plate. Work with item 2 below as shown on SK2 and confirm welding at this joint is not required as none is shown.
2) Similar to detail 2/S1-5052 as shown on SK1 (item 1 above), the contact surface will be milled for bearing as requested. Please confirm the noted 1/2" fillet welds for the built-up TT section to the 4" thick plate are to be applied as shown.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.

2) Confirmed.

T-1031 **SSS - Typical Deck Support Details at Columns** **Closed** **12/12/2013** **12/22/2013** **12/19/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

1/S1-5001 refer to sketch CD RFI 119 SK1 & SK2. Confirm the specified L3x3x12GA deck support angles are adequate given the approximate length of these angles will be 3' 9-1/2".
The
contractor proposes to use A36 L3x3x5/16" at these typica l details. Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

L 3 x 3x 12 gage deck support is adequate as shown.
It is acceptable to use L3 x 3 x5/16 as proposed.

T-1032 **SSS - Detail Clarification at Bent Plate to Sloping Beams** **Closed** **12/12/2013** **12/22/2013** **12/30/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Refer to sketch CD RFI 231 SK1 and confirm it is acceptable to fabricate the double bent deck support plate as shown when the beam is sloping and the underside of slab is horizontal, resulting in a variable height along the deck support plate. It is not possible to model a double bent plate with a variable height in Tekla.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Acceptable to fabricate the double bent deck support angle as proposed, but the weld shall be a continuous 1/4" double fillet weld, not a 3" long weld at 12" on center. Note that the lower horizontal plate needs to be welded according to welds shown in detail 4B.

☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1033	SSS - Weld Clarifications at Light Columns	Closed	12/12/2013	12/22/2013	12/20/2013	Potentially	

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Per detail At the light column bases refer to sketch CD RFI 167 SK1 for items 1 & 2:
1) Confirm the CJP weld designation applies to the 1" thick web and the 2" thick flanges to the column base plates.
2) Supply the weld requirements for the 1" shear key web to the 2" shear key flanges.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) confirmed.
2) Weld requirement for the 1" shear key web to the 2" shear key flanges: double fillet welds with w = 0.5" on each side.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1034	SSS - Material Grade and CVN Requirements	Closed	12/12/2013	12/22/2013	12/12/2013	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

1. At 1/S1-4205 EBF LINK BEAM DETAIL, there is a section 4/S1-4205 that cuts an EBF LINK BEAM CROSS SECTION. The same section 4/S1-4205 is cut on 2/S1-4205 BRACE DETAIL. Please confirm that EBF link beams are where the 4/S1-4205 section is shown, and that they will be ASTM A709 grade 50 and other built-up beams at the roof park perimeter will be ASTM A572 grade 50 per SS-1/S-0007.

2. Please verify if bus deck built-up plates that are ASTM A709 grade 50 plates less than 2" thick part of the SLRS should be CVN tested 25 ft.-lb @ 70 degrees F.

3. Please supply CVN testing requirements, if any, for secondary material steel (i.e. stiffeners, connection plate, continuity plates, etc.).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. The requirements for ASTM A709 Grade 50 material for the link beam is for the region between the diagonal work point as shown in Detail 1/ S1-4205. At the contractor¿s option, steel plate beyond the splice point outside of the A709 grade 50 plate may be ASTM A572, grade 50.

2. CVN should be per requirements in the respective ASTM specification and Specification 05 10 00. For a member that is a part of SLRS (or SFRS), see 05 12 10 for additional requirement for CVN testing. Also, the testing temperature for weld metal is not 70 deg F, it should be in accordance with AWS D1.1 and 1.8 (for SLRS), assuming LAST=25 deg F per specification 05 12 10, paragraph 2.1.C.3.

3. CVN requirement for stiffeners, connection plate, continuity plates shall be in accordance with their respective ASTM specification.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1035	SSS - Ground Level Cast Node to 3" Connection Plate Weld	Closed	12/12/2013	12/22/2013	12/16/2013	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

1. Please verify weld configuration at 3/S1-4350, similar

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed that the weld configuration at 3/S1-4350

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

condition at 2/S1-4354 and 3/S1-4356. See sketches CD RFI 225 SK1 & SK2.

2. Please verify if weld configuration 3/S1-4353 should be the same as weld shown at 3/S1-4350, 2/S1-4354 and 3/S14356. See sketch CD RFI 225 SK3.

is similar to 2/S1-4354 and 3/S1-4356. The joint bevel configuration is not correctly shown on RFI 225 SK2. The 45 deg bevel shall be on the opposite side (the side that the 3" plate connecting to the curve surface of the cast node), and 5/16" back gouge and re-weld (no need to prepare the groove) shall be on the flat side where the 3" plate is in line with the back of the cast node.
2) Confirmed. Also see response to Item 1).

T-1036 **SSS - Flange Plate between Tapered Girder and Built Up Edge Girder** **Closed** **12/12/2013** **12/22/2013** **12/26/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

The 1 1/4" top flange plate per 6/S1-5010 & 7/S1-5032 will require bending due to the sloping TPG girders on the roof and a 5/16" shim will be required to fill the gap as shown in CD RFI 154 SK1&2. Confirm it is acceptable to bend the top flange plate at the edge of the BU beams on grid lines B & H and supply a 5/16" shim plate to fit the profile of the top flange plate to be welded all around to the TPG girders with 1/4" fillet weld. If not, supply an alternate solution.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is acceptable to bend the 1 1/4" plate and add shims to match the profile of the sloping tapered girders. Note that T/steel of tapered girder is not correctly shown on SK2. T/steel of the tapered girder should match the T/steel of the BU girder at the flange edge of the BU girder.
- End of Response -

Turner disputes the claim that there is a probable cost increase as noted in this RFI. The top of steel of the beams connected are shown in the contract document. The necessity of bending the connection plate due to beam slope should be anticipated by the contractor.

T-1037 **SSS - Typical Kicker Brace Detail** **Closed** **12/12/2013** **12/22/2013** **12/26/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Reference the bracing connection details provided on S1-5015. At conditions where a full depth shear plate and bracing are required, there is consistently a conflict

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Acceptable.
2) Acceptable.
3) Acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

between the bottom gusset plate and shear plate. Based on the weld requirements for the kicker brace connection, the following is proposed to avoid this conflict:
1) Connect the kicker directly to the shear plate
2) Eliminate the bottom gusset
3) Offset the top gusset (below the beam) by the width of the beam web to align with the shear plate
4) Match the thickness of the gusset and stitch plates to the shear plate thickness
5) Shape the bottom of the shear plate, where necessary, to achieve the required angle brace weld

Please confirm this is an acceptable typical solution for the conditions shown in the sketches attached and at other typical locations where bracing and a full depth shear plate are required.

4) Reducing the top gusset plate thickness to match the full depth shear plate thickness is not acceptable. See response to RFI T-0920.1 where stitch plates with varying thickness were allowed to be used when the full depth shear plate and gusset plate thickness did not match. The same solution can be applied at all similar locations. Alternatively, the full depth shear plate thickness can be increased to match the gusset plate thickness.
5) Acceptable.
It is typically acceptable to apply solutions 1) through 5) at locations where there is a conflict between the bottom gusset plate and full depth shear plate at the transfer girders.

T-1038 **Spandrel Beam Reinforcement clarification Area 1-9** **Closed** **12/13/2013** **12/23/2013** **12/19/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Further to discussion with Thornton Tomasetti design Engineer Kerem Gulec on the responses to the RFI received to date on the spandrel Beams modifications for area's 1-9 which include: RFI's T-0707, 708, 713, 717, 718, 719, 873 & 874 the response to these RFI"s specified that a "lap splices shall be provided where the beam rebar is transitioned from the spacing in the construction drawings to the modified spacing" However following discussion this now will change to "Horizontal Rebar Bar spacing between modified spacing and construction drawings spacing will transitions over a distance of 6' on either side of the modified cross-section and thus removing the need to provide the additional lap splices. See a typical example attached.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
12/18/2013
RESPONSE
Confirmed.

Webcor/Obayashi Joint Venture

PROJECT MANAGEMENT - REQUEST AND ANSWERS LOG

30100 - Transbay Transit Center Project

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1039	SSS - Stitch Bolts on Kicker Braces	Closed	12/16/2013	12/26/2013	12/30/2013	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Details 4, 5 & 7/S1-5015 do not show a stitch bolt requirement for the kicker braces. At a sample location and detail shown on sketches CD RFI 066 SK1 & SK2 please confirm none are required or supply the necessary information.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to Section 3/S1-3703 that is just above the SK2 section cut, where the Section RFI 066-SK2 was cut. In addition to Section 3/S1-3703 refer to Section 6/S1-5022, which provides information on the stitch plate.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1039.1	SSS - Stitch Bolts on Kicker Braces	Closed	02/03/2014	02/13/2014	02/10/2014	Potentially	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

The response to T-1039 references details 3/S1-3703 & 6/S1-
5022 for stitch plate information although these sections are only cut at Ground Level at Fremont & First Street. Ple ase confirm the response is intended to indicate stitch plat es are required at all kicker brace locations including detail s 4, 5 & 7/S1-5015 as per details 3/S1-3703 & 6/S1-5022. If so pleases confirm detail 8/S1-
5015 can also be used for the stitch plate detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed. Stitch plates are required for kickers where Details 4, 5 and 7/S1-5015 are applicable, except where the kicker is shorter than 1.5'. Stitch plate details provided in 8/S1-5015 can be used at locations where kickers are required except that the stitch plate thicknesses shall match those of the gusset plates in the details. Stitch plates can be either welded (as shown in 8/S1-5015) or bolted (as shown in 6/S1-5022) to the kicker angles. For kickers shorter than 3' but longer than 1.5', provide a single stitch plate centered on the kicker angles.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1040	BGP - Width and Depth of Intermediate Beam in Lower Concourse at GL E.6/7	Closed	12/17/2013	12/27/2013	12/19/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference contract drawing S1-2203.

Plan sheet S1-2203 shows an intermediate beam at gridline E.6 from gridline 6 to gridline 8 (see highlighted area attached). The Section 2/S1-3400 does not give the specific dimensions for a beam with change in slab elevation. Please provide both width and depth of the beam at this location in the lower concourse.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
12/19/2013
RESPONSE:
There is no beam at Grid E.6 between Grids 6 and 8 of the Lower Concourse. The hidden line shown on S1-2203 is a step in the soffit that corresponds to a change in top of slab elevation. Refer to Detail 2/S1-3501 for dimensions and reinforcing. Detail 2/S1-3400 does not apply at this location. See RFI T-876 response for additional information.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1041	SSS - CJP Weld Prep between Ground Level Cast Node and Transfer Girder	Closed	12/17/2013	12/27/2013	12/26/2013	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Stacy Wilson

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Our fabricator Thompson Metal Fab has requested a 2" 45° bevel be incorporated into the ground level cast node machining drawings. This weld is detailed on 6/S1-4350. See attached sketch for bevel detail.
Please confirm approval for weld prep detailed in attached sketches.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The 2" 45 degree bevel to the ground cast nodes is acceptable to incorporate into the machined drawings per CCX. The additional Cast Connex detailing, Bradken additional machining, and any other follow on expenses or schedule delays due to this change will be borne by Skanska and not the TJPA.

George Metzger
12/18/2013
RESPONSE:
Cast Connex,
It makes sense to have Bradken to put in this bevel as detailed on the structural drawings. Please coordinate with Bradken for this work.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1042	BGP - Geothermal Manifold Locations for Fields 3, 4, 5, 6, 7, 8, 9, and 10	Closed	12/17/2013	12/27/2013	01/07/2014	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Per the drawings, the manifold is to be located at an elevation no greater than 14' below finish grade (street) elevation. Per conversations in the preparatory DFOW meeting and other coordination meetings, the Engineer planned to have the manifold in a specific location. Attached are elevation drawings for Field 3, 4, 5, 6, 7, 8, 9 and 10 Manifolds. Please confirm that the attached elevation details work with the desgner's intent for the manifold locations for said Fields.

Note that Riser 10 has been relocated approximately 4' East between piles 231 and 232 to allow for the required 10' minimum spacing for future column installation.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
1/7/2014
RESPONSE:
Riser penetrations into the building must occur within the beam space of the ceiling of the lower concourse level. The elevations shown on the sketches fall below the beam pockets and conflict with future emergency ventilation ducts within the building. Elevations shall be modified and resubmitted to verify that the pipes enter the building within the beam space. Risers 7 & 8 may be greater than 14'-0" below finished grade and should be reviewed by ARUP for confirmation.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1043	BGP - Elevator Sill Support Angle Dimensions	Closed	12/17/2013	12/27/2013	12/26/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Please refer attached SKA-2916 through SKA-2921, and A1-7576.

1. Please confirm Elevator Sill Support Angle at GL 2/E.2 is 4'-4" in length

2. Please confirm all other elevator sill support angles highlighted on the attached drawings extend the entire length of slab opening/pit, except where the angle terminates as prescribes in RFI response T-0837.1

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
12/21/2013
RESPONSE:
1. The Elevator Sill Support Angle for PE 203 at GL 2/E.2 is 6'-0" in length (at concrete wall opening).
2. Confirmed, all other elevator sill support angles run the entire length of the edge of slab except where the angles terminates as prescribed in RFI Response T-0837.1.

T-1044 **SSS - Personnel and Material Hoist Layout** **Closed** **12/17/2013** **12/17/2013** **12/20/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Webcor Construction LP Jeff Galoyan **Answered By:** Webcor Construction LP Gregory Kemerer

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Information Requested:
For reference, please use drawings A101 - A110 from Exhibit A of the Subcontractor Bid Package Manual and Forms - Contract #30100071W, #30100071C and #30100071E.

Skanska would like to confirm that the personnel and material hoist layout will be installed at the locations as shown on drawings A101 - A110. In addition, please provide the dimensions of the hoist openings.

In order for the hoists to be installed, steel framing will have to be left out until the hoists are removed. Please provide back-up engineering that allows for this to take place & provide any weldaments or bracing required.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For your reference, please see the attached R2 update to the A101-A110 drawings.

T-1045 **BSE - Micropile Relocations -Zone 3** **Closed** **12/17/2013** **12/27/2013** **01/07/2014** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Robert Kjome

Co-Author:

REQUEST:

Fourteen (14) micropiles located under Span 3.7 and 3.8 in Zone 3 have to be relocated in the field due to their

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

TT field engineer¿s observation of pile layout staking and trestle configuration does not support that

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

proximity to the Trestle Deck. Micropiles E343/E354/E363/E375/E390/ E401/E411 have to be relocated 5' to the North and micropiles E340/E353/E362/E371/E386/ E400/E410 5' to the South. See attached sketch of micropiles in question.

Please confirm these relocations are acceptable.

micropiles have to be relocated as stated in the RFI. The low-overhead rig appears very capable of installing piles per plan.

The proposed relocations are not acceptable.

T-1045.1 **Micropile Relocations -Zone 3 & 4** **Closed** **12/30/2013** **01/09/2014** **01/14/2014** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

BBII is proposing to move 49 micropiles located within Zone 3 & 4 due to their close proximity to the Trestle/bridge Deck. Micropiles E375/E390/ E401/E411/E654/E670/E704/E738/E769/E800/E815/E826 would all be relocated 5' to the North, micropiles E492/E512/E537/E564/E587/E610/E630 would also relocated 3' north. The micropiles E371/E386/E400/E410/E488/E526/E534/E559/E578/E605 /E622/E650/E666/E700/E734 /E765/E796/E811/E825 would also be relocated 5' to the South. Micropiles E416/E417/E418/E419/E420/E426/E427/E428/E429/E430 /E431 would also be relocated 3' to the West. See attached sketch of micro piles in question.

Please confirm this is acceptable

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Based on a reanalysis of the mat slab with the proposed micropile relocations contained in the RFI, the proposed relocations are determined to be acceptable. No modifications to the mat slab are required to accommodate the proposed micropile layout.

T-1046 **SSS - Transfer Girder Weld Access Holes** **Closed** **12/17/2013** **12/27/2013** **12/26/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please confirm the weld access holes detailed on SK1 are acceptable for all Transfer Girder field splice connections.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The attached sketch SK-1 did not provide sufficient information on the dimension for the weld access hole, hence, this RFI cannot be confirmed by the Design

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Team. However, there is no need to resubmit this RFI. Weld access hole for the Transfer girder shall be detailed per AWD D.11, Section 5.17.1, which gives very specific requirements for the weld access hole dimension for built-up members.

T-1047 **SSS - Field Splice Locations** **Closed** **12/17/2013** **12/27/2013** **12/30/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Skanska has evaluated adding, relocating or removing sev eral field splices on a number of the transfer girders in ord er to reduce segment weights for critical picks, avoid interf erences with longitudinal framing members, increase stabil ity of the girder segments during erection and to optimize our erection sequencing.

Please confirm the field splice locations indicated on the at tached sketches (SK1 thru SK34) are acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed that the proposed field splice locations are acceptable. However, changing the field splice locations shall not result into reducing the steel plate thickness. If the proposal in this RFI results in additional shoring or costs, SKANSKA shall bear the additional costs.

T-1048 **SSS - Elevator Rail Support Embedded Plate** **Closed** **12/17/2013** **12/27/2013** **12/17/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Webcor Construction LP Jeff Galoyan **Answered By:** Webcor Construction LP Gregory Kemerer

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Elevator rail support detail 4/S1‐7630 indicates a shop assembled support with embedded plates. As the package delineation line shows the ½" thick embedded plate is not in Skanska¿s scope of work. The embedded plates will besupplied and installed by Shimmick and Skanska will field weld the HSS with end plates to the embedded plate as indicated on SK3.
Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed. The embedded plates shown in the attached sketch are to be provided and installed by others. Skanska will field weld the HSS per contract documents.

T-1048.1 **SSS - Elevator Rail Supports Erection Aids** **Closed** **01/08/2014** **01/18/2014** **01/14/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Gregory Kemerer

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 183.1 SK1A, SK1B, SK2A & SK2B for items 1 & 2:

1.) Confirm the elevator rail support connection with erection aids is acceptable as shown.

2.) Confirm the elevator rail support connection with erection aids is acceptable as shown.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

RFI number changed to RFI T-1105

T-1049 **BGP - Column Base Plate Clearance Lower Concourse Slab** **Closed** **01/14/2014** **01/27/2014** **Potentially** ☐

From: Webcor Construction LP Adib Sassine **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Ref: 1 and 3/S1-5051, S1-3600, S1-2205

To erect and plumb Lower Concourse Column with base plates Types I as shown on schedule 1/S1-5051 and II at 7/F.8 shown on detail 5A/S1-5051, erection aids will be required at the base plate. However, due to the depression, rebar running thru the depression and based on our experience with the grouting at column base plate mock-up, allowable clearances to set these base plates may not be adequate. As an example, column at GL C/24.9, the bottom of type I C base plate is within 1" from the top of rebar and does not have adequate area for shim packs.

Question # 1:

To provide adequate erection aids, please review the following options and advise as to which one is acceptable:

Option 1: Lower rebar around the base plate area by 1" to allow for 2" clear between rebar and bottom of base plate. Install 4 shim packs for erection purposes under each corner of the base plate on top of level concrete surface.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Question 1, Option 1: Lowering the MF Beam reinforcing is not acceptable. Erection aids are contractor's means and methods.
Question 1, Option 2: The reinforcing adjustments allowed are contained in RFIs 908.1, 917, 924, 925 and 1015. Erection aids are contractor's means and methods.
Question 1, Option 3: Raising the column base plates is not acceptable. Erection aids are contractor's means and methods.
Question 2: Increasing the plan dimension of the column base plate block-out to 6" all around is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Option 2: Stop or adjust reinforcing steel under the base plate and use shim packs for erection on top of level concrete surface.

Option 3: Do not modify rebar, raise base plate elevation by 1" to provide minimum of 2" clearance under the base plate. Locate two shim packs next to key plates and install two additional erection aid threaded bolts with leveling nut drilled in concrete by Skanska as shown on the attached sketch SK-2.

Question # 2:
There is a 3" dimension between edge of steel plate and edge of depressed slab. Pls confirm if 6" dimension is acceptable in lieu of 3" around the base plates Type I C , I B and Type II at 7/F.8.

T-1050 **SSS - Field Splice Framing Interference** **Closed** **12/19/2013** **12/29/2013** **12/30/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

At two locations, TR5 & TR33.2 the framing beam end con nections foul the Transfer girder field splices. Please verify beam framing adjustments shown on CD RFI # 163 SK3 & SK10 are acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Do not move the W40x211 beam. The transfer girder splice may be move toward south 1'-0" to be in line with the step of the transfer girder.

2) Do not move the W21x44 beam. The transfer girder spice may be move south slightly to clear the W21 and W33 connections.

T-1051 **SSS - BRB Gusset Plate Connections** **Closed** **12/19/2013** **12/29/2013** **12/30/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Gary Krutsch

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

The details on S1-4206 & S1-4207 do not provide the information required to finalize the shape of the BRB gusset plates. Please see questions below and noted on

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) The dimensions requested are pending on the geometry of the end connections of the BRB brace. Skanska to submit BRB Technical Submittals per

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

sketches CD RFI 236 SK1 & SK2.
1) Please provide a typ. minimum dimension to maintain from the edge of the Clevis plate to the corners of the gusset. See SK1 & SK2.
2) Please verify the typ. length for the gussets on 1 & 5/S1-4206, 1/S1-4207, see SK1.
3) Please verify the typ. length for the gusset on 2/S1-4206, see SK2.
4) Please verify if a typ. minimum width for the gusset on 2/S1-4206 is to be maintained or the shape of the gusset can be based from the offset of the edge of the Clevis plate to the corners of the gusset? See SK2.
5) Please verify if the 1/2" stiffener should maintain a minimum width or should the stiffener extend to the edge of the beam flange? also please verify if the corners of the stiffeners should be shaped? if so, please provide details. See SK2.

specification 05 12 50.

2) See response #1

3) See response #1

4) See response #1

5) Stiffeners shall match the width of the beam. Corners of the stiffener plates do not need to be shaped.

T-1052 **SSS - W10 Detail Clarifications** **Closed** **12/19/2013** **12/29/2013** **01/02/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Gregory Kemerer

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

1. Confirm the dimensions as shown are correct and match the W-10 system.
2. The noted elevation shown on 87'-4" in details 1,4,9/S1-8008 conflicts with A1-2903. Please verify correct elevation.
3. Supply the offset from top of curb to determine the location of the 3/8" x 6" x 6" stiffener plates.
4. The 5/16" fillet weld all around is only possible on one side of the post due to the 10 1/8" flange width on the W27x114 and the limited remaining distance on the end of the beam as shown. Confirm it is acceptable to supply a 5/16" PJP weld on 3 sides.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). The clouded dimensions shall be determined from the W-10 3d model, TTC_SBP_STR_WRF_MST_NFC_W10-WIREFRAME_131010, which WOJV has as part of the current bid documents.

2). The top of concrete curb elevation is 87'-4 1/2" (Also see Detail 5/S1-6011).

3). The clouded dimension (center line of the rebar to face of sloping concrete wall) is 1 1/2".

4). The 5/16" fillet weld is on 2 sides only (not all around as stated in this RFI). The width of the stiffeners can be reduce to match the W27 beam flange width. Don't see a problem in performing the double fillet weld, however, a CJP weld to replace the double fillet weld is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1052.1	SSS - W10 Detail Clarifications	Closed	01/16/2014	01/26/2014	01/28/2014	Potentially	☐

From: Skanska USA Civil West California Dis Ryan Clayton **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

The response to RFI T-1052 (SK RFI 309.1), states that "The 5/16" fillet weld is on 2 sides only (not all around as stated in this RFI). The width of the stiffeners can be reduced to match the W27 beam flange width. Don't see a problem in performing the double fillet weld, however, a CJP weld to replace the double fillet weld is acceptable." The original question asked permission to use a PJP weld in lieu of the double fillet weld, not a CJP weld. Please clarify the following:

1) Skanska disagrees with the note that the referenced weld is shown as being required on 2 sides only. Please review the attached SK2 and confirm the welding locations as shown are acceptable.

2.) As there is insufficient landing to perform the 5/16" fillet as originally detailed, please confirm the welding as per CD RFI 240.1 SK2 is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Questions 1 and 2 appear to be asking the same thing.

Welding per SK2 is will be acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1053	SSS - Roof Park Level W40 to BU Girder Connections	Closed	12/19/2013	12/29/2013	12/31/2013	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On S1-2602 to S1-2607 along lines B & H the bottom flanges of the sloping W40x264 moment beams are deeper than the BU 40 girders by 5/16" of an inch as noted on sketch CD RFI # 217 SK1.
1). To accommodate for the depth discrepancy verify a 1/2" plate can be added to the bottom of the BU 40 girders and the welds as noted on sketch SK1.
2). Also for the top & bottom flange welds for the W40x264 sloping beams verify the CJP weld noted on the sketch SK1.
3). Option # 2 is to move the work points of the W40x264 beams up 5/16" thus flanges would then be flush for both W40 & BU 40 members.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) The top of steel for the slope W40 may be set to match the BU40 girder at the tip of the flange, thus, avoid the need for the 1/2" connection plate.

2) 1 3/4" bevel for 1 1/2" effective PJP weld is acceptable.

3) See response to Item 1).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1053.1	SSS - Roof Park Level W40 to BU Girder Connections	Closed	01/21/2014	01/31/2014	01/27/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Reference the response to RFI T-1053. Per the conversation during the 1/21/14 Structural Issues Meeting, please address the following:

1) Please confirm that a 1/2" plate is acceptable as described in RFI T-1053, item #1

2) Please confirm that a CJP weld will be acceptable in lieu of a PJP weld, as described in RFI T-1053, item #2

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.
2) Confirmed.

T-1054 **SSS - Light Column Reference Detail Clarifications** **Closed** **12/19/2013** **12/29/2013** **12/20/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Gregory Kemerer

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

ASI 0106 changed the majority of the detail and section references on drawing S1-6005 that result in incomplete or incorrect traceability. These changes were not clouded. Two possible issues exist as a result of these changes:

1) Some of the revised detail/section references were revised in error, and/or
2) Some of the revised detail/section references are correct and the referenced drawing requires either a revision to match the sourced reference or the addition of a new detail/section.

Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This RFI references the outdated drawings in ASI 106. Please reference the updated drawings in ASI 108 & 109 and clarify your question.

T-1055 **SSS - Tapered Girder Connections** **Closed** **12/19/2013** **12/29/2013** **12/30/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

At the roof Tapered girders refer to sketches CD RFI 238 SK1 to SK3 for items 1 & 2. The proposed erection method for the Tapered Girders on the roof is to shop attach both connection angles at the roof perimeter (See SK3), tip the girder into the connected position on the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) See response to Item 2 and 3

2) Confirmed that the 2" gap may be increased to 3 1/2". The RFI SK149 (CD108) was not included in this RFI, so we cannot figure out the meaning of

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

perimeter BU-Girders and then lower the left end between the double shear plates on the columns (see SK2). In order to erect these girders confirm the dimensions may be increased as noted:

1) With the connection angles tight against the BU-Girder on the right end, the 2" clear dimension per detail 2/S1-5016 will need to increase to 3 1/2" assuming the back-up bar will not exceed 3/4" thick. Confirm it is acceptable to increase the dimension as noted for all Tapered Girders.
2) This 1" dimension will need to increase to 2 1/2" to be able to erect the girder as described on SK1. Confirm this is acceptable.

"assuming the back-up bar per RFI SK149(CD 108) will not exceed 3.4" thick"

3) If the bottom flange is to be coped for erection purpose, extend the web stiffener plate (L=17" in Detail 2E/S1-5016) the same distance equal to the length of the flange cope.

T-1056 **SSS - Edge Plate Clarifications** **Closed** **12/20/2013** **12/20/2013** **12/31/2013** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On S1-2604 & 2605 between grids 17 to 24 & D to F refer to sketches CD RFI 159 SK1 to SK3 for items 1 & 2 for edge plate clarification. Detail 1/S1-8000 and details 1, 3 & 4/S1-8016 show edge plate on the beam. Please confirm/clarify the following items:
1) Confirm the edge plates on the noted details is per 8/S1-5000.
2) The vertical leg of the edge plate appears to extend above the slab but does not extend up to the construction joint. Confirm the vertical leg terminates at the top of roof slab or clarify the vertical height.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). Confirmed the detail is per 8/S1-5000, but the angle thickness shall be 3/8".
2). Confirmed that the vertical leg terminates at the top of roof slab.

T-1056.1 **SSS - Edge Plate Clarifications** **Closed** **03/24/2014** **04/03/2014** **04/08/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 352 SK1:
1) S1-8008 ~ Sequence 'CS2' approval drawings 4769, 4770, 4815, 4816 & 4919 request that the slab edge plate

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) The vertical leg of the bent plate shall extend only up to the top of the slab per response to RFI T-1056. Comments on CS2 shop drawing sheets regarding

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be extended up to the 1st concrete pour but 'CS2' approval drawings 4777 & 4823 do not have the comment. Note that the details on S1-8008 do not show the edge plate extending up to the concrete construction joint (1st concrete pour). Detail 9/S1-8008 does not show the concrete construction joint. RFI T-1056 (SK 210, CD 159) confirmed that the details on S1-8008 remain as shown and that the edge plate terminates at the top of slab. Please clarify the designer's requirement for this edge of slab bent plate.

2) S1-8006 ~ Detail 1 shows the edge plate extending up to the top of slab and not to the 1st concrete pour. Please review RFI T-1056 (SK 210, CD 159) and confirm that remains the intent. If not, issue a revised detail showing the vertical dimension locating the construction joint (1st concrete pour).

3) S1-8016 ~ RFI T-1056 (SK 210, CD 159) confirmed that the edge plate terminates on top of the slab as shown in details 1,3,4/S1-8016. Confirm this remains the intent. If not, issue a revised detail showing the vertical dimension locating the construction joint (1st concrete pour).

length of vertical leg of the bent plate may be ignored.

2) Confirmed.

3) Confirmed.

T-1057 **SSS - Bus Deck Level Edge of Slab Plate Clarification** **Closed** **12/20/2013** **12/30/2013** **01/09/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

For edge for slab framing @ slab notch refer to sketches CD RFI 234 SK1 to SK3 for items 1 to 3:

1) Work with SK2 & SK3 and supply the location, angle orientation and connection detail for the L6x6x3/8 in light of the beam flange cut-back as shown.
2) Supply the location, angle orientation and a connection detail for the L6x6x3/8 in detail 2 & 4/S1-2550.
3) Supply the location, angle orientation and a connection detail for the (2) L6x6x3/8 in detail 6/S1-2550.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) The L6x6x3/8 is to be laid parallel to the Grid B, as close to the cast node as possible. The vertical leg of the angle is to be clipped, and laid flat on top of the beam, no connection is needed.
2) See the response #1
3) See the response #1

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1057.1	SSS - Bus Deck Level Edge of Slab Plate Clarification	Closed	04/17/2014	04/27/2014	04/28/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

This is a follow-up RFI to RFI T-1057 (SK 300, CD 234)
See attached CD RFI # 234.1 SK1 & SK2 for items 1 to 3:
1) Confirm the noted detail reference should read 6/S1-2550 Sim.
2) Confirm the angles may typically be located 1/2" from end of top beam flange as shown.
3) Supply a connection detail for the end of the angle.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.

2) Confirmed.

3) Cope the horizontal leg of the angle, extend the vertical leg of the angle to the web of the beam, and weld the angle to the beam web and flange (similar to detail 1/S1-5001).

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T-1058	SSS - Brace Detail Clarifications at Spandrel Beams	Closed	12/20/2013	12/30/2013	01/02/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Gregory Kemerer

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

At 2nd level & Bus deck level Spandrel beams refer to sketches CD RFI 235 SK1 & SK2 for items 1 to 8:
1) Detail 1/S1-8020 is not referenced on the structural Bus Deck Level plans. Please clarify where this detail applies.
2) Detail 4/S1-8020 is not referenced on the structural Second Level plans. Please clarify where this detail applies.
3) Supply the information showing the W-2 mullion locations to help locate the angle braces in details 1 & 4/S1-8020.
4) Confirm the work point for the brace is on beam center at top of bottom flange in details 1 & 4/S1-8020.
5) Supply the work point location for the brace from top of beam in details 1 & 4/S1-8020.
6) Confirm the noted plate size in details 1 & 4/S1-8020 is a minimum size and may be increased to facilitate the connection.
7) Supply stitch plate requirements in details 1 & 4/S1-8020.
8) Confirm the brace in detail 1/S1-8020 may be connected beyond the beam flange as shown in 4/S1-8020 (SK2) to facilitate the erection of the brace.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). Detail 1/S1-8020 was referenced in the Plan Note #3, Sheet S1-2402. See architectural drawings A1-2302 thru A1-2304 for the locations of W-2 system.
2). Detail 4/S1-8020 was referenced in the Plan Note #3, Sheet S1-2402. See architectural drawings A1-2302 thru A1-2304 for the locations of W-2 system.
3). The W-2 design documents are in-progress and have not been issued for bid. The dimensions requested should be obtained from the W-2 Shop Drawings as the exact final mullion placement will be determined by the W-2 trade subcontractor.
4). Confirmed.
5). Work point to be located at the intersection of the beam centerline and bottom face of the flange.
6). Confirmed.
7). Stitch plates shall not be spaced more than 4'-0" on center with 1 -3/4" dia A-325 bolt.
8). Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1058.1	SSS - Brace Detail Clarifications at Spandrel Beams	Closed	01/29/2014	02/08/2014	02/03/2014	Potentially	☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Turner Construction Comp Stacy Wilson

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

This is a follow-up RFI for RFI T-1058 (SK 301 CD 235)
Please confirm the following for RFI T-1058 responses:
Item 1: Confirm the correct architectural drawings showing the W-2 system on the Bus Level are A1-2502 thru A12504
and not as noted in the response..
Item 2: Confirm the correct architectural drawings showing the W-2 system on the Second Level are A1-2402 thru
A1-2404 and not as noted in the response.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This RFI is rejected per 01 10 40 1.6 C 2. f. "The TJPA will reject requests for interpretations or clarifications of the Contract Documents which can reasonably be derived from a review of the Contract Documents".

T-1058.2 **SSS - Brace Detail Clarifications at Spandrel Beams** **Closed** **02/06/2014** **02/16/2014** **02/12/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Per item (3) on RFI T-1058, please supply the information showing the W-2 mullion locations to help locate the angle braces in details 1 & 4/S1-8020.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See drawings posted as ASI No. 0111 for Transit Center Building [140]

T-1058.3 **SSS - W-2 Bracing Clarifications** **Closed** **03/17/2014** **03/27/2014** **04/01/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Turner Construction Comp Stacy Wilson

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

As a follow up to SK RFI 301, 301.1, and ASI 111, please review the following requesting further clarification for the W2 kicker brace locations:
1) (SK1 & SK2) Detail 1/A1-8151 indicates mullions on the W-2 curtain wall from grade level to the bus deck level. However, the section cut 2/A1-8151 only shows bracing and stiffeners at the Bus Deck level framing, not the Second Level framing. Please confirm no kicker braces or stiffeners are required at W-2 mullions at the second level.

2) (SK1) Please advise if Bus Deck Level mullion spacing shown on A1-8155 is to be pulled from grid line 10 or 10.1. It appears that the spacing is typically for a 42-6" bay.
3) (SK3) Per A1-8151, kicker braces per 4/S1-8020 are

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

WOJV has requested the secondary steel in support of the W-2 System to be removed from the TG07.1R contract. Forthcoming PCO seeking a credit from Skanska.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

required as shown. Please confirm.
4) (SK5) Per A1-8152, kicker braces per 4/S1-8020 are required as shown. Please confirm.
5) The mullion locations on A1-8157 cannot be located with the information provided. Please supply the dimensions off grid lines to locate the bracing and mullions.
6) It appears that W-2 mullions occur along the entire wall on grid line 1.4, however A1-8157 only shows mullions between grid lines C and D.4. If mullions occur south of GL D.4, please provide the dimensions required to locate the mullions, braces, and stiffeners.
7) A1-8158 is shown on grid line 2.5. Please advise if A1-8158 is to be mirrored on GL 3.5 or provide the required mullion spacing.
8) A1-8158 does not provide the locations of the mullions. Please supply the required dimensions off grid lines.
9) A1-8159 is shown on grid 8.5. Please advise if this elevation also applies on grid 9.5 or provide the required mullion spacing.
10) The locations of the mullions cannot be located with the information provided on A1-8159. Please provide a reference dimension off a grid line to locate the mullions.
11) A1-8152 is reference on A1-8150 between grid lines 2 and 3, with grid lines 2 and 3 shown on the elevation. Please confirm this detail also applies at the corners on grid lines 4, 8, 10, 12, and 14.
12) Please confirm details 1 and 4 on S1-8020 do not apply to drawings A1-8156, A1-8165, A1-8166.
13) A1-5167 is reference on the south portion of grid 16.9. Please advise if this detail also applies on the north portion of grid 16.9.
14) It appears that partial dimensions are provided (between grid lines E.6-F.7) for the mullion locations on A1-8161 along grid line 27 on the Second Level. Please provide the remaining dimensions required to locate the mullions along the remainder of grid line 27.
15) No detail reference is provided on the north half of grid line 27 and grid line 32.5. Please provide the mullion spacing requirements at these locations.
16) A1-8156 is referenced on grid line F.7 between grid lines 27 and 32.5 on the Second Level, but this detail does not appear to be correct. Please confirm the reference should be A1-8160 or provide the corrected reference.

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T-1059	SSS - EOS Closure Details at Columns	Closed	12/20/2013	12/30/2013	01/10/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

At the 2nd level at sample locations on S1-2403 @ grids 9.9/C & G please verify the edge of slab closure detail at the column grid lines per detail 1/S1-5004 shown on sketch CD RFI 246 SK1 is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed that the detail shown on sketch CD RFI 246 SK1 is acceptable. Provide welding between the vertical leg and horizontal leg of the bent plate.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1060	SSS - Shop Primer Coat Exclusion Areas	Closed	12/20/2013	12/30/2013	12/26/2013	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Specification section 05 10 003.2 P.3b specifically excludes shop paint from areas to be enclosed in concrete and cementitious fireproofing. Drawing A-8662 matrix shows 3 different types of fireproofing, SFRM, IFRM-1 and IFRM-2. Please confirm which of these are cement based so we can determine shop painting limits.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Prep and prime all steel that is to recieve fireproofing per the fireproofing manufacturer's recommendations. Fireproofing type SFRM-1 is cementitious fireproofing. For reference only, see the attached in-progress specification sections 07 81 00 (SFRM-1) and 07 81 23 (IFRM-1 & IFRM-2).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1060.1	SSS - Shop Primer Coat Exclusion Areas	Closed	01/06/2014	01/16/2014	01/16/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

While specification section 05 10 00-3.2 .P.3b excludes shop paint from areas to receive cementitious fireproofing, the response to SK RFI 319 (WOJV T-1060) indicates that all steel is to be prepped per the manufacturer's recommendations. The response to WOJV T-1060 provided three potential manufacturers for the SFRM-1 per the preliminary specification section 07 81 00-2.3.A.

1.) Based on the product data sheets published for the Grace Monokote Z-146 and Cafco Fendolite M-II products, Skanska understands that these products are recommended to be applied to bare steel that is free of oil, grease, excess rolling compounds, lubricants, loose mill scale, excess rust,..., or any other substance that will impair proper adhesion. Please confirm this interpretation is acceptable and the potential use of these products is intended for application on bare steel.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1.) Confirmed.
2.) The two manufacturers described in item 1 above meet the technical performance requirements specified. The third product on item 2 should match the technical performance requirements specified in section 07 81 00 without requiring additional treatments to meet the specified requirements. If the manufacturer of this product deems it necessary to add corrosion protection for meeting the requirements, they should add this to their bid.

As an additional measure prior to issuing specification section 07 81 00 for bid, we will add "or equal" to the Materials listing of Specification Section 07 81 00.

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2.) The Carboline Pyrocrete 40 product does not require the use of a primer, however the published data sheets state that "Pyrocrete 40 neither promotes nor prevents corrosion". It is understood that the manufacturer finds application of Pyrocrete 40 to bare steel to be acceptable on the building interior, but recommends the Owner's consideration of a primer on steel exposed to corrosion. Please advise which areas, if any, are required to be primed prior to application of the Carboline Pyrocrete 40 product.

Please note that application of a primer for areas receiving any of the three SFRM-1 products will incur additional costs and schedule impacts, as these areas were originally specified to be bare steel per 05 10 00-3.2.P.3b.

T-1060.2 **SSS - Shop Primer Coat Exclusion Areas** **Closed** **01/27/2014** **02/06/2014** **02/12/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Webcor Construction LP Gregory Kemerer

Co-Author:

REQUEST:

Details 5, 6, and 7/A1-8662 indicate "12 inches of fireproofing required on stiffener fins, typical."

1) Please provide a UL assembly # and details for conditions where cruciform columns are enclosed with exterior wall cladding or interior furred-out walls.

2) Structural drawings reference cruciform columns while A1-8662 references "stiffener fins." Please advise if the A1-8662 drawings are intended to show the cruciform columns, and provide revised drawings as necessary. Please provide the applicable UL assembly for cruciform columns with any revised details.

3) Please advise if the cruciform columns are to be fireproofed SFRM-1 per spec section 07 81 00

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Refer to 'Fire Protection Matrix & Schedule' per attached A1-8662 for UL Assembly listings. Refer to drawings A1-9317, A1-9351 and A1-9354 for related details.

2) The 'stiffener fins' as noted on sheet A1-8662 are added to the Ground Level columns to increase weak axis bending stiffness of what are known as the cruciform columns on the Structural drawings. These stiffeners are provided for vibration control and being non-load carrying elements they do not require fire protection from a code perspective. As typically recommended by the fire protection manufacturer, non-load carrying attachments be fire proofed to the same level as the protected structural elements to mitigate 'thermal bridging'.

3) Confirmed

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1060.3	SSS - Finish Requirements at Isolation Bearings	Closed	02/13/2014	02/23/2014	02/20/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

1) As noted in the sketch below, exposed surfaces of the isolation bearing pads are to be hot dip galvanized per ASTM A123. Please confirm this is acceptable in accordance with specification section 13 48 63-2.3.A.2.

2) In accordance with A1-8662 and the response to WOJV T-1060.1, all other steel associated with isolation bearings, such as those members shown on S1-5021, will be bare steel. This is in anticipation of receiving SFRM by others. Please confirm.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed, the steel plates that are a part of bearing assembly are to be galvanized per specification 13 48 63, paragraph 2.3.A.2 Finishes for steel members and pieces that are shown on S1-5021 are to follow the specification.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1060.4	SSS - Ancillary Steel Fireproofing Requirements	Closed	02/26/2014	03/08/2014	03/06/2014	Potentially	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Reference A1-8662 which indicates that beams and columns from the Lower Concourse level to the Roof Park Level, as well as beams at the Roof Level, are to receive SFRM. As noted in the response to WOJV RFI T-1060.2, it is typically recommended by the fire protection manufacturer that attachments to primary structural members are fire proofed to the same level as the protected structural elements to mitigate thermal bridging.

Please confirm that all ancillary components for beams and columns scheduled to receive SFRM are also to be prepped to receive SFRM. This includes, but is not limited to, kicker braces, hangers, stiffeners, connection plates, gusset plates, outriggers, and connection angles.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SFRM to be applied to structural steel members as scheduled and all attachments, please refer to spec 07 81 00, item 1.1 A.

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T-1061	SSS - Weld Access Hole Details at Column Webs to Base & Cap Plates	Closed	12/20/2013	12/30/2013	12/30/2013	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On details 4/S1-5052 & 1/S1-5052 (sim.) refer to sketch CD RFI 134B.1 SK1 and verify the weld access hole size

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Geometry of the weld access hole for SMRS shall be in accordance with AWS D1.8, Section 6.10.

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and radius in the column webs is acceptable.

T-1061.1 **SSS - Weld Access Holes at Columns Cap Plates** **Closed** **02/24/2014** **03/06/2014** **03/04/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Per the response to Webcor's RFI # T-1061 (SK RFI # 180B.1) we have complied with the geometry for the weld access hole size per AWS D1.8, section 6.10. Using this formula we have shown the connection on CD RFI # 134.2 SK1 for a BU column with a 3 1/2" thick web. Please confirm the remaining 5 1/2" web material as shown on SK1 is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed that it is acceptable to use AWS D1.8 for WAH geometry and confirmed that the 5 1/2" remaining web material for the column with 3 1/2" web thickness is acceptable.

T-1062 **BSE - Timber Pile Removal from CDSM Wall** **Closed** **01/03/2014** **01/02/2014** **01/13/2014** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Danny Walsh

REQUEST:

BBII has located portions of timber piles in several CDSM wall panels along gridline A in zone 3 at excavation levels 4 and 5, between soldier piles 255-257 and 259-261. BBII believes any attempt to remove the piles has the potential to damage the CDSM wall. Given that there is no issue with water intrusion at the pile locations and the CDSM material is in good condition, BBII believes the best course of action is to leave them in place. To ensure a smooth surface for waterproofing, the piles have been ground down so that they are recessed from the face of wall. BBII will then patch over the panel to bring it flush with the CDSM piles. (Patching has already occurred on a portion of the affected areas - see attached photos of panels before and after the above procedure.)

Please confirm this is acceptable

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:
We take no exception.

Adamson Associates, Inc. Response:
The CM/GC shall confirm the waterproofing subcontractor/manufacturer and the contractor's waterpoofing system designer accept the site conditions

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☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1063	BSE - Micropile E335 Relocation	Closed	12/26/2013	01/05/2014	01/03/2014	Potentially	

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Robert Kjome

Co-Author: Balfour Beatty Infrastructure, Inc. Kelly Phariss

REQUEST:

Micropiles E335 cannot be installed as laid out due to a dewatering well.
BBII proposes moving E335 North 3' and West 2'.
See attached sketch.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1064	BGP - Fire Alarm Conduits at Column D.8/12	Closed	12/30/2013	01/09/2014	01/13/2014	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please refer to drawing A1-9204.

Detail A on A1-9204 calls for embedded junction boxes on GL D.8 from GL 13 to GL 33.2. A set of (3) 1" fire alarm conduits were erroneously installed embedded at the column on D.8/12 rather than stubbing up outside the column. An embedded junction box was installed flush with the face of the column at a height of 13'-9" to center per Detail A. If future devices are to be installed on that column at a different height, then an extension box can be installed, and conduit can be run from the extension box on the surface of the column.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
1/9/2014
RESPONSE:
1) For the condition described in the RFI, the Contractor should include an extension box with blank faceplate, box depth of 2-3/4" (which will be flush with the finished face of the future column cladding).
2) Extension box shall have knockout provisions for the conduit extension to the strobe to be concealed within the finished column wrap.
3) The as-built condition and detail shall be documented on the as-built drawings.

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T-1065	BGP - Elevation Discrepancy at Escalator Pit near GL 21/E.2	Closed	12/30/2013	01/09/2014	01/02/2014	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please refer to attached drawing S1-2205, S1-7660 and SKA-2919.

The depth from the concourse TOC to the TOC in the pit conflicts in Details 10 and 11 of drawing sheet S1-7660. Detail 11 shows a distance of 4-feet from the concourse finished floor to the TOC in the pit. As drawn, this

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The details are not in conflict. Detail 11: FF=-7'-9" minus 4'-0" = -11'-9". Detail 10: TOC=-8'-2" minus 3'-7" = -11'-9". Pit depth relative to FF = 4'-0". Pit depth relative to TOC = 3'-7". Refer to Sheet A1-2205.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

indicates a concourse TOC to pit TOC depth of 3'-9". Detail 10 shows the dimensions between the concourse TOC and the bottom of the slab in the pit as 4-feet, and this indicates a concourse TOC to pit TOC depth of 3'-7". Elevations provided in SK2919 also indicate the concourse TOC to pit
TOC distance is 3'-7".

Please clarify the correct depth dimensions for the pits represented in Details 10 and 11 of S1-7660.

T-1066 **BGP - Moment Frame Beam and Column Conflict GL 21** **Closed** **12/30/2013** **01/09/2014** **01/09/2014** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please refer to attached drawing S1-2025, S1-3304 ans S1-3621.

Please confirm that the moment frame beam at GL 21 is 66-inches. Columns at GL C21 and G21 are 68-inches which make them 2-inches wider than the moment frame beam.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Increase GL21 moment frame beam width from 66" to 72" per sketch SKS-0323. Required revisions to the rebar detailing is also provided in the same sketch.

T-1067 **SSS - Stair and Elevator Connections** **Closed** **12/30/2013** **12/30/2013** **01/13/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Adamson Associates, Inc. George Metzger **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Arup Rich Coffin

REQUEST:

For typical stair & elevator connections refer to sketches CD RFI 181 SK1 to SK3 for items 1 to 11:
1. Please consider attached detail (CD RFI 181 SK4) as an alternative for elevator post bases shown in 1/S1-7600 and 10/S1-7600.
2. Confirm a 1/16" gap between post and angle on each side is acceptable (CD RFI 181 SK1).
3. Plate washers are not shown for the slotted holes for 1" dia. A307 bolts. Are they required? (CD RFI 181 SK1)
4. Supply dimensions for kicker brace connections to

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. The Design Team cannot accept the proposed detail as shown in CD RFI 181 SK4 because required fire protection and separation of the structural beam and slab is not able to be maintained. Note that the HSS is to align with the EOS and not be set off the EOS by the noted 1/2" dimension in CD RFI 181 SK4.

2. Confirmed.

3. No.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

composite deck requested on (CD RFI 181 SK2)
5. Confirm gusset and hole dimensions at top of kicker brace (Detail E) are same as shown for bottom of brace connection shown in CD RFI 181 SK2B.

4. For detail 2D/S1-7600, the width of the plate is the length required to capture 2 flutes as shown in detail. Fasteners shall be centered on deck bottom flute. For detail 2B/S1-7600, fasteners shall be 3" from the ends of the plate/angle and 6" min between fasteners.

5. Confirmed with the following exception: The centerline of bolt to end of kicker angle at bottom flange of beam and top of brace at the L5x5 shall be 2".

T-1067.1 **SSS - Stair and Elevator Connections** **Closed** **03/18/2014** **03/28/2014** **03/31/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached SK1 & 2 for items 1 & 2:
1) Details B, C & D are not practical as it is not known where the deck bottom flutes will be located at the time of modeling this project. As designed it is not possible to position the brace so the anchor bolts will be located on the centers of bottom flutes. Please confirm it is acceptable to model an oversized plate with additional staggered holes to account for the unknown position of the bottom flutes or supply an alternate detail.

2) Confirm a vertical short slot can be provided in the angle of the top bolted connection to allow for fabrication tolerances of the WF beam.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Detail B, C, D cover possible conditions where the brace hits the metal deck. This types of detail is usually field adjusted, and does not require pre-fabrication. Skanska please confirm.

2) A vertical short slot in the HSS10x4 is acceptable. No need to increase the size of the angle.

T-1067.2 **SSS - Stair and Elevator Connections** **Closed** **04/17/2014** **04/27/2014** **04/28/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

As per the response to T-1067.1 Skanska confirms these details will require field adjustment and proposes the following as per SK1:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1a, 1b) We don't take any exception to the erection approach outlined by the Contractor. Regarding SK1 of the RFI, it is acceptable to field align braces with

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

1)Confirm it is acceptable to (a) field weld the bottom connection after aligning the top connection to center of low flutes when deck flutes are parallel to kicker and (b) field drill the top connection after aligning the L6 to center of low flutes when deck flutes are perpendicular to the kicker.
2) Confirm the diameter of expansion bolt required.
3) Confirm the field drilled top connection is acceptable at deck flutes perpendicular to the kicker as this will vary from the direction in T-1067 #5.

the closest deck flutes.

2) Confirmed.

3) It is unclear how the 2" bolt edge distance requirement to the edge of the angle brace per response to item 5 of RFI T-1067 affects the distances noted as "6 inch" and "varies" on SK1. Please add this item to the agenda of an upcoming structural coordination meeting.

T-1068 **SSS - Perimeter Connections at GL C&G** **Closed** **12/30/2013** **01/09/2014** **01/13/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Details 7 & 8/S1-3703 are shown on sheet S1-2305 as typical sections for beams connecting perpendicular to the perimeter BU & WF beams at grid lines C & G. These sections reflect the varying elevation differences between the two members. In most conditions, the remaining depth of the beam framing into the perimeter BU or WF will only allow for a two bolt connection as shown in details 7 & 8/S1-3703.

1) Please confirm it is acceptable to use a two bolt shear plate connection for any beam size where the remaining depth of the connecting beam will only allow for two bolts. The shear plate thickness and welding will be per the schedule on 1/S1-5011.
2) Please confirm at some locations it is acceptable to cut the flange flush on one side of the beam to maintain edge distance.
3) Please confirm edge distance can be reduced where needed to complete connection.
4) Please confirm a double angle connection should be used when the varying elevations will allow for more than a two bolt connection. The angle size & thickness will be per the schedule on 1/S1-5010.
5) Please confirm the maximum amount of bolts that will be used would be based on the remaining depth of the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). Details 7 & 8 /S1-3703 showing 2 bolt shear connection are applicable to the condition where the sections are cut and similar condition.

2). Confirmed. Specific application of this detail will be reviewed on a case by case basis during shop drawing review.

3). AISC minimum edge distance shall be maintained.

4). Confirmed.

5). Confirmed. Specific application of the approach stated will be reviewed on a case by case basis during shop drawing review.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

connecting beam.

T-1069 **SSS - Connection at Crash Rail Supports** **Closed** **12/30/2013** **01/09/2014** **01/09/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

At the Bus deck level at the Crash Rail supports beams, verify when larger beams are framing into smaller beams that details 1/S1-5031 will be used with detail 1/S1-5011 for the number of bolts required. At sample locations on S1-2502 & S1-25 03, refer to sketches CD RFI 248 SK1 to SK3 and verify the 3 Types indicated.

Note: The other ends of the beams in question are connected per the typical detail 1/S1-8000 at the grid lines unless indicated with a moment connection.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed
2) Confirmed
3) Confirmed

T-1070 **SSS - Connection Clarification at Escalator Areas** **Closed** **12/30/2013** **01/09/2014** **01/16/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

1). On 1/S1-7303 at Escalator E309 & E310 at detail 5/S1-7661 verify 4 - 7/8" A325N (non TC) bolts can be used in lieu of the 5/16" field weld that would be required, see sketches CD RFI 243 SK1 & SK2 for reference.
2). Per detail 5/S1-7661 verify the stiffener plates are 2/3/4" wide to match the beam flange with as noted on sketch CD RFI 243 SK2.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Contractor proposed is acceptable, however, please refer to updated S1-7303 issued with TG07.2 Addendum #1 dated 12/13/2013 for updates to this low beam area condition.

2. Stiffener plate width is per referenced detail. See also response 1 to refer to updated sheet.

T-1071 **SSS - Edge of Slab Support at Protected Zones** **Closed** **12/30/2013** **01/09/2014** **01/13/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

SUGGESTION:

ANSWER:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

At the Bus deck level (S1-2503) @ grids D/9.9 & 10.1 and F/9.9 & 10.1 the 3/8" edge of slab bent plate protrudes 3'-4 & 2'-3 from grid lines 9.9 & 10.1 respectively as shown on sketch CD RFI 244 SK1. Due to the 5'-0 protected zone at these lo cations the angle supports per detail 9/S1-5000 cannot be attached due to no welding is allowed in this area. Please advise on this non supported area and other similar type areas where no welding is allowed in the protected zones.

Accept Suggestion: ☐

At grids D/9.9 & 10.1 and F/9.9 & 10.1, run an L5x5X3/8 parallel to the moment frame beam between the two outriggers, namely, the cantilever W30x90 (gravity moment connected to the MF beam) and the support angle at the moment frame column. Attach the angle legs to each support using fillet welds (1/4" thk, 2" long), cope the angle as needed. Note that seam welding to be provided where the bent plate width changes.

T-1071.1 **SSS - Edge of slab support @ protected zones** **Closed** **02/11/2014** **02/21/2014** **02/24/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

1). Per the response to Webcor RFI # T-1071 (SK RFI # 313) please verify the bolted end connections for the new L5x5x3/8 angle now required as shown on sketch CD RFI # 244.1 SK1.
2). To eliminate any overhead field welding confirm the bent plate required will be shop attached to the angle.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) The intent for the RFI T-1071.0 is further clarified on the attached sketch. Either bolted or welded connection is acceptable.

2). Skanska should verify whether the bent plate is to be shop welded. Shop welded bent plate might affect the weld access of the moment connection at the beam bottom flange if a "wild cat" position is to be used.

T-1072 **SSS - Clarify Beam Connections at Protected Zones** **Closed** **12/30/2013** **01/09/2014** **01/07/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

At the Bus deck level near grids 10.1/F & 10.1/D please verify the double angle connections for the W16 beams can partially connect into the protected zones for the BU moment girders as shown on sketch CD RFI 247 SK1. If not please supply an alternate connection.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The encroachments into the protected zones by the double angle connections at the two locations indicated the RFI are acceptable. Note that the W16X26s indicated in the RFI have been revised to W21X50s in 12/13/13 package (TG 7.2 IFB, Addendum #1 package).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1073	SSS - North Exit Mezzanine Support	Closed	12/30/2013	01/09/2014	01/24/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please refer to detail 1/S1-2252 in regards to the following clarifications for the North Exit Mezzanine:

1.) Please provide connection details for MC4x13.8 channels framing into the W12x40 beam, CMU wall, and adjacent MC4x13.8 members.
2.) Please confirm how MC4x13.8 channel, east of GL 24, is supported at east end.
3.) Please provide the required dimension to locate the east end of the W12x40 member.
4.) Bracing for the W12x40 appears to be located slightly west of CL 23. Please provide the indicated dimension to locate bracing. Verify that this is the only location to receive bracing along the length of the W12x40.
5.) a. Please confirm the splice locations indicated on SK1 for the W12x40 beam are acceptable. Note that the splice just west of CL 23 may need to be shifted slightly depending on the response to item #3.
b. Please provide a splice detail for the W12x40. Note that bolted splice connections are preferred.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. For MC4 to W12, weld channel with 5/16 fillet weld to 3/8" thick plate welded to underside of W12 beam (use 1/4" fillet weld, NS/FS). See 4/S1-5032 for graphic reference. For MC4 to CMU wall refer to updated version of sheet dated 12/13/2013 Issued for Bid Addendum #1. For MC4 to perpendicular MC4, use 1/4" fillet weld all around.

2. Refer to 12/S1-9001.

3. End of W12 is at EOS. Refer to architectural drawings for EOS.

4. Dimension to locate bracing in SK1 is 2'-9" west of gridline 23. Locate second set of bracing at 6'-9" west of gridline 24.

5a. Acceptable, however adjust as necessary for brace locations identified in response 4. Locate splice in middle third of spans between hanger locations and avoid locations 3 ft within brace locations.

5b. Refer to T-0979 SSS RFI response for splice information.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1074	SSS - Crash Rail at Bus Deck	Closed	12/30/2013	01/09/2014	01/13/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On the Bus deck level, at the Crash Rail detail 1/S1-8000, refer to sketches CD RFI 242 SK1 to SK3 for items 1 to 3:

1.) Confirm the noted weld is acceptable.
2.) Confirm the noted weld is acceptable.
3.) Please confirm it is acceptable to provide a 7/8" plate in lieu of a 13/16" plate, as a 13/16" plate to match the flange thickness is not available. Note this creates a 1/16" gap between the top of the stiffener and underside of the beam flange as indicated in SK3. Please confirm this is acceptable or provide an alternate solution.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). Confirmed

2). Confirmed

3). Confirm using 7/8" plate is acceptable. Provide shim plate at the bolt connection. Confirmed the 1/16" gap at the stiffener plate is acceptable. Adjust the fillet weld size per AWS code to account for the 1/16".

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1075	SSS - Girder Weld Details	Closed	12/31/2013	01/10/2014	01/08/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

For girder weld details, refer to detail 7/S1-4202 & CD RFI 241 SK1 for the following:

1). Please verify that holes are not required in the built up members as shown on CD RFI SK1.

2). Please verify the noted welds as shown on CD RFI SK1.

3). Please verify the weld transition as shown on CD RFI SK1.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1.) If the contractor chooses to splice the beam flanges at these weld transitions, then these holes would serve as weld access holes. Otherwise these holes are not required.

2.) To be reviewed as part of shop drawings, following submittal and review of welding procedures.

3.) If no hole used, weld transition should comply with AWS D1.1 Section 2.8.2. Fillet weld shall start at the transition line shown in the construction drawings (i.e., fillet weld to overlap with tapering CJP).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1076	SSS - Transfer Girder Stiffener & Shear Plates	Closed	12/31/2013	01/10/2014	01/07/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

1). At the Transfer girder stiffener & shear plates noted on S1-5052 & 2/S1-4350 verify the plates corner access hole size with a 1/2" radius when the stiffener & shear plates are welded with a CJP prep as noted on sketch CD RFI # 166.1 SK1 is acceptable.

2). At the Transfer girder stiffener & shear plates noted on S1-5052 & 2/S1-4350 verify the plates corner clip size when the stiffener & shear plates are welded with a fillet weld as noted on sketch CD RFI # 166.1 SK2 is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1.) Acceptable.
2.) Acceptable. Note that a minimum clear distance of ½ inch shall be provided between the access hole and fillet welds connecting the stiffener (or shear plate) to beam web.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1077	Bracing removal/re-bracing sequence on the west end of Zone 1	Closed	01/02/2014	01/12/2014	01/13/2014	Potentially	☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Bracing removal/re-bracing sequence on the west end of Zone 1

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The propopsed method is not acceptable. Both sets of diagonal bracing, on the north side and the south side,

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

WOJV is proposing the following sequence for the re-bracing/ Bracing removal for the west side of Zone 1 See sketches SK-1, 2 & 3 attached.

For level C strut removal see sequence on attached sketch SK1. WOJV is proposing to remove level C bracing in three defined areas.
1. Remove level C Cross lot struts and walers from east to west direction once the walls and RB re-bracing is installed and stressed.
2. Remove level C struts and walers from south west corner once the walls and RB re-bracing rakers beneath are installed.
3. Remove level C struts and walers from north west corner once the walls and RB rakers beneath have been installed.

For level B strut removal see sequence and defined areas on attached sketch SK2
1. Remove level B struts and walers from east to west direction once the lower concourse slab beneath has been place, cured and reached the required design strength.
2. Remove level B struts and walers from south west and north west corner once the lower concourse slab beneath has been place, cured and reached the required design strength.

For level A strut removal see sequence on attached sketch SK3
1. Remove level A cross lot struts and walers from east to west direction once the RA re-bracing is installed and stressed.
2. Remove level A struts and walers from south west corner once all the RA re-bracing rakers and +7.00' diaphragm slab beneath have been installed.
3. Remove level A struts and walers from north west corner once the RA re-bracing rakers beneath have been installed.

Please confirm if this sequence would be acceptable and the first few cross lot braces work in conjunction as a group. Any one part cannot be removed until the rebracing is complete for the entire group.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1078	SSS - Machine Type 1 Drag Connection Pads	Closed	01/02/2014	01/12/2014	01/15/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

The Type 1 Drag Connection shear plates are shown on drawing S1-5016 to be oriented perpendicular to the connection face of the cast node and further they are shown to be centered with respect to the width of the connect ion face. OIW has discovered that this is in error; the shear plates are neither centered on the face nor do they project perpendicular from the face. These conditions significantly increase the complexity of this welded joint.

OIW would like to use a CNC milling machine to prepare the surface of the Type 1 Drag Connection pads on the cast nodes in order to provide a perpendicular surface for the shear plates to attach to. Please see attached sketch showing proposed machining.

1. Please indicate if it is acceptable to machine these surfaces.
2. Please indicate if there is adequate stock to allow machining of these surfaces or if additional stock must be added.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The contract drawings at bid time clearly showed orientation of the connection pads of the cast node. Since the cast node contract drawings and the cast node shop drawings (which are also a part of bid documents), were provided, it is clear that the Drag Connection shear plates steel connections (angle and centering) to the castings would need to be cut by the contractor prior to fit-up for welding. The design intent was clearly depicted on the contract documents. The angle of the connection pads (F5 and F6) are provided in the cast node schedules; refer to 1/S1-5121, for example. Each cast node type is used in multiple framing locations as noted on the cast node designation sheets (S1-5110, S1-5120, and S1-5130). The cast node shop drawings, which are also a part of the bid documents, show that the face of the drag pads are cast perpendicular to the axis of the pad and were provided in the as cast condition (not a machined condition). From the framing plans (Sheets S1-2502 thru S1-2507), Skanska should be able to see that the diagonal beams are framed into the same cast node type at various angles, resulting in a condition that requires some connection plates to be appropriately fabricated. There are many details in the structural set which graphically show the connections not to be concentric and normal to the drag pads on the bus deck nodes. Detail 1 on S1-5030 is one example where the design intent is visually evident without having to correlate information on more than one drawing.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1078.1	SSS - Machine Type 1 Drag Connection Pads	Closed	02/25/2014	03/07/2014	03/04/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

The response to Skanska RFI 294 (W/O T-1078) states that machining the internal drag pads is Contractors means and methods. In order to simplify modelling, detailing, fabrication and welding of the drag pads, Skanska's fabricator OIW intends to machine the internal drag pads.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed that the "minimum 1-inch extrusion" dimension called out for the bus deck cast nodes in contract drawings can be less than 1 inch as needed by machining of these pads by the Contractor.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

In so doing, there is potential that the "minimum 1-inch extrusion" called out for the drag pads on the bus deck nodes on the structural drawings may be violated in some cases (refer to 1/S1-5121 attached).

Assuming that this minimum dimension was provided to accommodate fabrication, and given that the responsibility for fabrication and erection is with Skanska, please confirm that it would be acceptable for Skanska to violate the 1inch minimum extrusion with machining of the pad.

With the design team's approval, Skanska hereby proposes to move forward with machining of the pads without the submission of RFIs for every bus deck node. RFIs will only be submitted for those cases where the planned machining of the pad may slightly undercut an adjacent pad or where the planned machining may slightly bite into the main body of the node.

T-1079 **Bracing removal-rebracing sequence on the East end of Zone 4** **Closed** **01/02/2014** **01/12/2014** **01/13/2014** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Bracing removal/re-bracing sequence on the East end of Zone 4
WOJV is proposing the following sequence for the re-bracing/ Bracing removal for the East side of Zone 4 See sketches SK1, 2, 3 & 4 attached.

For level D strut removal see sequence on attached sketch SK1. WOJV is proposing to remove level D bracing in two defined areas.
1. Remove level D Cross lot struts and walers from west to east direction once the mat slab beneath has been place, cured and reached adequate strength.
2. Remove level D struts and walers from south east and north east corner's once the mat slab beneath has been place, cured and reached adequate strength.

For level C strut removal see sequence and defined areas

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The propopsed method is not acceptable. Both sets of diagonal bracing, on the north side and the south side, and the first few cross lot braces work in conjunction as a group. Any one part cannot be removed until the rebracing is complete for the entire group.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

on attached sketch SK2
1. Remove level C Cross lot struts and walers from west to east direction once the walls and RB re-bracing is installed and stressed.
2. Remove level C struts and walers from South East and North West corner's once the walls and RB re-bracing rakers beneath are installed.

For level B strut removal see sequence and defined areas on attached sketch SK3
1. Remove level B struts and walers from west to east direction once the lower concourse slab beneath has been place, cured and reached the required design strength.
2. Remove level B struts and walers from South East and North West corner's once the lower concourse slab beneath has been place, cured and reached the required design strength.

For level A strut removal see sequence on attached sketch SK4
1. Remove level A cross lot struts and walers from west to east direction once the RA re-bracing is installed and stressed.
2. Remove level A struts and walers from South East and North West corner's once all the RA re-bracing rakers beneath have been installed.

Please confirm if this sequence would be acceptable

T-1080 **SSS - Double Angle Connection Clarification** **Closed** **01/02/2014** **01/12/2014** **01/13/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 250 SK1 & SK2 and confirm the 3/4x6 stiffener per 1/S1-7604 may be omitted on the noted side as it will foul the double angle connection for the W33x130.

If not, supply an alternate detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is acceptable to omit the stiffener on one side of the beam as noted in the RFI

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1081	BGP -Shear Wall Horizontal Hooks Near GL 1.4-K	Closed	01/03/2014	01/13/2014	01/07/2014	Potentially	☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

At the shear wall (first lift) near grids 1.4/K, the tails to the horizontal hooks which terminate at the columns were erroneously cut in the field and no longer provide the proper development length. See
the attached sketch for specific portions of the shear wall affected. Per field discussions with the TT engineer on site, Gerdau proposes to leave the hooks that have been cut "as-is" and to add a
standard 180° #9 hook to allow for proper development of the horizontal bar.
Please confirm if this is acceptable

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
1/6/2014
RESPONSE:
Confirmed

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1083	BGP - Geothermal Riser Pressure Gauge Location	Closed	01/06/2014	12/30/2013	01/17/2014	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Previous geothermal fields and risers had a "cat walk" behind the risers at grade. Additional pipe and 90s were added to bring the gauges up to grade to allow for pressure monitoring from this "catwalk." At fields 09-15 no cat walk exists, thus no location to access these gauges from.

Please provide the location for the geothermal riser gauges for inspection from Field 09 through Field 15.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
1/15/2014
RESPONSE:
Gauges shall be located at the top of the risers. Monitoring of the gauges to confirm that the piping system has not been damaged is the means and methods of the contractor.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1084	SSS - Connection Clarification	Closed	01/06/2014	01/16/2014	01/17/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 250 SK1 & SK2 and supply the welding for the noted connection as S+t per 8/S1-5012 will result in 1 5/8" fillet welds.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Weld size shall be as detailed on 8/S1-5012. As noted on the detail, "s" is per schedule on 1/S1-5011, and "t" is the thickness of the shim plate.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1085	SSS - Framing Clarifications	Closed	01/06/2014	01/16/2014	01/17/2014	Potentially	☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 252 SK1 & SK2 for items 1 & 2:

1.) Confirm the 3" drag plate typically extends from the column to the W24x55 as shown.
2.) Confirm detail 8/S1-5020 may be modified as shown to suit the actual condition. If not, supply a new detail showing the drag plate in its sloped position.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.

2) Confirmed.

T-1086 **SSS - Missing Brace Locations** **Closed** **01/06/2014** **01/16/2014** **01/17/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 253 SK1 & SK2 and please confirm the kicker brace locations as shown are acceptable. If not, supply the location from a grid line.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

CONFIRMED

T-1087 **SSS - Connection Clarifications for Skewed Beams** **Closed** **01/07/2014** **01/17/2014** **01/17/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Reference details 7 & 8/S1-5010 and CD RFI 094 SK1 to SK7 for clarifications required on skewed beam connections as noted below.

1.) Refer to S1-2303 and CD RFI SK1 indicating an example location where a skewed beam and standard beam connection occur at the same location on the support beam. As noted on CD RFI 094 SK4, the connections foul at this typical condition. Please confirm it is typically acceptable to replace one of the connections with a shear plate connection per detail 1/S1-5011 or supply an alternate typical solution.

2.) Refer to S1-2303 and CD RFI SK1 indicating an example location for two-sided skewed beam connections. As noted on CD RFI 094 SK5, the non -symmetrical bolt locations in detail 7/S1-5050 will not work at two-sided

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) No, it is not typically acceptable to replace one of the double angle connection with a shear plate connection. Shear plate connection might be able to use for some short span beam if specifically approved during the shop drawings review. The conflict shown on CD RFI 094 SK4 might be resolved by using an bent plate with longer leg.
2) Confirmed.
3) At this specific location, A single shear plate connection per Detail 1/S1-5011 may be used for W16 x 26 beam.
4) Confirmed.
5) It is not typically acceptable to replace one of the double angle connection with a shear plate connection. Shear plate connection might be able to use for some short span beam if specifically approved during the shop drawings review.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

connections. Please confirm it is typically acceptable to locate the bolts as shown at two-sided connections or provide an alternate detail for this condition.

3.) Refer to S1-2305 and CD RFI SK2 indicating an example location of a two-sided skewed beam connection. As noted on CD RFI 094 SK 6, the non-symmetrical bolt location in detail 8/S1-5010 will not work at two-sided connections. Please supply a typical alternate detail for these conditions.

4.) Detail 8/S1-5010 shows the shear plate on the obtuse side. Confirm it is acceptable to locate the shear plate on the acute side for beam erection access purposes as noted on CD RFI 094 SK 6.

5.) Refer to S1-2303 and CD RFI 094 SK3 indicating an example location where details 7 & 8/S1-5010 occur at the same location based on the angles of the skewed beams. Please confirm that one of the connections may be typically replaced with a skewed shear plate per 1/S1-5011 to avoid the conflict shown on CD RFI 094 SK7, or supply a new typical alternate detail.

T-1087.1 **SSS - Connection Clarifications for Skewed Beams** **Open** **09/10/2014** **09/20/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 094.1 SK1:
The response in RFI T-1087 (SK 122, CD 094) item 3 does not work as the bolts/shear plate foul each other as shown. Supply an alternate typical detail for skewed 2 sided beam to beam connections.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T-1088 **BGP - Shear Wall Corbel Tie Spacing at W190C, D and E** **Closed** **01/07/2014** **01/17/2014** **01/08/2014** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

In the first lift (up to EL -20.56) of the 190C to 190E shear walls, the #6 ties were installed at 5-inches O.C. instead 4-inches O.C. Please confirm if it is acceptable to leave the corbels as-installed. If not acceptable, Gerdau proposes to install additional T9 (hairpin) ties between every 4ea - #6 ties on the Western face of the corbel. See attached SCCI sketch SK-RFI 410 for details.

Please confirm if this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is acceptable to leave the corbels as installed (5" tie spacing) without adding additional hairpins.

T-1089 **BGP - Concourse Beam Added Bar Congestion at GL 10.1 to 12** **Closed** **01/07/2014** **01/17/2014** **01/20/2014** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Robert Kjome

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please refer to drawing S1-2203, S1-3400.

In the lower concourse, where four beam pairs consisting of C68 and C69 between GL 10.1 and 12, the added short bars at the top and bottom intrude into the laps of typical bars. This would mean per plans, SCCI would have 14 bars at the top location and 18 bars at the bottom location. Gerdau proposes to move the additional short bars into their own layer to alleviate congestion. Please confirm if this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractor proposal to place additional short bars at B68 and B69 beams between GL10.1 and 12 in a second layer is acceptable. Place bars in second layer with 1.5" clear distance between the 1st layer.

T-1090 **BGP - Elevator Opening Embed Dimensions at GL 2/E, 8/E and 23/E** **Closed** **01/07/2014** **01/07/2014** **01/20/2014** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please refer to attached drawings: SK.A-2916, SK.A-2917, SK.A-2921, Sl-7004, Sl-7104, Sl-7111 , and S 1-7600.

Details for the pits located at grid lines 2/E, 8/E, and 23/E are missing dimensions. Please provide dimensions for installation of the embed per detail 11/S1-7600 at above referenced grid lines.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached sketch "20140117 RFI T-1090 SSS sketch comments" for the requested dimensions for installation of the embed plate.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1091	SSS - Transfer Girder Rebar Hole Spacing	Closed	01/08/2014	01/18/2014	01/24/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 258 SK1 to SK3 for items 1 to 3:

1.) The spacing for the #4 stirrups is given as 5 1/2" & 8". Confirm 5 1/2" is correct.

2.) Confirm the first holes for the #4 stirrup may be located 5 3/4" from the end of girder (centered between the headed studs).

3.) The 2" dia. holes for the #4 stirrups foul the stiffeners at (4) locations. Confirm it is acceptable to move the holes as shown.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). Spacing shall be 8" as shown on 5/S1-3705.

2). Confirmed.

3). The hole may be moved slightly to clear the stiffeners. Holes at the top and bottom shall be in line, so where one hole is moved, the hole on the opposite side shall be moved accordingly also.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1092	SSS - Ground Level Cast Nodes	Closed	01/09/2014	01/19/2014	01/24/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

In recent meetings, Webcor/Obayashi has made it clear that the same Ground Level Cast Node geometry will be used at multiple locations even though the angle of the lower Basket Columns changes at each Node. This adds a level of complexity and cost to the joint between the Cast Node and Basket Column Pipe due to the kink imposed on that joint as a result of the following:

- The Lower Pipe Columns will be required to be limiter cut" instead of a traditional square cut end. (Please note Spec Section OS 10 00, paragraph 3.2.M.1 states 11Bearing ends of columns shall be milled or sawn square perpendicular to axis of the column.")
-Miter cut Pipe will have an ellipse cross section and will not match the circular Casting Node.
- Backing bars used to full pen weld the Pipe Column to the Cast Node would need to be custom machined to match the ellipse Pipe and circular Node to eliminate weld gaps. This significantly increases the complexity and risk for successfully welding the joint, and reduces the adjustability for fit up of these joints in the shop and the field.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per Contract, RFIs shall not be used as a vehicle for requesting cost and schedule increases which appears to be the purpose of this Skanska/OIW statements; "A negative response will result in a cost increase and a time increase" are examples.

The contract drawings at bid time clearly showed that the centerline of the pipe is not in line with the centerline of the cast node nozzle, and that the cast nodes were not miter cut to be perpendicular to the incoming pipe. The reference to Spec section 05 10 00 noted in this RFI regarding bearing ends does not apply for this condition as the pipe to cast node connections are not "bearing" connections, they are a fully welded connections as shown on the contract documents.

This "kink" between the bottom-side of the ground floor basket column and the top-side of the ground floor cast node - resulting from the building's geometry and the use of the same cast node type in multiple locations - can be accommodated by miter cutting either the pipe or the cast node. However, the

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

This kink can be accommodated either by machining the nozzle of the Cast Node to be perpendicular to the pipe, or by machining the pipe end at a mitered angle to match the Cast Node.

Since this joint on the Cast Node is already being machined, OIW believes that the more desirable and less expensive option is to machine the nozzle of the Cast Node perpendicular to the axis of the Basket Column Pipe. As the nozzles will each be custom machined regardless, machining them to match the pipe axis should be a relatively low cost change.

OIW requests that the nozzles of each Ground Level Cast Nodes to be machined perpendicular to the axis of the adjoining lower Basket Column Pipe.

A negative response will result in a cost increase and a time increase.

contract documents, including those cast node shop drawings available during bid, clearly show that the ground floor cast nodes were not going to be miter cut, so miter cutting of the basket column pipe members by the Steel Contractor is necessary to accommodate the building's geometry.

Miter cut of the cast node is not acceptable architecturally. The specified miter angle of the pipe does not exceed 1.5-degrees in any location.. Even though Miter cut Pipe will have an ellipse cross section, the lips created by the ellipse cross section is very small (1/160"), which can be ground smooth as a part of weld grinding for meeting AESS requirements. Weld assist devices like backing bars, a contractor means and methods for joints fit up in the shop and the field, are the responsibility of Skanska.

T-1093 **BGP - Foundation Wall Mix Placed in Shear Wall** **Closed** **01/09/2014** **01/19/2014** **01/14/2014** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference TG06.0 technical specs section 033020.2.1 and cast-in-place mix designs submittal numbers: TG0600-203 (Foundation Walls) and TG0600-204 (Slabs, Beams and Shear Walls).

Foundation Wall cast-in-place mix satisfies all requirements prescribed in table 2-1 "'Concrete Properties"' (033020.2.1) for the Shear Wall cast-in-place mix design. In order to limit site congestion (1 concrete pump vs. 2 concrete pumps) and to aid in logistic coordination between trade subcontractors (BBII Steel offhaul and/or bracing/rebracing work and SCCI concrete placing activities). SCCI is proposing to utilize the Foundation Wall mix when placing the shear walls. Per the project schedule there will be instances in which a foundation wall and shear wall that are in close proximity, are to be poured on the same day. If the same mix is

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractor-proposed mix design variance for convenience as proposed in RFI is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

approved to be used for both types of walls, one pump can be utilized vs. two.

Is this proposed mix design variance acceptable?

T-1094 **SSS - End Transfer Girder Details at GL16G** **Closed** **01/09/2014** **01/19/2014** **01/16/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 263 SK1 to SK3 for items 1 to 6:

1.) Supply the slope angle for MFB1.
2.) Confirm the noted information is the correct information to determine the top end of MFB1.
3.)
Supply the noted dimension (to be used to locate PL 2 1/2 x 9 x 2'-6).
4.) Confirm the braces shown on S1-2304 (SK1) may be located as shown to avoid fouling the stiffeners in Girder TR16.
5.) Supply the underside of slab dimension at the location of the brace per item 4.
6.)
Supply the underside of slab dimension at the location of t he brace per item 4.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). The slope of the beam can be calculated from the Top of Slab Elevation Given at each end of the beam.
2). Confirmed.
3). Centerline of the welded coupler is at the elevation that is equal to the bottom of the beam minus the clear cover (see 5/S1-3600) minus diameter of the stirrups minus 1/2 of the rebar diameter.
4). Confirmed.
5). Underside of the slab is 10" below the top of slab, which can be calculated based on the spot elevations given (also see response #1).
6) See response #5.

T-1095 **SSS - End Transfer Girder Details at GL14G** **Closed** **01/09/2014** **01/19/2014** **01/16/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 262 SK1 to SK3 for items 1 to 6:
1.) Supply the slope angle for MFB4.
2.) Confirm the noted information is the correct information to determine the top end of MFB4.
3.)
Supply the noted dimension (to be used to locate PL 2 1/2 x 9 x 2'-6).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). The slope of the beam can be calculated from the Top of Slab Elevations given at each end of the beam.
2). Confirmed.
3). Centerline of the welded coupler is at the elevation that is equal to the bottom of the beam minus the clear cover (see 5/S1-3600) minus diameter of the stirrups minus 1/2 of the rebar diameter.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

4.) Confirm the braces shown on S1-2304 (SK1) may be located as shown to avoid fouling the stiffeners in Girder TR14.
5.) Supply the underside of slab dimension at the location of the brace per item 4.
6.)
Supply the underside of slab dimension at the location of t he brace per item 4.

4). Confirmed.
5). Underside of the slab is 10" below the top of slab, which can be calculated based on the spot elevations given (also see response #1).
6). See response #5.

T-1097 **SSS - End Transfer Girder Details at GL19.9 & 20.1G** **Closed** **01/09/2014** **01/19/2014** **01/16/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 264 SK1 to SK4 for items 1 to 8:

1.) Supply the slope angle for MFB1.
2.) Confirm the noted information is the correct information to determine the top end of MFB1.
3.)
Supply the noted dimension (to be used to locate PL 2 1/2 x 9 x 2'-6).
4.) The braces per 5/S1-5015 as shown on plan (SK1) will cross each other between Grids 19.9 & 20.1 as shown on SK3 & SK4. There is insufficient room on Girders TR19.9 & TR20.1 to accommodate these brace connections without the braces fouling each other.
Please work with SK3 & SK4 and provide a solution.
5.) Supply
the underside of slab dimension at the location of the brac e per item 4.
6.) Supply
the underside of slab dimension at the location of the brac e per item 4.
7.) Supply
the underside of slab dimension at the location of the brac e per item 4.
8.) Supply
the underside of slab dimension at the location of the brac e per item 4.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). The slope of the beam can be calculated from the Top of Slab Elevation at each end of the beam.
2). Confirmed.
3). Centerline of the welded coupler is at the elevation that is equal to the bottom of the beam minus the clear cover (see 5/S1-3600) minus diameter of the stirrups minus 1/2 of the rebar diameter.
4). The cross brace between 19.9 and 20.1 may be replaced by a single horizontal brace.
5). Underside of the slab is 10" below the top of slab, which can be calculated based on the spot elevations given (also see response #1)
6) See response #5
7) See response #5
8) See response #5

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1097.1	SSS - End Transfer Girder Details at GL19.9 & 20.1G	Closed	03/12/2014	03/22/2014	03/31/2014	Potentially	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 264.1 SK1 to SK3 for items 1 to 4:

At GL 22/G detail 9/S1-
3702 is noted as typical at Grids 19.9 & 20.1 on S1-
2305. However, TR19.9 & TR20.1 do not match the inform
ation as shown in detail 9/S1-
3702 due to the MFB1 concrete beam & BU girder depth.
See SK3 for the outline of the MFB1 and please provide di
rection for the following items at Grids 19.9 & 20.1.
1) The number of headed studs requested in detail 9/S1-
3702 will not fit TR19.9 & TR20.1. Supply the number of h
eaded studs required with location dimensions.
2) The PL 2 1/2 x 9 x 2'-
6 cannot be welded as shown in detail 9/S1-
3702. Please advise.
3) The 2" diameter holes at the bottom of MFB1 thru the w
ebs of TR19.9 & TR20.1 cannot be supplied as requested.
Please advise.
4) The L8x4x1/2x2'-
0 cannot be supplied as shown. Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The top of the beam is at 16.07', and the bottom of the concrete beam is at 12.07'. The top of Transfer Girder is at 17.60', which allows 5.3' high region for 5 rows of studs at 6" spacing (out to out distance of 2'-0"). Lower the stud group so that that top row is 6" below the top of concrete beam.

2). The 2 1/2" plate is incorrectly shown graphically. The end of the plate is to flush with the end of the transfer girder web.

3). 2" dia holes are to be provided. The center of the hole is to be 2" above the bottom of the concrete beam.

4). The angle may be deleted.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1097.2	SSS - End Transfer Girder Details at GL19.9 & 20.1G	Closed	05/23/2014	06/02/2014	06/04/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 264.2 SK1 to SK3 for items 1 to 3:

1. The group of headed studs has been lowered to 6"
below the concrete beam per response in RFI T-1097.1
(SK 340.1, CD 264.1). Please confirm the headed studs
may be moved as necessary to clear the stiffeners.
2. Please clarify the vertical location for the PL 2 1/2 x 9 x
2'-6.
3. The 2" dia. holes cannot be located 2" above the bottom
of the concrete beam as requested in RFI T-1097.1 (SK
340.1, CD 264.1) as the concrete beam is below TR19.9
as shown. Please clarify where the 2" dia. holes are to be
placed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). Confirmed.

2). PL 2 1/2" x 9" x 2'-6" may be deleted and the couplers may be welded to the bottom flange of the transfer girder directly.

3). The holes are to be located above the bottom flange (as close as possible to the flange).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1098	SSS - End Transfer Girder Details at GL16C	Closed	01/09/2014	01/19/2014	01/16/2014	Potentially	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 266 SK1 & SK2 for items 1 to 3:

1.)
Supply the location of the braces from grid 'C' considering the dimensions on TR16 shown on SK2 and the connection for the braces to the girder per 8/S1-5015.
2.) Supply
the underside of slab elevation at the brace located per di mension supplied in item 1.
3.) Supply
the underside of slab elevation at the brace located per di mension supplied in item 1.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Brace may be similarly located per RFI T-1095 (Skanska RFI 338).

2) The bottom of slab elevation is 10" below the top of slab, which can be calculated using the spot elevations at each end of the beam given.

3) See response to item 2).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1099	SSS - End Transfer Girder Details at GL14C	Closed	01/09/2014	01/19/2014	01/28/2014	Potentially	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 265 SK1 & SK2 for items 1 to 3:

1.) Supply
the location of the braces from grid 'C' considering the di mensions on TR14 shown on SK2 and the connection for the braces to the girder per 8/S1-5015.
2.) Supply
the underside of slab elevation at the brace located per di mension supplied in item 1.
3.) Supply
the underside of slab elevation at the brace located per di mension supplied in item 1.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). The braces may be connected to the first Transfer girder bottom flange stiffeners away from the column.

2). The bottom of slab elevation equal to top of slab (16.81' as noted on the plan) minus 10"

3). See response #2.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1100	SSS - End Transfer Girder Details at GL19.9 & 20.1C	Closed	01/10/2014	01/20/2014	01/28/2014	Potentially	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 267 SK1 & SK2 for items 1 & 2:

1.)

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). See response #1 for RFI T-1099.

2). The bottom of the slab is 10" below top of the slab

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Supply the location of the braces from Grid C considering t he dimensions on TR19.9 & TR20.1 per 3/S1-3705 as shown on SK2 and the connections for the braces to the Girders per 8/S1-5015.
2.)
Supply the underside of slab elevations at each brace loca ted per dimensions supplied in item 1.

(16.07' as noted on plan).

T-1100.1 **SSS - End Transfer Girder Details at GL19.9 & 20.1C** **Closed** **03/12/2014** **03/22/2014** **03/31/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 267.1 SK1 for items 1 to 3:
At GL 22/C detail 3/S1-
3705 is noted as typical at Grids 19.9 & 20.1 on S1-
2305. However, TR19.9 & TR20.1 do not match the infor mation as shown in detail 3/S1-
3705. See SK1 for the outline of the MFB1 and please pro vide direction for the following items at Grids 19.9 & 20.1.

1) The 112 headed studs requested in detail 3/S1-
3705 will not fit inside the MFB1 as is shown. Confirm it is acceptable to eliminate the top row of headed studs and s upply a total of 98 headed studs (49 per side) or supply an alternate solution.
2) The 2" diameter holes for the #4 stirrups will not fit insid e TR19.9 & TR20.1. Give direction on the bottom stirrup h oles and confirm the top stirrup holes are still to be supplie d as shown.
3) Confirm the 2 1/2" diameter holes in the bottom stiffener s are no longer required as they will foul the bottom flange of TR19.9 & TR20.1.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). The top row shall not be eliminated. Those studs will be casted inside a concrete pad.

2). The top row of 2" dia holes is to be located 3" from the top of the concrete beam.

The bottom 2" holes shall be located similar to Section 7/S1-3704

3). Holes still be needed in the vertical stiffeners. See 7/S1-3704 for hole detail and lenton couplers.

T-1101 **SSS - Connections for Rigging Schemes** **Closed** **01/10/2014** **01/20/2014** **02/05/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Skanska is reviewing the rigging schemes required to erect the Transfer Girders, Built-up Columns and Tapered Roof Girders. Please confirm drilling holes for the bolted connection in the following members is acceptable so Candraft can incorporate them into the model as per:
1) Transfer Girders sketches R-1A & R-1B.
2) Built-up Columns sketches R-2A, R-2B & R-2C.
3) Tapered Roof Girders sketches R-5A & R-5B.

Rigging is a means and methods issue, the Design Team does not have specific comment on the proposed rigging scheme, however, the rigging scheme for the transfer girder shall consider the weight of the cast node as it is to be shop welded to the transfer girders.

T-1102 **SSS - Type III Column Base Embedded Plate** **Closed** **01/09/2014** **01/20/2014** **01/10/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Webcor Construction LP Jeff Galoyan **Answered By:** Webcor Construction LP Gregory Kemerer

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Type III column base detail 8/S1-5051 indicates an embedded plate, as the package delineation line shows the ½" thick embedded plate is not in Skanska's scope of work. TG06 trade subcontractor will be required to coordinate locating the shear studs to clear the congested rebar at these locations. The embedded plates will be supplied and installed by others and Skanska will field weld the L4x3 to the embedded plate as indicated on SK1. Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

T-1103 **BGP - Increased Slump Specification Limit for Mixes with High-Range Water Redu** **Closed** **01/13/2014** **01/23/2014** **01/15/2014** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference attached letter Authored by Robert Foley, CEMEX QC Manager, dated 1/2/2014 and TG06.0 technical spec section 033020.2.3.F.1.b.

SCCI and CEMEX are proposing the following guidelines regarding slump of cast-in-place mix designs that contain 30% or higher fly-ash (CM) and HRWR:

1. Maximum 8-inch slump will continue to be the target slump for delivery of concrete mixes with HRWR.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
1/15/2014
RESPONSE:
The revised guidelines are not acceptable. Acceptability is governed by the limits in the approved mix design submittals and the project Specification within ACI 117 tolerances.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

2. 9-inch and higher slump will be considered an action limit. Whenever slump of consecutive loads exceeds 9 inches, actions wiJI be taken to reduce subsequent slump measurements.
3. Batches with slump as high as 10.5 inches will be accepted provided the batch weights are evaluated to verify the batch did not include water content that exceeds mix design w/c ratio; and the concrete is not visibly segregating.

Are these revised guidelines acceptable?

T-1104 **BGP - Increase Concourse Slab Maximum construction Joint Spacing** **Closed** **01/13/2014** **01/23/2014** **01/28/2014** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference TG06.0 contract specs section 033020.3.2.A.4, submittal TG0600-030.2 and attached drawing showing proposed CJ layout per variance below. SCCI is proposing to increase the allowable maximum construction joint spacing in the lower concourse slab:

With the use of currently approved Concourse Slab cast-in-place mix design, SCCI is proposing to eliminate every other construction joint. See attached pages for reference example. Maximum construction joint spacing would be 96-feet. Joint location will always land on wall joint location below per 033020.3 .2.A.4.

Construction joint layout submittal TG0600-030 will be revised and resubmitted to reflect any change made to currently approved layout.

Is this acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
1/27/2014
RESPONSE:
The contractor-proposed Lower concourse slab CJs presented in the RFI will be acceptable.

T-1105 **SSS - Elevator Rail Supports Erection Aids** **Closed** **01/14/2014** **01/24/2014** **01/27/2014** **Potentially** ☐

From: Skanska USA Civil West California Dis Ryan Clayton **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

See attached CD RFI # 183.1 SK1A, SK1B, SK2A & SK2B for items 1 & 2:
1.) Confirm the elevator rail support connection with erection aids is acceptable as shown.
2.) Confirm the elevator rail support connection with erection aids is acceptable as shown.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). a. Connections for elevator guide rail support (HSS Beams) are updated in the MEP/TE/SE/VT Issue for bid package dated 1/23/2014. Refer to the revised drawings in the package for guide rail support and their connection details.
b. Erection aids for elevator guide rail support are contractor's means and methods.
2). See response to item 1)

T-1105.1 **SSS - Elevator Rail Support Details** **Closed** **02/12/2014** **02/22/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

RFI # changed to T-1105.2

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T-1105.2 **SSS - Elevator Rail Support Details** **Closed** **02/12/2014** **02/22/2014** **02/27/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

The response to RFI T-1105 directs the contractor to issued for bid drawings. Please advise if the new details 7/S17630 & 8/S1-7630 are intended to be for construction, if so please indicate which ASI package these revised drawings will be formally issued with.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Yes, details 7/S1-7630 and 8/S1-7630 are intended for construction. The documents have now been issued to TJPA as and ASI.

T-1106 **SSS - Pretensioned Rod Bearing Plate Hole Dia** **Closed** **01/14/2014** **01/24/2014** **01/24/2014** **Potentially** ☐

From: Skanska USA Civil West California Dis Ryan Clayton **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

With reference to detail 6/S1-5052 (attached) please review the following:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractor proposed use of anchor bolt hole sizes per Table 14-2 of AISC Manual for the pre-tensioned rods in SLRS columns is not acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Due to the limited access at the top of the built-up TT please confirm it is acceptable to increase the diameter of the hole in the 4" bearing plate to the maximum allowable size of 3-3/4" as per ASIC table 14-2 (attached) to allow for additional tolerance and workability when installing the 2-1/2" diameter 18' rod. The oversized side hole will only be required at the 17 built-up TT locations and the 6x6x2" plate washer hole will remain the major diameter of the rod + 1/16".

Please confirm this proposal is acceptable.

T-1107 **SSS - Connection Clarification at Roof Level GL 11** **Closed** **01/14/2014** **01/24/2014** **01/27/2014** **Potentially** ☐

From: Skanska USA Civil West California Dis Ryan Clayton **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

See attached CD RFI # 256 SK1 & SK2.

Due to the thick flanges of the W40x593, it is not possible to provide the required 10 bolts in the W36x160 per S1-5010.

Please confirm it is acceptable to provide 9 bolts as shown or supply a new detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

T-1108 **SSS - Edge of Slab Location Clarification** **Closed** **01/14/2014** **01/24/2014** **01/29/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 261 SK1 to SK4:

S1-2503 (SK1) shows the beam as 9" from the edge of slab. 1/S1-7303 (SK2) shows the edge of slab as 31'-11 1/2 from Grid 11 but A1-2893 (SK3) shows the edge of slab as 31'-11 from Grid 11.

SK4 shows what is currently in the model.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The dimensions shown on SK-4 are correct. See additional comments noted on the attached sketches RFI T-1108 SSS-Edge of Slab Location Clarification-AAI.pdf.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please advise of any correction that needs to be made in the model due to the discrepancy for the edge of slab location.

T-1109 **SSS - Pretension Rod Finish Requirement** **Closed** **01/14/2014** **01/24/2014** **01/17/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

With reference to pretensioned rods required as per schedule 3/S1-5052 please review the following:

As the pretensioned rods on the cruciform columns are to receive a fireproof coating please confirm the rods are to be supplied
plain (no finish required) as per General Note SS-10 - All steel members and embedded steel angles and plates not painted, coated with fireproofing, nor protected by concrete cover, shall be hot-dipped galvanized.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed that the pre-tensioned rods are to receive fire proofing; they shall not be galvanized.

T-1109.1 **SSS - Pretension Rod Finish Requirement** **Closed** **01/27/2014** **02/06/2014** **02/12/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

The response to RFI T-1109 (attached) indicates that the pretensioned rods are to receive fireproofing.

1) Please provide the UL assembly for the rod fireproofing.
2) Please confirm that the rods will be Sprayed Fire Resistive Materials SFRM-1 to match the column fireproofing system.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The pre-tensioned rods are to increase the bending stiffness of the column in a seismic condition and are considered non-gravity load carrying elements which do not require fire protection from a code perspective. As typically recommended by the fire protection manufacturer, non-gravity load carrying attachments be fire proofed to the same level as the protected structural elements.

Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1110	SSS - Welded Reinforcement at Light Column Tendons	Closed	01/14/2014	01/24/2014	02/03/2014	Potentially	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Reference details 1 and 5 on S1-6008 which indicate that welded reinforcement bars are "to be determined by post-tensioning system supplier." Per detail 4/S1-6008, the PT anchor bolt supplier is Dywidag.

Per the email attached, Dywidag's representative states that additional reinforcing bars are not required provided the concrete strength is sufficient and that the anchorages are not located particularly close to an exterior concrete face.

Based on the maximum permissible jacking load and associated maximum bearing stress of 3.8ksi, please confirm the concrete strength is sufficient and that the reinforcing bars can be eliminated at the Light Column tendons.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

TT has confirmed that the mat slab has a concrete strength of 5 ksi. As per the anchor plate size specified by Bryan Lampe of DSI USA, only 4 ksi concrete strength is required for the anchor plate without additional reinforcing bars. Therefore, we agree that the helical reinforcement can be eliminated at the Light Column anchor rods.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1111	SSS - Framing & Connection Clarifications	Closed	01/14/2014	01/24/2014	01/28/2014	Potentially	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 254 SK1 to SK4 for items 1 to 7:
1.) It appears the noted section references do not apply on the noted level of steel but the detail should be applied on S1-2403. Work with SK1 & SK4 and confirm or clarify how the detail is to be applied at this level.
2.)If detail 1/S1-7661 is to be applied on the noted level, please respond to the following:
a.) Confirm 1/S1-7661 applies within the 10'-11 area.
b.) Supply information for how to apply 1/S1-7661 at the 2 1/4" slab transition per A1-2883 as doc umented in RFI T-0963 (SK 247 & CD 196)
3.)Confirm noted dimensions are correct.
4.) Confirm the L8x8x3/4 does not need to be welded to the plate and/or to the L8x4x1/2. If yes, supply the welding requirement.
5.)The noted information is not clear. Please supply information for the plate and welding.
6.)Confirm the horizontal leg of the L8x4x1/2 does not need to be welded to the beam flange. If yes, supply the welding requirement.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). Confirmed that Section 1/S1-7661 is to be applied to S1-2403.

2). a. Confirmed.

b. See response to Item 3). The distance from EOS to centerline of the beam varies.

3). See the attached sketch RFI T-1111 SSS-Framing Connection Clarification -AAI.pdf for the dimensions requested.

4). Confirmed

5). Use 3/8" plate with weld to beam flange per Detail 8/S1-5000.

6). Provide CJP weld the horizontal leg of L8x4 to beam flange.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

7.)Confirm a slab closure plate per 8/S1-5000 is required on center of beam or clarify the edge of slab along this beam.

7). Confirmed.

T-1112 **SSS - Detail Clarifications** **Closed** **01/14/2014** **01/24/2014** **01/28/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See att ached CD RFI # 259 SK1 & SK2 for items 1 to 3:
1.) The 1" MAX is not achievable with the hole locations shown. The actual gap will be 1 13/16 as shown on SK2. Confirm this is acceptable.
2.)The stitch plate will foul the web of the WT20x105.5 above if it is located at mid-span. Confirm it is acceptable to locate the stitch plate 7/16" clear of the WT as shown on SK2.
3.)It is not clear what is meant by the noted size of the shim plates. Confirm it is acceptable to locate the corner of the MC10 2 7/16" below the top of the WT20x105.5 to clear the "k" and to have the shim plates match the profile of the MC10 as shown on SK2. The shim plate size is 10" x 2'-0 1/2.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). Confirmed.

2). Confirmed.

3). Confirmed.

T-1113 **SSS - Light Column Template Air Gap** **Closed** **01/14/2014** **01/14/2014** **01/17/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Installation of the template at the base of the light column DYWIDAG anchor rod will result in a 1/16" air gap (see SK1). Please confirm it will be acceptable to fill this air gap with either Teflon tape or caulking.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The proposed template detail is ok. SBP has no objections to anything below the loaded anchor.

T-1114 **BGP - Concrete Samples for Columns** **Closed** **01/15/2014** **01/25/2014** **01/21/2014** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference Spec: 03 30 20-3.a.

"The TJPA Representative shall conduct tests of concrete as follows:

a. Testing frequency: Sample sets for all tests listed below of each concrete design mix
placed each day shall be taken not less than once a day, nor less than once for each
100 cubic yards of concrete, nor less than once for each 5000 square feet of surface
area for the mat, cast-in-place formed concrete slabs or walls. Additional tests shall
be performed if deemed necessary by the TJPA Representative. Sample each
column, regardless of other frequencies listed above."

We request that the last sentence "Sample each column, regardless of other frequencies listed above", be deleted. The current testing of columns would fall under the statement to test "..not less than once a day, nor less than once for each 100 cubic yards". As the current schedule shows two columns to be poured per day, this will produce one set per day for testing.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
1/17/2014
RESPONSE:
The requirement that samples be taken for every column may be relaxed to a single sample set for every two columns placed contemporaneously with the same pump.

T-1115 **BSE -Alternate Micropile Method in Buttress Area** **Closed** **01/16/2014** **01/26/2014** **01/31/2014** **Potentially** ☐

From: Balfour Beatty Infrastructure, Inc. Kelly Phariss

To: Turner Construction Compan PHIL MILITELLO

Answered By: Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

DTDS is concerned about delays and extra costs resulting from drilling Micropiles adjacent to buttress piles from Gridlines 26.5 to 30. As stated in our Contract Change Order request (CCO #04) regarding "Final Micropile Layout - Additional Micropiles" (attached for reference), drilling for the micropiles may encounter overbreak pile concrete and grout placed during buttress pile remediation. The current drilling system cannot be used to drill through the pile overbreak and/or remediation grout.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is not an acceptable alternate at this time. If serious delays begin to be encountered, the design team, Turner, Webcor and their subcontractors should meet to discuss this issue immediately.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

The reduced pile spacing from 10 feet on center to 5 feet and less may also cause problems such as communication between piles.

Significant additional costs and schedule delays will result should DTDS have to change our procedure and/or equipment to drill through buttress pile concrete and/or remediation grout. Delays will also be realized should DTDS have to change our drilling sequence to mitigate problems that may arise from the reduced pile spacing.

Should detrimental issues arise, DTDS proposes to drill, install, and grout micropile dowels in the center of the existing buttress piles as an alternative to drilling adjacent to buttress piles. A micropile dowel could take the place of a micropile as necessary. A dowel would consist of the same #20 Gr. 80 reinforcing bar used for the micropiles. A six- inch diameter, 20 foot long hole would be drilled in the center of the buttress pile. An additional drill rig will be required to perform the drilling. A 25' bar would be set with centralizers and tremie grouted with the same grout used for the micropiles. Based on an assumed minimum Buttress pile concrete and grout strength of 3,000 psi, the developmental length (ld) of a #20 bar is 182.5 inches (15.2 feet). 20 feet embedded would develop the yield strength of the #20 bar (393 kip) and exceed the design micropile load of 308 kips.

ld = (80,000 psi/ (20 * sqrt(3000 psi))*2.5 in = 182.5 in.

Accepting this alternative would mitigate delays and extra costs that will result should buttress pile concrete and/or grout be encountered while drilling adjacent to these piles.

Please confirm that this alternative micropile procedure is acceptable.

T-1116 **BSE - Micropile Removal and Relocation in Buttress Area** **Closed** **01/16/2014** **01/26/2014** **01/31/2014** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Kelly Phariss

REQUEST: **SUGGESTION:** **ANSWER:** **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

WOJV recieved FO T-00008 9/07/2012 which added micropiles within the footprint of the buttress shafts. RFI T-0323.1 returned 10/24/12 directed BBII to install buttress shaft E4, which is in direct conflict with Micropile E520.

BBII proposes to:

Option 1. Remove Micropile E520
Option 2. Drill Micropile E520 into the center of the buttress shaft as proposed in RFI T-1115
Option 3. Relocate Micropile E520 to a location provided by the design team.

Also, BBII is requesting that they be permitted to relocate Micropile E519, 1' to the South, to allow further clearance form Buttress Shaft E4.

Option 1 and 2 are not acceptable (also see response to RFI T-1115) Option 3: Move E520 toward east or west (approximately 6'+/-), in the space between 2 buttress piles.

Relocate E519 as proposed is acceptable.

T-1117 **BGP - Geothermal Trench Backfill and Compaction Requirements in Zones 3 & 4** **Closed** **01/16/2014** **01/26/2014** **01/24/2014** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Webcor Construction LP Jackson Tukuafu

REQUEST:

There are areas in Zone 3 (and perhaps in Zone 4) that Geothermal trenches will be trenched through that Arup identified as unsuitable soils (high in bay mud) , which is of such nature as to be incapable of being compacted to specific density using ordinary methods of optimum moisture content. Additionally, there are areas in Zone 3 (and perhaps in Zone 4) that Geothermal trenches will be trenched through that Arup identified as in-situ suitable, which are incapable of being compacted.

- Spec. 23-57-34 Ground Loop Heat Exchanger states "placing and compacting soils the loop installation, the trenches shall be back filled per IGSHPA with loose soil minimizing air gaps or voids and then marked with warning tape. After bedding around the loop and header piping, the backfill shall be watered to settle the loose soil to ensure there are no air gaps along the length of the pipe."

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
1/23/2014
RESPONSE:
Backfill with Native Soil to replace the unsuitable material is acceptable to WSP. Reference RFI 356.1 for relaxation of wetting requirement.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

- Spec. 31-23-34 Trenching and Backfill states "All backfill will be placed in horizontal layers not more than (8) inches thick before compaction, and each layer shall be satisfactorily compacted by mechanical means. Flooding or jetting will not be allowed. Compact soil to not less than 95 percent maximum dry density according to ASTM D1557.

Is the following procedure acceptable for placing and compacting soils in the Geothermal Piping trenches in the areas with unsuitable soils (high amounts of bay mud), and suitable in-situ non-compactable as identified by Arup?

1. After the Geothermal piping is installed and tested, these trenches will be filled with available approved suitable materials from onsite excavations or 300 psi CLSM as approved by the TJPA Rep.
2. Geothermal piping trenches soils will be placed per Geothermal Spec. 23-57-34 Ground Loop Heat Exchanger which states "the trenches shall be back filled per IGSHPA with loose soil minimizing air gaps or voids and then marked with warning tape."
3. Soil bedding and backfill around the loop and header piping, shall be placed to ensure there are no air gaps along the length of the pipe (water will not drain well, so will be used sparingly and only if necessary).
4. All backfill will be placed in horizontal layers not more than (8) inches thick before compaction, and each layer shall be satisfactorily compacted by mechanical means (e.g. pogo stick/power puff tools) .
5. Flooding or jetting will not be allowed.
6. Soils will be compacted using steps above and best construction practices.
7. Trench fill and adjacent areas will not be tested to verify the "not less than 95 percent maximum dry density" according to ASTM D1557. The TJPA Reps will not perform density and moisture content tests specified in the Trenching and Backfill Spec. 31-23-34. In lieu of testing, the TJPA Geotechnical Inspection and Testing Agency will perform full time inspection of the fill and compaction process to verify procedure steps are followed, the suitability of the fill and that soils compaction is achieved.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1118	BGP - Knockout Wall Neoprene Pad Width Clarification	Closed	01/17/2014	01/27/2014	01/21/2014	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please refer to attached drawing S1-3204.

Details 1, 2, and 4 on S1-3204 call out a 1/4-inch x 8-inch continuous neoprene pad to be placed between the shear wall pilaster and the knockout wall. The bearing surface of the pilaster is 12-inches, so the 8-inch pad will no adequately cover the bearing surface.

Please confirm that this is the designer's intent. If not, SCCI proposes using a 1/4-inch x 12-inch continuous neoprene pad to provide more adequate coverage of the bearing surface.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The following options are acceptable:

1. As per design documents, an 8" continuous neoprene pad may be used. Center the pad on the supporting corbel. The Knockout wall concrete shall not be permitted to directly contact the supporting corbel concrete. As part of contractor's means and methods, 2" foam (or equivalent) strips may be used on either side of the neoprene pad to prevent concrete to concrete contact.

2. A 12" continuous neoprene pad may be used.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1119	BGP - Column Steel Jacket Details	Closed	01/17/2014	01/27/2014	01/27/2014	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please refer to submittal package TG0600-905 and RFI T-0693 regarding the "steel jackets" that certain columns are to receive.

1. Please clarify "Coordination" notes shown on attached excerpt drawing S101.0 of TG0600-905 by providing applicable details that show the steel jackets. The applicable architectural drawings currently in the Construction Drawing Set dated 07/17/2013 - Issued for Construction do not show steel column jackets. However, similar drawings issued in Issued For Bid - Addendum #1 dated 12/13/13 (not issued to construction) appear to show column jacket and details. See attached drawing A1-2103 from each drawing update set.

2. Please provide further details that SCCI should be aware of when it comes to these steel jackets and columns to be constructed, including but nol limited to, items embedded in the columns that will utilized for steel jacket construction

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
1/27/2014
RESPONSE:
1. Contractor to coordinate surface mounted boxes and embedded conduit routing for columns that receive steel jacketing (ref to TG0600-905 and RFI T-0693).
2. Refer to detail 6/S1-3503 for structural details pertaining to steel jackets issued with ASI 106 dated 09/20/2013. Refer to the following SKA-2922 to SKA-3003 for locations and details of columns with steel jacketing.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1120	BGP - Horizontal Hooks in Shear Walls 2nd Lift and Above	Closed	01/17/2014	01/27/2014	01/20/2014	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please refer to attached drawing 4/S1-3261.

Please confirm if it is acceptable to replace the shear wall horizontal bars which have a 90-degree hook with a 180-degree hook. See attached drawing for more details. This change will only be applied to the second lift of shear walls and above (approx. EL. -20.56 and above).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
1/20/2014
RESPONSE:
Contractor proposal of 180deg hooks for shear wall horizontal bars is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1121	SSS - Bus Deck Level Edge of Slab Plate Clarification	Closed	01/17/2014	01/27/2014	01/31/2014	Potentially	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI 233 SK1 to SK3 for reference.

After reviewing the structural steel documents for TG 07.1R, a detail is not provided for deck support around the bus deck level cast nodes. Please confirm that the intent is to utilize, 12 gauge sheet metal, in these areas as shown on 1/S1-5001. The sheet metal will follow the contour of the cast node, providing a 1" gap per A1-2893 (SK2).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Architectural slab edge plans A1-2892 to A1-2897 layout all the locations and provide the slab edge heights of the slab edge plate. Additionally detail 4/A1-8376 shows the typical cast node slab edge plan detail and it references section details 4/A1-8675, 3/A1-8376 and 2/A1-8376, which show the conditions around the cast node and gap required - see markup on enclosed CD RFI 233 SK3.

Closure plate (curved at the back of the cast node) may be a 12 gage sheet metal, but it should be welded to the end of edge angle at the seam. The edge angle shall be extended to meet with the curved closure plate.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1122	SSS - Edge Plate Detail at Steel Drag Beam	Closed	01/17/2014	01/27/2014	02/03/2014	Potentially	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Reference detail 4 on S1-5022 which indicates that where "S" is less than or equal to 3", a double bent plate is to be used. Based on the information provided in SK RFI 266.1 SK2, this cannot be achieved, as the minimum overall height for a Z angle is 4" and the minimum thickness for a

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Yes, it is acceptable, however, the weld shall be a continuous 1/4" double fillet weld, not a 3" long weld at 12" on center. Note that the lower horizontal plate needs to be welded according to the weld shown on detail 4B/S1-5022.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Z angle is ½".

1.) Please advise if it is acceptable to use the detail approved in RFI T-1032 (for sloping conditions), shown on SK RFI 266.1 SK1, at all locations where "S" is less than 4".
2.) Please advise if it is acceptable to use a Z angle at all locations where the "S" dimension is greater than or equal to 4" and the required thickness is ½", in lieu of the bolted connection.
3.) Please advise if it is acceptable to use the detail approved in RFI T-1032 (for sloping conditions), shown on SK RFI 266.1 SK1, at locations where "S" is greater than or equal to 4" and the required thickness is 3/8", in lieu of the bolted connection.
4.) Note that based on the bending radius and edge distances shown in 4/S1-5022, the minimum height for bolted connections is 4 ¾" as indicated on CD RFI 215.1 SK1 attached. If the bolted connection is required, please verify the maximum height "S" for the bent plate detail in 4A/S1-5022 may be increased to 4 ¾".

2). Z section is acceptable, but it limits any field adjustment that the bolted connection can provide. It is Skanska's decision which way is preferable.

3). See Response to #2.

4). Angles can be used in lieu of bent plates to address the clearance issue raised. Also see response to #2 & #3.

T-1122.1 **SSS - Edge Plate Detail at Steel Drag Beam** **Closed** **02/05/2014** **02/15/2014** **02/14/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Detail 4 on S1-5022 calls for a double bent plate for slab support where "S" is less than or equal to 3". However, the minimum overall height for a double bent angle of the required thicknesses is 4" and the minimum overall height for the bolted connections is 4 ¾". Further, it has been determined that the minimum overall height for the detail proposed for sloping conditions is 2".

For instances where the difference between the underside of the slab and top of beam is less than 2", please confirm it is acceptable to use an angle as depicted in CD RFI 279 SK2. Otherwise, please provide an alternate detail for this condition.

A sample location of this condition has been included in

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). As noted in the response to RFI T-1122.0, the weld of the bent plate to the horizontal plate shall be a continuous 1/4" double fillet weld, not a 3" long weld at 12" on center.

2). For the instance where the difference between the underside of the slab and top of beam is less than 2", follow the detail in the attached sketch.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

SK1 for reference, where an angle is proposed for the 1" vertical height difference.

T-1123 **SSS - End Transfer Girder Details at GL 7C** **Closed** **01/17/2014** **01/27/2014** **02/03/2014** **Potentially** ☐

From: Skanska USA Civil West California Dis Ryan Clayton **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

See attached CD RFI # 268 SK1 to SK3 for items 1 to 4:
1) Confirm the noted are acceptable location dimensions f or the headed studs per 7/S1-3702 SIM.
2) Confirm the noted are acceptable location dimensions f or the 2" dia. holes per 7/S1-3702 SIM.
3) Supply the location of the 2" dia. holes from top of girde r as shown.
4) Confirm the headed studs and 2" dia. holes may be mo ved as necessary to avoid fouling the stiffeners.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). Confirmed

2). Confirmed.

3). Center of the 2" holes is 3'-3 1/2" below top of steel at the beam end, and 3'-0" below top of steel near the end of concrete beam.

4). Confirmed.

T-1124.1 **SSS - Plate Grade Substitution** **Closed** **02/21/2014** **03/03/2014** **03/03/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

In response to RFI T-1124 & the Structural Coordination Meeting on February 6, 2014:

The moment frame columns and light column base plates are identified on the structural drawings for TG07.1R as material grade ASTM A572 Grade 50. Please confirm that it is acceptable to use ASTM A572 Grade 42 modified to achieve a minimum specified yield strength of 50 ksi for all plate exceeding 4¿ in thickness at these locations.

Please note that the mill certification will read ASTM A572-Gr 42 but the reports will indicate a yield strength of 50 ksi.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Acceptable to use ASTM A572 GR42 with 50 ksi min yield strength for moment frame columns. The light column base plate was already called out as ASTM 572 GR42, therefore 42 ksi yield is acceptable as indicated in contract drawings.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1125	BGP - Glass Guard Rail Embed A529 Grade 55 Steel in Lieu of A36	Closed	01/21/2014	01/31/2014	01/30/2014	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please confirm it is acceptable to use A529 Grade 55 steel in lieu of A36 steel for the 3/8 x 7 flat bar portion of the glass guard rail embeds as shown on detail 7 of S1-3410.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
1/29/2014
RESPONSE:
A529 Grade 55 plate is acceptable as long as proper welding procedure specification is used to match with the A529 steel materials.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1126	SSS - End Transfer Girder Details at GL 6C	Closed	01/21/2014	01/31/2014	02/04/2014	Potentially	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 269 SK1 to SK4 for items 1 to 7:
1) Supply the location of the braces from Grid C considering the end dimensions of TR6 shown on SK2 & SK4 and the
connection for the brace to the Girder per 8/S1-5015.
2) Supply the underside of slab elevation at the brace located per dimension supplied in item 1.
3) Supply the underside of slab elevation at the brace located per dimension supplied in item 1 .
4) Provide the noted dimensions to locate the 2" dia. holes.
5) Provide locations for the 2 1/2" dia. holes from center of TR6 and from top of TR6.
6) Provide dimension to locate the 2" dia. holes.
7a) Confirm it is acceptable to move the headed studs or rebar holes as necessary to avoid fouling the stiffeners.
7b) Provide the minimum clearance between the stiffener and the headed studs.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). The brace may be connected to either one of the vertical stiffeners at the beam bottom flange.
2). The underside of the slab elevation is at 10" below the top of slab. The top of slab elevation may be calculated based on the spot elevations given at each end of the beam.
3). See response #2.
4). Center of the hole for the stirrups is to be 3" below the top of the concrete beam MFB 1. Top of the MFB1 is to be calculated based on the spot elevations given on the plans.
5). The first hole is 5" from center line of the TR 6, the 2nd hole is 15" from the centerline of TR6.
6). 2"
7). a. Confirmed. b. The headed studs may be moved to a location that have sufficient distance for welding the headed studs.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1126.1	SSS - End Transfer Girder Details at GL 6C	Closed	02/24/2014	03/06/2014	03/06/2014	Potentially	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On RFI T-1126 item 5 we requested the horizontal and vertical locations of the holes in the stiffeners. The

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The holes in the stiffener plates shall be located to match with the center of the horizontal beam rebars.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

horizontal locations were provided but not the vertical locations.

Please refer to sketch CD RFI # 269.1 SK1 and supply the vertical locations as shown

The horizontal rebars is to be set at 3.8125" (2 3/4" cover + 1/2" for tie + 1/2 bar diameter) below the top of concrete beam. Please see the green markups on the sketch attached for the vertical dimensions requested.

T-1127 **SSS - End Transfer Girder Details at GL 4C** **Closed** **01/21/2014** **01/31/2014** **02/06/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 270 SK1 to SK3 for items 1 to 7:
1) Supply the location of the braces from Grid C considering the end dimensions of TR4 shown on SK2 and the
connection for the brace to the Girder per 8/S1-5015.
2) Supply the underside of slab elevation at the brace located per dimension supplied in item 1.
3) Supply the underside of slab elevation at the brace located per dimension supplied in item 1.
4) Provide the noted dimensions to locate the 2" dia. holes.
5) Provide locations for the 2 1/2" dia. holes from center of TR6 and from top of TR6.
6) Provide dimension to locate the 2" dia. holes.
7a) Confirm it is acceptable to move the headed studs or rebar holes as necessary to avoid fouling the stiffeners.
7b) Provide the minimum clearance between the stiffener and the headed studs.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This RFI is similar to T-1126, please see response to T-1126 for response to this RFI.

T-1128 **SSS - End Transfer Girder Details at GL 2C** **Closed** **01/21/2014** **01/31/2014** **02/06/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 271 SK1 to SK3 for items 1 to 7:
1) Supply the location of the braces from Grid C considering the end dimensions of TR2 shown on SK2

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This RFI is similar to RFI T-1126, please see response to RFI T-1126 for response to this RFI.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

and the
connection for the brace to the Girder per 8/S1-5015.
2) Supply the underside of slab elevation at the brace located per dimension supplied in item 1.
3) Supply the underside of slab elevation at the brace located per dimension supplied in item 1 .
4) Provide the noted dimensions to locate the 2" dia. holes.
5) Provide locations for the 2 1/2" dia. holes from center of TR6 and from top of TR6.
6) Provide dimension to locate the 2" dia. holes.
7a) Confirm it is acceptable to move the headed studs or rebar holes as necessary to avoid fouling the stiffeners.
7b) Provide the minimum clearance between the stiffener and the headed studs.

T-1129 **SSS - End Transfer Girder Details at GL 5C** **Closed** **01/21/2014** **01/31/2014** **02/06/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 273 SK1 to SK4 for items 1 to 3:
1) Confirm the noted dimensions for locating the headed studs are acceptable or supply alternate dimensions.
2) Confirm the noted dimensions for locating the 2" dia. holes are acceptable or supply alternate dimensions.
3a) Confirm it is acceptable to move the headed studs or rebar holes as necessary to avoid fouling the stiffeners.
3b) Provide the minimum clearance between the stiffener and the headed studs.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). Confirmed
2). Confirmed
3a). Confirmed
3b). Minimum clearance shall be the distance required for welding the headed studs.

T-1130 **SSS - End Transfer Girder Details at GL 3C** **Closed** **01/21/2014** **01/31/2014** **02/04/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 274 SK1 to SK4 for items 1 to 4:
1) Supply the location for the holes in the stiffeners (information not shown on S1-3600):

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). Hole locations can be determine following the rules below:
The holes are for MFB11 bottom bars (6-#9).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

a) Dimensions from center of TR3
b) Dimension from top of bottom flange of TR3
2) 4/S1-3707 shows 5 1/2" and 6/S1-3702 shows 6" spacing for the headed studs. Confirm 5 1/2" in acceptable.
3) It is not clear where the 2" dia. holes are to be located. 4/S1-3707 shows the concrete extending to the bottom of TR3 and 6/S13702 shows the concrete stopping above the top of the boittom flange of TR3. Please confirm the location of the 2" dia. holes as shown on SK3 are acceptable or supply the location dimensions.
4a) Confirm it is acceptable to move the headed studs or rebar holes as necessary to avoid fouling the stiffeners.
4b) Provide the minimum clearance between the stiffener and the headed studs.

The center of the 6-#9 bars are to be 2 9/16" above the bottom of the beam (1 ½" cover + stirrup diameter + ½ bar diameter).
The 6-9" shall be equally spaced witin the concrete beam width (36"), the outside bars shall be 2 9/16" (+/-) from the side of the concrete beam (1 ½" cover + stirrup diameter + ½ bar diameter).

2). Confirmed.

3). The 2" holes are to be located base 1 ¾" above the bottom of the beam per Detail 6/S1-3702.

4a). Confirmed

4b). The headed studs shall be located with sufficient distance away from the stiffeners to facilitate welding of the studs.

T-1131 **SSS - Transfer Girder Shear Details at GL 1.4** **Closed** **01/22/2014** **02/01/2014** **02/04/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 275 SK1 to SK3 for items 1 & 2:
1) Supply dimensions to locate headed studs at Grids 'D' & 'F'.
2) Supply dimensions to locate headed studs at Grids 'D.4' & 'E.6'.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). Locate the head studs such that the center of the group is at the mid depth of the concrete beam.
2). See response to #1.

T-1132 **SSS - End Transfer Girder Details at GL 1.4C** **Closed** **01/22/2014** **02/01/2014** **02/04/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 276 SK1 to SK3 for items 1 to 3:
1) Confirm it is acceptable to locate the headed studs as shown or supply alternate dimensions.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). Confirmed
2). Confirmed
3). Confirmed

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

2) Confirm it is acceptable to locate the rebar holes as shown or supply alternate dimensions.
3) Confirm it is acceptable to move the noted rebar hole as necessary to avoid fouling the stiffener.

T-1133 **SSS - Top of Slab Elevation Clarification** **Closed** **01/22/2014** **02/01/2014** **02/04/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 278 SK1 & SK2:

The noted elevation on S1-2304 (SK1) is shown as 18.63' on A1-2864 (SK2) with a slab elevation transition as shown. Confirm A1-2864 is correct.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The top of slab elevation 18.13' shown on the structural is correct. See the attached sketch.

T-1134 **SSS - Transfer Girder Web Plate Detail at GL 9.9 & 10.1** **Closed** **01/22/2014** **02/01/2014** **02/04/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 283 SK1:
The plates are shown as 2'-6 long on each side but the width of the concrete is only 3'-6 wide. This will result in the
plates extending outside the concrete beam. Please confirm this is the intent or supply a revised plate length.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The plates are 14" wide each side of the web, so the total width of the stiffener plates is 2x 14" + 2" (TR web thickness) = 30", within the width of the 42" concrete beam. The 2'-6" is the length of the plate (in the direction along the TR).

T-1135 **SSS - Transfer Girder Web Plate Details** **Closed** **01/22/2014** **02/01/2014** **02/04/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 284 SK1 for items 1 to 4:
1) Confirm the plates are required on each side.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). Confirmed.
2). The 2'-6" dimension is measured in the direction

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

2) The plate is shown as 2'-6 long but the width of the concrete is only 3'-6 wide. This will result in the plates extending outside the concrete beam. Please confirm this is the intent or supply a revised plate length.
3) Confirm the correct reference is 9/S1-3701.
4) Confirm the edge of the plate should be aligned with the end of the Girder.

along the length of Transfer Girder.
3). Confirmed.
4). Confirmed.

T-1136 **SSS - Double Angle Connection** **Closed** **01/23/2014** **02/02/2014** **02/04/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 272 SK1 to SK3 for items 1 & 2:
1) There is insufficient room to provide a double angel connection per 1/S1-5010 for the W12x14 & the W16x26. Confirm it is acceptable to supply a shear plate connection per 1/S1-5011 for the W16x26 to the W12x14 as shown or

supply an alternate solution.
2) Confirm the W16x26 may be connected to the W16x26 using a shear plate similar to SK2 & SK3.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). Confirmed.
2). Confirmed.

T-1137 **SSS - Drag Plate Splice Detail** **Closed** **01/23/2014** **02/02/2014** **02/06/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please refer to attached sketches SK1 & SK2 for the following:

Due to lifting capacity while unloading material, THC will need to order the 3" plate at a maximum of 40'0" length Please confirm a shop splice using CPBG during fabrication to achieve the final lengths of 53'0" and 62'6".

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Shop welded splicing of the 3" drag plate is acceptable. However, the splice shall be located at the far end of the plate away from the columns at Grid D & F.

T-1138 **SSS - Double Angle Connection** **Closed** **01/24/2014** **02/03/2014** **02/06/2014** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 281 SK1 & SK2:
There is insufficient room to connect the W16x26 to the W27x84 using the double angle connection per 1/S1-5010.

Confirm it is acceptable to connect the W16x26 to the W27x84 using a shear plate per 1/S1-5011 as shown or supply
an alternate solution.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed

T-1139 **SSS - WT Deck Support Requirements** **Closed** **01/24/2014** **02/03/2014** **02/07/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 282 SK1 to SK4 for items 1 to 5:
1) The noted WT is shown as stopping short of the concrete curb on S1-2304 (SK1).
a) Confirm the WT is to extend as shown.
b) It appears the WT will interfere with the rebars below the curb per 6/S1-5002 (SK2). Confirm the WT is located as shown and the rebars will be modified.
2) It is not clear from S1-2304 (SK1) what the deck support requirements are above the noted beam are. Please supply a detail.
3) It is not clear from S1-2304 (SK1) what the deck support requirements are above the noted beam are. Please supply a detail.
4) It appears the WT will interfere with the rebars below the curb per 6/S1-5002 (SK2). Confirm the WT is located as shown and the rebars will be modified.
5) The items below have been identified at specific locations on S1-2304 but similar conditions appear repeatedly on the Ground Level. Confirm the responses to items 1 to 4 may be applied typically on the Ground Floor at similar conditions.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

a) The WT does not need to extend beyond the curb that runs north-south (N-S). It should stop short of the N-S curb as shown in detail 6/S1-5002. Note that this also applies to the BU-WT over the W24x76 beam on the east of GL 13 shown in SK1.

1b) The WT will not interfere with the rebar as it stops short of the curb.

2) See attached sketch SKS-0329 that shows deck support above the W12x14 beam. Provide closure plates at the end of the deck as shown in the sketch.

3) See response to 2).

4) See responses to 1a) and 1b).

5) Confirmed.

T-1140 **SSS - Bus Deck Level Perimeter Weld Prep** **Open** **01/24/2014** **02/03/2014** **02/06/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

See attached CD RFI # 285 SK1:

The flange of the sloping W40x277 is 1/8" below the flange of the flange of the W40x297 at the top and 1/16" below at the bottom, making the requested CJP weld not achievable.

Confirm the welds with the flange alignments as shown are acceptable.

Note: moving the sloping W40x277 up to align with the top edge of the W40x297 is not an option as this will move the

sloping W40x277 out of the normal sloping plane.

Please note that this condition repeats at all the same conditions along Grids B & H.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

T-1141 **SSS - AESS at Grand Hall and Shaw Alley Bridge** **Closed** **01/27/2014** **02/06/2014** **02/12/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

1. Reference drawing A1-8661, issued for construction, which appears to have information missing for the Grand Hall AESS requirements. Please reference details E, F, and G on A1-8661 attached and clarify the AESS requirements at the noted locations.
2. Detail C on drawing A1-8661 indicates that the HSS 16x16x5/8" member supporting the Shaw Alley Bridge is AESS. However, details C and D on A1-8662 indicate that the HSS 16x16x5/8" member, BU girder, and HSS 5x1/2" posts at the Shaw Alley Bridge are to receive IFRM-1. Please clarify the coating requirements at the Shaw Alley Bridge.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Refer to attached drawing A1-8661. Details E, F, and G are not used, there are no additional AESS requirements.

2. Correct, Detail C on drawing A1-8661 identifies AESS requirements for the Shaw Alley Bridge. To clarify, IFRM-1 coating as indicated on details C and D of sheet A1-8662 for the HSS member, BU girder and HSS posts are the required coatings on these structural members.

T-1142 **BGP - Grounding Rod at Buttress Pile in Zone 4** **Closed** **01/27/2014** **02/06/2014** **02/03/2014** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Please refer to drawing E1-2026.

In Zone 4, an overlapping series of concrete buttress piles were poured along the North Wall of the excavation, extending towards the south wall.

In this area, the final grade of the excavation will be the concrete buttress piles. The attached photo shows the buttress pile layout with the grounding ring/ground rods overlayed on it. The ground rods need to be driven 10' deep. Please confirm that the rods which conflict with the buttress piles could be moved away from the north CDSM wall and to the void area of the buttress piles as shown in the attached SCCI sketch SK-SCCI_RFI421.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

RESPONSE
George Metzger
1/31/2014
WSP does not object to moving ground rods inward; however, contractor shall maintain separation between ground loop and geothermal piping. The photo submitted does indicate this separation.

T-1143 **BSE - Reduced Micropile Testing Requirement in Unsuitable Material Areas** **Closed** **01/27/2014** **02/06/2014** **01/28/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Webcor Construction LP John Reynolds

REQUEST:

Balfour Beatty Infrastructure Inc. (BBII) has experienced complications with micropile testing in geothermal field 11 due to unsuitable material. In an effort to minimize additional cost and maintain schedule, Webcor/Obayashi Joint Venture (WOJV) requests the testing requirement be reduced in unsuitable areas to test one (1) in five (5) micropiles. To date, all micropiles have passed the testing requirement. WOJV proposes to test seven (7) of the remaining 31 micropiles in geothermal field 11. The micropiles selected to be tested will be approved by a TJPA representative.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

No. Per discussions with TJPA, AAI and T-T the following response is provided.

The contract Specification Section 31-63-33 Drilled Micropiles is clear; All Micropiles shall be proof tested. Paragraph 3.2H Proof and performance Testing in accordance with ASTM D3689 "Standard Test Method for Individual Piles Under Static Axial Tensile Load" SubParagraph 8 states "Proof tensile load testing shall be performed against reaction piles or cribbing in accordance with ASTM-D3689. Existing footings, piles, or other structures shall not be used as reaction points for load testing. An adjacent production micropile in a group may be used as reaction pile. If cribbing is used, the contractor's attention is drawn to the presence of poor bearing soils and underground utilities, which may require special measures to protect against settlement and damage."

Also; Requests such as these should be accompanied by the [Drilltech] Pile Test Engineer's written recommendation.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

1. Pile Test Engineer: A Contractor's engineer who is a registered civil engineer in the State of California.

2. The Pile Test Engineer supervises Performance and Proof Testing.

3. The working drawings and supplement shall be stamped and signed by the engineer who is licensed as a Civil Engineer in the State of California.

4. Micropile Proof Test Plans working drawings and supplement shall be stamped and signed by the engineer who is licensed as a Civil Engineer in the State of California.

NOTE: The RFI statement 'In an effort to minimize additional cost and maintain schedule" is not an acceptable justification for changing the testing requirements. Per Contract, RFI's shall not be used as a vehicle for requesting cost and schedule increases which appears to be the purpose of this statement.

T-1144 **BGP - Lower Concourse Electric Rooms & Lighting Feeds** **Closed** **01/27/2014** **01/27/2014** **02/07/2014** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

ASI 104 changed the feeds for the embedded (Type F15 fixture) lighting boxes in the lower concourse slab. Previously they were to be fed from Electric Rooms in the Train Platform level; as per ASI 104, they are now to be fed from Electric Rooms in the Lower Concourse Level. Some discrepancies have been noted as to electrical panel location, and room locations.

DWG E1-4102, Sheet Note J, and E1-4110, Sheet Note I, specify that the type F15 fixtures in Zones 2 and 10 are to be fed from Panel EDMH-BI-A-EMG located in Electric

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

RESPONSE
George Metzger
2/5/2014

1. Sheets E1-4102 and E1-4110 have been revised. Refer to attached sheets dated 01/23/2014 for revisions. Per Sheet Note J on E1-4102 and Sheet Note I on E1-4110, the type F15 fixtures in Zones 2 and 10 on the Train Platform Level are to be fed from Panel EDMH-B2-A-EMG-1 located in Electric Room B2280 on Train Platform Level.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Room B1253. DWG El-2202 identifies Room B 1253 as Emergency Equipment Storage.

DWG El-4103 indicates the F15 fixtures in Zone 3 up to Gridline 9 are to be fed from Panel EDMH-B1-A-EMG in Electric Room B1496. This is the same panel as indicated in Zones 1 and 10, but a different room is specified. Room B 1496 is not shown on the drawings.

DWG El-4103 and DWG E1-4104 indicate the F15 fixtures in Zone 3 past Grid Line 9, and the F15 fixtures in Zone 4 are to be fed from Panel EDMH-B1-B-EMG in Electric Room B1322. SKE-02-3201 issued with ASI 104 does not have a Panel EDMH-B1-B-EMG in Rm B1322.

DWG E1-4105 and DWG E1-4106 indicate the F15 fixtures in Zone 5 and Zone 6 are to be fed from Panel EDMH-B1-C-EMG in Electric Room B1541. Plan sheet E1-3204 Detail 6 referenced does not seem to be included in the contract drawings.

DWG E1-4107 indicates the F15 fixtures in zone 7 are to be fed from EDMH-B2-D-EMG in Electric Room in Electric Room B1644 in Lower Concourse. Per the "Equipment Naming" char on DWG E1-0010, the B2 in the panel name indicates that it is on the Train Platform Level. However, the room number indicates that it is indeed on the Lower Concourse level.

1. Please provide an enlarged room plan showing the location of each of the following panels: EDMH-B!-A-EMG, EDMH-B1-B-EMG and EDMH-B1-C-EMG

2. Please confirm that panel EDMH-B1-D-EMG is in ROom B1644 per detail E1-3203 (dated 8/30/12) on that the panel was incorrectly labeled EDMH-B2-D-EMG on E1-4107

2. Sheet E1-4103 has been revised. Refer to attached sheet dated 01/23/2014 for revisions. Per circuiting note on E1-4103, the type F15 fixtures up to gridline 9 on the Train Platform Level are to be fed from Panel EDMH-B2-A-EMG-1 located in Electric Room B2280 on Train Platform Level.

3. Sheets E1-4103 and E1-4104 have been revised. Refer to attached drawings E1-4103 and E1-4104 dated 01/23/2014 for revisions. Type F15 fixtures in Zone 3 and Zone 4 are to be fed from Panel EDMH-B1-B-EMG located in Electric Room B1325 on Lower Concourse Level.

4. Sheets E1-4105 and E1-4106 have been revised. Refer to attached sheets E1-4105, E1-4106, and E1-3204, Detail 6 dated 01/23/2014 for revisions. F15 fixtures in Zones 5 and 6 are to be fed from EDMH-B1-C-EMG in Electric Room B1563 on Lower Concourse Level.

5. Sheet E1-4107 has been revised. Refer to attached sheet dated 01/23/2014 for revisions. Type F15 fixtures are to be fed from Panel EDMH-B1-D-EMG located in Electric Room B1644 on Lower Concourse Level.

6. Refer to attached drawings dated 01/23/2014 for enlarged plans requested (Panels clouded in blue). EDMH-B1-A-EMG is now EDMH-B2-A-EMG-1.

7. Refer to revised sheets E1-3203 and E1-4107. Revised sheets dated 01/23/2014 are attached

T-1144.1 **BGP - Electrical Rooms B1222, B1223, B1560 & B1561 Enlarged Plan Sheet Discre| Closed** **02/11/2014** **02/21/2014** **03/21/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Ref: E1-2202, E1-3201

Electric Rooms B1222 and B1223 on plan sheet El-2202 (Issued in ASI 104) and rooms B1560 and B1561 on plan sheet El-2205 (Issued in ASI 104) do not match the enlarged room plans shown on El-3201 (IFC) and El-3202 (IFC) respectively.

Please issue revised electrical drawings including, but not limited to El-3201 and El-3202.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The requested updated drawings will be issued in a forthcoming ASI 0112 scheduled for issue on 02/24/14.

T-1145 **BGP - Plumbing and Floor Drawing Detail Discrepancies** **Closed** **01/27/2014** **02/06/2014** **02/10/2014** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please refer to attached drawing A1-2224, A1-2844, A1-2225, A1-2845, A1-2846, A1-2226 and excerpt from spec section 22 05 30, 3.2.

Details for plumbing and floor drains in the drawings for the Lower Concourse have the following discrepancies:

1. Drawing A1-2224 left of gridline (GL) 13 between GL B - GL C shows two plumbing details and in drawing A1-2844 these plumbing details are not shown
2. Drawings A1-2845 and A1-2225 between GL 22 - GL 23 and GL G - GL H where A1-2845 shows a plumbing (PLBG) detail and A1-2225 shows a floor drain (FD) detail
3. Drawings A1-2846 and A1-2226 between GL 29 - GL 30 and GL G - GL H where A1-2846 shows a plumbing (PLBG) detail and A1-2226 shows a floor drain (FD) detail
4. A plumbing detail shown in drawing A-2225 on GL G between GL 24 - GL 24.9 is not shown in drawing A1-2845.

5. Furthermore, the PLBG callouts in all the Architectural and Structural drawings do not include the size for each pipe or sleeve. Plumbing sleeve details in spec section 22 05 30 - 3, do not state the required clearance spacing needed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. 2 PLBG penetrations on A1-2224 (refer to SKA-3021) have been removed and are coordinated with A1-2844 (refer to SKA-3029).

2. PLBG annotation on A1-2225 (refer to SKA-3022) revised to FD and is coordinated with A1-2845 (refer to SKA-2845).

3. PLBG annotation on A1-2226 (refer to SKA-3023) revised to FD and is coordinated with A1-2845 (refer to SKA-2845).

4. PLBG annotation on A1-2225 (refer to SKA-3022) is coordinated with A1-2845 (refer to SKA-2845).

5. For Pipe Sleeve Schedule - Refer to PSK-0051.

For updated Lower Concourse plans, refer to attached SKAs:

SKA-3011 to 3018 - B1 Zone Plans,

SKA-3019 to 3026 - B1 Wall Plans,

SKA-3027 to 3034 - B1 Slab Edge Plans.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please verify the conflicting plumbing and floor drain details, the diameter size of each pipe or sleeve detail, and clarify the clearance space for sleeves required for plumbing.

Red mark ups are for changes in slab penetration annotations, relocation, and/or deletion.

Blue mark ups are for slab penetrations that were added due to Plumbing coordination.

T-1145.1 **BGP - Plumbing and Floor Drain Drawing Details** **Closed** **02/12/2014** **02/22/2014** **03/05/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference RFI T-1145 Response BGP - Plumbing and Floor Drawing Detail Discrepancies

The diameter size of PLBG callouts were not provided in the response (only sleeve schedule was provided). TG06.0 Plumbing drawings are for reference only and not for construction and have not been revised through the current ASI's and SK.A's.

Please provide diameter size of plumbing penetrations or revised plumbing drawings coordinated with updated Architectural and Structural drawings.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to ASI 0112 and ASI 0113 for additional information.

T-1145.2 **BGP - Plumbing and Floor Drain Drawing Details** **Closed** **03/11/2014** **03/21/2014** **03/24/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Reference RFI T-1145.1 BGP - Response - Plumbing and Floor Drain Drawing Discrepancies

The diameter size of PLBG callouts were not provided in ASI-112 and ASI-113 referred to by the response.

Please provide diameter size of PLBG callouts.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to your RFI #T-0909.1 language for block-out sizes for floor drains and floor sinks.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1145.3	BGP - Plumbing and Floor Drain Drawing Details	Closed	03/24/2014	04/03/2014	03/27/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

As discussed in the 3.24.2014 submittal TG0600-121 comment review meeting, please issue current design drawings P1-2202 through P1-2211 so that the size of plumbing pipes that pass through the concourse slab can be ascertained for the purposes of sizing the plumbing penetration sleeves per PSK-0051 (issued in RFI 1145rev0). The -8.30.2012 Issued for Construction - Below Grade Package- P1-2202 through P1-2211 pipe plans do not match up to the current sleeve layout as shown in sheets A1-2842, A1-2843, A1-2844, A1-2845, A1-2846, A1-2850 & A1-2851.

The size of the Concourse level slab sleeves required in the above mentioned A1-2800 series drawings cannot be determined without the current coordinated plumbing design.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to ASI 112, ASI 113 and Addendum #2 for the most current plumbing drawings as of this date.

RESPONSE: 3-28-14
Judy Long: Refer to the attached ASI 112, ASI 113 and Addendum #2 plumbing drawings for the most current plumbing drawings as of this date. These drawings will be issued on April 1, 2013 as "Issued for Construction" documents.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1146	SSS - W16 connection fouls W33 connnection at grid 14F	Closed	01/27/2014	02/06/2014	02/14/2014	Potentially	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On S1-2304 there are W16's centered under CMU wall connecting into a W40 along grid F near grid 14. The drag connection for the W33 connecting into the Transfer Girder and the W16 connections will foul each other. Please
verify the following:
1. Per the schedule on 1/S1-5010 the W16 connections should be three bolts. Please verify it is acceptable to reduce
the bolts form three to two bolts?
2. Please verify it is acceptable to move the drag connection down to clear the two bolt W16 connection?
3. Please verify coping the bottom flange of the W16's to clear the W40 drag connection is acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Acceptable.
2) Acceptable.
3) Acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1147	SSS - Double Angle Shear Connection	Closed	02/03/2014	02/13/2014	02/13/2014	Potentially	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 277 SK1 to SK3 for items 1 to 3:
In order to maintain interior TOS (Top of Steel) elevations shown on the contract documents, the connection detail as
shown on 1/S1-5010 needs to be modified along the ground level perimeter beams at certain locations. Please

confirm the following:
1) Confirm the proposed connection is acceptable as shown or supply an alternate detail.
2) Confirm the proposed connection is acceptable as shown or supply an alternate detail.
3) Confirm the connections in items 1 & 2 may be applied typically at other similar conditions.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Provide connection details per 6/S1-5011 (similar) at the W12x14 beams highlighted in the RFI.

2) Provide a double angle connection per 1/S1-5010 with 2 bolts at the W16 beams highlighted in the RFI.

3) Solutions in 1) and 2) can be applied typically at other W12 and W16 beams with similar conditions, except at beams with * notations. For beams with * notations provide connection detail per 1/S1-5028 as noted on sheet note 2 on S1-2305.

T-1147.1 **SSS - Ground Level Perimeter Framing Clarification at GL14** **Closed** **03/17/2014** **03/27/2014** **03/31/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 331 SK1:

The connection per RFI T-1147 (SK 356, CD 277) item 2 on SK3 will not work here as the connection angles will foul the Girder connection to the column as shown.

Confirm it is acceptable to connect the W16 to the W40 per 1/S1-5028 with S < 12" or supply an alternate connection detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Provide a shear plate connection at the W16 beam per attached sketch SKS-366. The beam and shear plate may be adjusted slightly to avoid the bolts at the W40 drag connection.

T-1148 **SSS - Steel Chemical Composition** **Closed** **02/03/2014** **02/13/2014** **02/12/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Basket column pipes of wall thickness less than or equal to 1" will be produced from rolled and seam welded plate per API-5L (X65 for ground level to bus deck level pipes and X52 for bus deck level to roof level). For wall

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

We note that the chemical composition for cast steel provided in the RFI has elements for which max limits exceed those recommended by ASTM 732 or those of API 5L (for example, Mn). The chemistry of the

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

thicknesses greater than 1", the pipes will be produced using the centrifugal cast process as defined in the project specifications section 05 15 22. Please see attached letter of compliance from the pipe manufacturer confirming chemical composition to meet mechanical requirements. Please confirm this is acceptable.

material may be as proposed and submitted by the Contractor provided that all mechanical properties (yield strength, tensile strength, elongation, CVN toughness) of the supplied material meet those outlined in specification 05 15 22 (Centrifugally Cast Steel Pipes). However, the Contractor assumes all responsibility for ensuring that the material is adequate from a weldability perspective. Since this is not a prequalified base material, welded joints will need to be qualified per AWS. We recommend that joint qualification is performed in advance (before pipes are manufactured) in order to minimize risks related to weldability and joint adequacy.

T-1149 **SSS - Erection Aids for Studded Plate** **Closed** **02/03/2014** **02/13/2014** **02/10/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please confirm the concept of the temporary erection angl es required to field weld the studded plates detailed in SK 1 are acceptable and can be incorporated into the model.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed

T-1150 **BGP - Geothermal Pressure Gauge Monitoring** **Closed** **02/05/2014** **02/15/2014** **02/14/2014** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Spec section 23 57 34, Part 3.2.J the geothermal loops are to be pressurized to 60 psi and monitored during construction to detect possible damage. The geothermal loops will be re-pressurized to 60 psi and the gauges orientated to be viewed from the trestle. Please confirm these gauges can be monitored and documented weekly until the completion of Airco's contract scope.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Piping pressure readings should be per the specification.

T-1152 **SSS - Added Steel Members at Stair 501** **Closed** **02/05/2014** **02/15/2014** **02/26/2014** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Drawing S1-2205 on ASI 106 appears to add steel members at Stair 501 (see SK1) on the lower concourse level. The associated detail, 6/S1-7016, was not updated to reflect this change. Please advise if these members were added in error. If this is an intended change, please provide the appropriate details.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached sketch SKS-0331 that shows framing sizes at Stair 501 on Lower Concourse Level .

T-1153 **BGP - Geothermal Riser 11 Location** **Closed** **02/05/2014** **02/15/2014** **02/14/2014** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please confirm the Geothermal Riser 11 can be installed between soldier pile 274 and 275. This location is within 1' of contract drawings. Note that due to schedule constraints, the chipping has already begun at this location.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Location is acceptable.

T-1154 **BGP - Consolidation of Geothermal Fields 13 14 15** **Closed** **02/07/2014** **02/17/2014** **02/14/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please confirm Airco is to consolidate Fields 13(4 loops), Fl4(10 loops) and Fl5(6 loops) totaling 20 loops into ONLY Fields 13 and 14 each with I0 loops(20 loops total) per discussion with EOR James Bradshaw on 2/4/14.

Please provide direction for the new Riser Locations for Fields 13 and 14:
Option A) Field 13- IOft East of GL 33, Field 14- 1Oft West of GL 33
Option B) Field 13- East of GL 31, Field 14- 10' East of GL 33

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed, Fields 13, 14 and 15 shall be combined into 2 fields. Option B should be utilized to consolidate loops to 2 fields.

T-1155 **BGP - SFPUC Grounding Company Room B1441** **Closed** **02/07/2014** **02/17/2014** **02/19/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

There are 5 grounding PUC risers terminating in the SFPUC Grounding EAST room B1441, however Detail 4 on E 1-6006 indicates seven(7) ground rod risers which are to be welded to the mesh ground grid. Please confirm the number of grounding risers in the East room B1441.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Five (5) grounding risers are required to be terminated within east SFPUC room. This clarification was included in detail 5/E1-3212 within Issued for Bid package - Addendum #1, dated 02/21/2014

T-1156 **BGP - Lighting and Telecom Layout Drawing Discrepancies (A vs E)** **Closed** **02/07/2014** **02/17/2014** **02/19/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

There are some discrepancies between the Train Platform Level Lighting Plans(E Drawings) and the Lower Concourse Level Slab Edge Plans(A Drawings). Please provide direction and revised drawings for the following instances.

1) The Lighting Plans show two exit signs in close proximity, yet on the Slab Edge Plan only one EJB layout is shown:
Al-2844/El-4104 at approximate Grid Lines:
-14.5/F
-16.6/A.6
-16.7/F
Al-2850/El-4110 at approximate Grid Lines:
-2.8/V.8

2) The Slab Edge Plan shows EJB layout, yet there are no fixtures on the Lighting Plan:
Al-2842/El-4102 at approximate Grid Lines:
-1.6/C.5
-2.7-3.5/C.3 (Three EJBs in a row)
-4.5/C.3 (Two EJBs)
Al-2846/El-4106 at approximate Grid Lines:
-25.7/F.I
-26.6/C.5
-26.7/A.6

3) The Lighting Plan shows fixtures, yet there is no layout on the Slab Edge Plan:
Al-2845/El-4105 at approximate Grid Lines:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please refer the following SKAs, ESKs and TE1 pdfs:

SKA-3059 to SKA-3066 for Lower Concourse Slab Edge Plans
ESK-026 to ESK-033 for Train Platform Level Electrical Lighting Plans
TE1-2202 - Lower Concourse Zone 2 Floor Plan
TE1-8014 - Telcom Closet Details

1. EJBs on the Lower Concourse slab edge plan A1-2844 were updated and coordinated with Train Platform Level Electrical Lighting Plan E1-4101: see SKA-3061 and ESK-028

2. EJBs on the Lower Concourse slab edge plan A1-2842 were removed and coordinated with Train Platform Level Electrical Lighting Plan E1-4102: see SKA-3059 and ESK-026 Same with A1-2846, EJBs were coordinated with E1-4106: see SKA-3063 and ESK-030

3. EJBs on the Lower Concourse slab edge plan A1-2845 were updated and coordinated with Train Platform Level Electrical Lighting Plan E1-4105: see SKA-3062 and ESK-029

4. For Train Platform Level Zone 11 Lighting Plan: see ESK-033 and SKA-3066

5.There are no Telcom conduit penetrations for

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-19.2/A.6
-21.2/C.6
-21.2/F

4) There was no Train Platform Level Zone 11 Lighting Plan (El-4111) included with the contract documents, but there is an EJB layout on Lower Concourse Level Zone 11 Slab Edge Plan(Al-2851).

5) Telecommunications Drawing Lower Concourse Level Zone 2 Floor Plan(TEl-2202) has six(6) 4" conduit sleeves on Grid Line I between GL E and F. the Slab Edge Plan(Al-2842) does not have a layout for these sleeves.

TELCOM closets along GL 1 between E & F. Please refer to attached TE1-2202 and Detail 1 of TE1-8014

T-1156.1 **BGP - Telecom Drawing Discrepancies** **Closed** **02/25/2014** **03/07/2014** **03/13/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

The response to RFI T-1156 provided a number of drawings which were not previously provided. Only TE1 drawings TE1-0000, TE1-2202, TE12203 and TE12207 were issued with the TG06 scope of work.

The telecom sleeve locations on SKA-3060, SKA-3063 and SKA-3064 do not match the TE1 contract drawings.

The discrepancies between the telecom drawings and the slab edge drawings are:

I) GL 5/A - Telecom sleeves indicated on TEl-2202, no layout dimensions on SKA-3059
2) GL 10/J -Telecomsleeves on TEl-2203 are not shown in the same location as on SKA-3060
3) GL 29.5/A - No TEI drawing provided, however SKA-3063 has layout for three(3) sleeves
4) GL 33/A - Telecom sleeves indicated on TEl-2207, but no layouUdimensions on SKA-3064

Please provide an up to date set of ALL TE I drawings

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

AAI Response:

For updated Slab Edge Plans coordinated with updated TE1 Plans showing telecom enclosure penetrations at the Lower Concourse Slab. Refer to the following sketches:

SKA-3095 to SKA-3102 Lower Concourse Level Slab Edge Plans

See also for reference:

SKA-3079 to SKA-3086 Lower Concourse Level Zone Plans

SKA-3087 to SKA-3094 Lower Concourse Level Wall Plans

SMW Response:

The attached sketches are based on coordination with

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

which show telecom sleeves and are consistent with the Lower Concourse Level Slab Edge Drawings.

updated Lower Concourse Level Slab Edge Drawing provided by AAI. We have adjusted Telecom sleeve locations to match Lower Concourse Level Slab Edge Drawings as well as adjusted Telecom enclosure quantities and locations as needed to match.

See attached SMW Response which includes TSK-008, TSK-009, TSK-010, TSK-012, TSK-013.

T-1157 **SSS - Fireproofing Clarification At Light Column** **Closed** **02/07/2014** **02/17/2014** **02/20/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 293 SK1 for items 1 to 3:
1) Supply the elevation to determine the termination of IFRM-2.
2) Confirm the IFRM-2 finish applies to the sides and top of the base plates but not the bottom surface.
3) Supply the finish requirements for the plate washers and the protection caps for the anchor bolts above the base plates.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Elevation to determine termination of IFRM-2 is not required at Ground Level as IFRM-2 does not terminate at this location. Extent of IFRM-2 at uppermost boundary is indicated on detail E/A1-8662.

2.Confirmed, bottom surface of any steel column base plate to be grouted shall not be fireproofed.

3.The plate washers and protection caps are to be finished as specified in section 05 10 00, Part 2 - Products.

T-1158 **BGP - Geothermal Field 12 Layout** **Closed** **02/07/2014** **02/17/2014** **02/14/2014** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

1Please confirm it is acceptable to decrease the minimum 4-inch center to center dimension required by the specifications to 2-feet center to center in order to install the required 10 loops in Geo Field 12 in the new East to West orientation. The 83-inch diameter will be maintained

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. As discussed in 2/4/2014 meeting with WSP, AAI Webcor, Schimick and Airco, 2' Center to Center distance is acceptable for Field 12.

2. It is acceptable to reduce clearance to 4 inches

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at the end of the loops. Please note that the 2-foot center to center dimension will require significant hand digging to maintain trench separation and stability.

2. Please confirm it is acceptable to reduce the geothermal 6" clearance around micropiles to 4".

within this field only.

T-1159 **SSS- Bracing Requirements at W-1 Connections** **Closed** **02/07/2014** **02/17/2014** **02/20/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See at tached CD RFI # 286 SK1 to SK4:
The attached sketches show (2) conditions where the back-up angle braces at the "CP6" (W-1 facade connection) connect ions are very close to the floor beams. Please review and confirm that the braces are required at all noted locations no matter what their proximity to the beams is. If not, supply a maximum/minimum off-set dimension criteria for omitting the braces.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Where a W40 beam connection (as shown on 1A/S1-8000) is within 1'-0" from the CP-6 connection, the 2L 3x3 kicker at the CP-6 connection may be deleted.

T-1160 **BGP - Spandrel Beam Modifications in Area 10** **Closed** **02/12/2014** **02/22/2014** **02/13/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: Exhibits A - B

Further to response to RFI T-637 please find attached proposed changes to the spandrel beams in pour Area 10 for location plan see exhibit - A

Exhibit - B shows the plan view of the modification necessary to the spandrel beam on the north and south elevations due to the revised reinforcement width of the foundation wall due to encroachment of the CDSM beams as well as typical cross sections of the revised spandrel beams.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Modifications for the spandrel beam at locations outlined are acceptable.

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RFI T - 0743 shows the extent of the modification to the foundation wall on the north and south elevations of Area 10.

Please confirm that these modifications as outlined at these locations are acceptable.

T-1161 **BSE- Replacement and Removal of Waler Lookouts GL 9.5 West** **Closed** **02/11/2014** **02/21/2014** **02/18/2014** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Turner Construction Comp Stacy Wilson

Co-Author: Balfour Beatty Infrastructure, Inc. Danny Walsh

REQUEST:

Due to a revision in the concourse slab elevation, waler lookouts from gridline 9.5 west must be removed to allow for construction of the slab. BBII's EOR for the internal bracing has approved the use of additional 6x6x3/8" angle braces to replace the lookouts in conflict. Reference the attached RFI response, supplemental calculations, and details from PB&A.

Please confirm it is acceptable to proceed with removal of the lookouts per PB&A's RFI response.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The following is URS' comments on the PB&A's response to the RFI.

It is not acceptable to proceed with removal of the lookouts per PB&A's RFI response until the following items are resolved. Please revise and resubmit the RFI response with the following items addressed.

1. The drawings do not show the sequence of installing new items and removing existing items. The construction sequence is required to ensure proper load transfer from removing elements to new load-carrying elements. Information provided for construction must clearly identify details and sequencing. There should be nothing left to interpretation by field personnel. This includes all detailing as well as full identification of what is to be installed and where, and what is to be removed, with clear identification of what is required prior to removal, and when (relative to installation of new bracing elements). The specific degree of finalization for installation of the new installed bracing elements prior to removal of lookouts is required. This includes identification of the specific inspections required to be complete prior to allowing any removal of existing lookouts to occur.

2. For welding of an angle brace to a waler, please

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show clarification of welding to provide full compliance AWS prequalified procedures (weld geometry). For the bottom welding, please verify the weld is accessible with waler beam flange being close to welds. Welding is to include detailing that provides access for performance of welding. All welding must have clearly defined geometry allowing calculation of weld capacities. If this is not achieved, the welding provided cannot be relied upon for transmission of loads. If an angle brace needs to move away from waler beam flange for accessibility, the distance shall be indicated.

3. Either an identical WF beam or an angle brace as proposed for a replacement element of the existing lookouts is to be attached to WF soldier pile beams above a waler according to the RFI. However, a number of soldier piles already connect angle braces, and those soldier piles with an existing brace may have a difficulty to accommodate an additional WF beam or angle. Lookouts were placed at least 4 per waler and one on each side of a strut per the drawings and calculations, and the same number and locations of replacement elements are required. Please verify the existing angle braces are to be used as a part of the lookout replacements or the same number of new angle braces as the existing lookout beams are to be added in addition to the existing angle braces. Please verify the proposed replacement elements can be installed without a conflict of existing angle braces.

T-1161.1 **BSE - Replacement and Removal of Waler Lookouts GL 9.5 West** **Closed** **02/20/2014** **03/02/2014** **03/04/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Turner Construction Comp Stacy Wilson

Co-Author:

REQUEST:

Due to a revision in the concourse slab elevation, waler lookouts from gridline 9.5 West must be removed to allow for construction of the slab.BBII's EOR for the internal bracing has approved the use of additional 6x6x3/8" angle braces to replace the lookouts in conflict. Reference the attached RFI response, supplemental calculations, and

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached URS response.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

details from PB&A.

See URS comments 1-3 below on RFI T-1161 also see PB & A response and additional drawing to these comments

1. The drawings do not show the sequence of installing new items and removing existing items. The construction sequence is required to ensure proper load transfer from removing elements to new load-carrying elements. Information provided for construction must clearly identify details and sequencing. There should be nothing left to interpretation by field personnel. This includes all detailing as well as full identification of what is to be installed and where, and what is to be removed, with clear identification of what is required prior to removal, and when (relative to installation of new bracing elements). The specific degree of finalization for installation of the new installed bracing elements prior to removal of lookouts is required. This includes identification of the specific inspections required to be complete prior to allowing any removal of existing lookouts to occur.

PB & A response :The replacement WF beam or angle shall be installed and special inspections shall be performed on the welding connections prior to the removal of the existing WF lookouts underneath the waler. As per sketch attached

2. For welding of an angle brace to a waler, please show clarification of welding to provide full compliance AWS prequalified procedures (weld geometry). For the bottom welding, please verify the weld is accessible with waler beam flange being close to welds. Welding is to include detailing that provides access for performance of welding. All welding must have clearly defined geometry allowing calculation of weld capacities. If this is not achieved, the welding provided cannot be relied upon for transmission of loads. If an angle brace needs to move away from waler beam flange for accessibility, the distance shall be indicated.

PB & A response :The replacement WF beams or angles shall be installed on each side of the pipe strut. If an existing angle brace has been installed on the soldier

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

beam on the side of the pipe strut, the replacement WF beam or the angle shall be installed on the adjacent soldier beam away from the
pipe strut. The angle brace is move from the waler beam flange for accessibility per sketch SK-1 attached.

3. Either an identical WF beam or an angle brace as proposed for a replacement element of the existing lookouts is to be attached to WF soldier pile beams above a waler according to the RFI. However, a number of soldier piles already connect angle braces, and those soldier piles with an existing brace may have a difficulty to accommodate an additional WF beam or angle. Lookouts were placed at least 4 per waler and one on each side of a strut per the drawings and calculations, and the same number and locations of replacement elements are required.
Please verify the existing angle braces are to be used as a part of the lookout replacements or the same number of new angle braces as the existing lookout beams are to be added in addition to the existing angle braces. Please verify the proposed replacement elements can be installed without a conflict of existing angle braces.

PB & A response: At least the same number of replacement WF beams as that of the existing lookouts shall be installed. For the replacement angle option, minimum 4 additional angle braces excluding the existing ones are required.

Please confirm it is acceptable to proceed with removal of the lookouts per PB&A's RFI response. Note that the RFI response provided by PB&A has been amended to address comments from urs in response to RFU T-1161.

T-1161.2 **BSE - Replacement and Removal of Waler Lookouts GL 9.5 West** **Closed** **03/24/2014** **04/03/2014** **03/25/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Turner Construction Comp Stacy Wilson

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

In response to URS' response of RFI T-1161.1, see attached Engineering Calculations.

Please confirm it is acceptable to proceed with removal of the lookouts per PB&A's calculations.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached URS response

T-1162 **SSS - AESS Clarifications** **Closed** **02/11/2014** **02/21/2014** **02/18/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Turner Construction Comp Stacy Wilson

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 289 SK1 for items 1 to 3:
1) Supply the noted elevation to determine the AESS boundary.
2) Supply the noted dimension to the determine the AESS boundary.
3) Supply the noted angle to determine AESS boundary.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Much of the information requested as questions on this RFI are contained in construction documents already submitted and in shop drawings under review. We suggest that the construction team should please consider reviewing drawings in detail and coordinating the shop drawings before submitting RFI's for questions contained in current documentation.

T-1162.1 **SSS - AESS Clarifications** **Closed** **03/10/2014** **03/20/2014** **03/17/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 289 SK1 for items 1 to 3:

1) Please confirm that the AESS begins immediately above the IFRM-2 areas noted on details A & E/A1-8662

2) Supply the noted dimension to determine the AESS boundary

3) Supply the noted angle to determine the AESS boundary

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to enclosed sketch for response to RFI questions.

T-1163 **SSS - Train Box Column Cap Plate Machining** **Closed** **02/11/2014** **02/21/2014** **02/14/2014** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Detail 4/S1-
5052 indicates "Grind Surface to Extra Smooth" for the sur face finish required for the machined out section of the Tra in Box Column Cap plate. This is not an industry standard reference. Our fabricator proposes to machine this surface to 125 RA. See attached backup information.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Definition of extra smooth is provided in Specification 05 10 00, Section 1.2.C.8.

T-1164 **SSS - Connection Details at Corner Roof Girders** **Closed** **02/12/2014** **02/22/2014** **02/25/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please see attached Roof Girder Blank drawing submittal returned by WOJV on 1/27/14 "Approved as Noted". The Engineer's directive to change the configuration of the "stub beam" is inconsistent with the current Plan Sheets. Upon
further discussions held in the Structural Coordination meeting on 2/6/14, OIW has been directed to proceed with the 2.25" T&B flange at the stub beam, as detailed on 10/S1-8001, and modify the web of the stub beam to align with grid
lines 1 and 33.5.

Please see attached "preliminary" shop drawings representing the requested changes to the stub beam detail.

Please confirm the changes to this drawing are consistent with the Engineer¿s intent. Upon confirmation, OIW will make the appropriate changes to drawings GB107 through GB110 and resubmit for record.

Please also note that the weld prep in detail 5 on GB107-2 has been modified per the 2/6/14 coordination meeting.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed

T-1165 **BSE - Relocate Micropiles E872 and E874** **Closed** **02/12/2014** **02/22/2014** **02/21/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

BBII discovered that Micropiles E872 and E874 were in conflict with struts STD-71 and STD-70 respectively. BBII proposes the following:

- Relocate Micropile W872 3' South West
- Relocate Micropile W874 8' South West

Please confirm these changes are acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractor proposed relocation of micropiles is acceptble.

T-1166 **SSS - Dimension Clarification** **Closed** **02/12/2014** **02/22/2014** **02/25/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please see attached red lines and confirm correct north elevation dimensions for the basket column work points.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For the south elevation, the 14'-7 1/4" dimension each side of Grid 9 is correct, i.e., the 29'-2 3/8" dimension shall be changed to 29'-2 1/2".
For the north elevation, the 14'-7 1/8" dimension at the left of Grid 9 shall be changed to 14'-7 1/4", and the 29'-2 3/8" dimension at the bottom shall be changed to 29'-2 1/2".

T-1167 **BGP - Geothermal Manifold Location for Risers 3 and 4** **Closed** **02/12/2014** **02/22/2014** **02/21/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Per discussions with Geothermal EOR (WSP), Airco was directed to route the geothermal risers below the bottom of the Air Duct and above the top of the conduit rack against the foundation wall.

Please confirm the attached sleeve detail for Geothermal Riser 3 & 4 is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Since piping is not installed per Detail A/M1-5002 with piping tight to slab, install as shown in the attached sketch (file name WSP Review-RFI_T-1167_BGP_-_Geothermal_Manifold_Locations_for_Risers_3__4) with the piping and valves mounted as close as possible to the foundation wall to limit the intrusion into the corridor at this location.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1168	SSS - HSS Splice Detail	Closed	02/12/2014	02/22/2014	02/24/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please reference attached sketch SK1:

The detail on 3/S1-7630 calls for a flare bevel complete penetration weld. Skanska believes that this is not a flare bevel condition and proposes the use of a CP weld with a ¼" root and 30 degree weld prep with full backing plate.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The weld should be a single bevel groove weld. The detail shown on attached sketch CD RFI 183.2 SK1 will not work because it does not include the 3/4" plate shown on 3/S1-7630.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1169	BGP - Geothermal Manifold Locations for Risers 5 through 10	Closed	02/13/2014	02/23/2014	02/21/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Per discussions with Geothermal EOR (WSP), SCCI was directed to route the geothermal risers below the bottom of the Air Duct and above the top of the conduit rack against the foundation wall.

Please confirm the attached sleeve detail for geothermal riser 5 through 10 is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Since piping is not installed per Detail A/M1-5002 With piping tight to slab, install as shown in the attached sketch (file name: WSP Review- RFI_T-1169_BGP_-_Geothermal_Manifold_Locations_for_Risers_5_through_10) with the piping and valves mounted as close as possible to the foundation wall.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1170	SSS - Light Column Base Plate and Corrosion Protection	Closed	02/13/2014	02/23/2014	02/25/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

As a follow up to review comments provided in Submittal Package TG0701-023.1 SSS - Light Column Anchor Bolts (#1.5E), please review and respond to the following items:

1) Base plate hole oversize and subsequent sizing of the top plate washer

As a follow up to the conference call held 1/29/14 for the Light Column anchor bolts, Dywidag provided the following information via the email attached: "If we spec a 50ksi plate and use the full width of the spherical washer, the plate works as-is. Leaving the plate

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

We have reviewed Dywidag's statement for the top plate washer as well as the corrosion protection of the bar within the galvanized tube and based on this guarantee by Dywidag we find these solutions acceptable.

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design alone (with the assumed actual contact width of the washer) the plate still works at a 6" hole diameter. This is designing for 95% of the ultimate capacity of the bar."

The maximum outside diameter of the HSS tube inside the base plate is 3.5". Within a 6" hole, this allows for 1.25" of clearance all around the tube, which is more than adequate clearance based on the AISC allowable tolerances for installations of anchor-rod groups. Reference AISC Steel Construction Manual, Section 16.7.5.1 attached, which does not allow for any more than ¼" variation between anchor rod groups nor between anchor rod group and column lines. Please confirm it is acceptable to proceed with a 6" base plate hole size to avoid modifications to the top anchor plate grade and geometry.

2) Adequate corrosion protection of bar with clearance provided between 2.79" bar and 3" galvanized tube

See the email attached from Dywidag stating that the provided clearance allows for adequate corrosion protection of the anchor bar. Please confirm the galvanized duct is acceptable as detailed based on this information.

T-1171 **SSS - Galvanizing Steel Composite Deck** **Closed** **02/13/2014** **02/23/2014** **02/24/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

With reference to the galvanizing required for the composite metal deck please clarify the following:

a) General Notes drawing S-007 note DK-1 requires deck to conform to ASTM A653 hot dipped galvanized conforming to ASTM A924 G90.

b) Detail 2/S1-5000 note 6 requires UNO all floor and roof deck to be galvanized in accordance with ASTM A653 coating class G60. Type 2 deck shall be galvanized in

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Note 6 of Detail 2/S1-5000 stating that UNO, all floor and roof deck to be galvanized in accordance with ASTM A653, coating class G60. Since both the General Note DK-1 on sheet S-007 and Specification 05 30 00, paragraph 2.3 A call for G90 coating for all metal deck, G90 shall be used.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

accordance with A653, G90.

c) Specifications section 05 30 00 part 2.3A requires before forming, the steel sheet shall be coated with a zinc coating conforming to ASTM A653 Zinc coated per ASTM A653 G90.

Please clarify this conflicting information

T-1172 **BSE - Geothermal Field 10 & 11** **Closed** **02/14/2014** **02/24/2014** **02/20/2014** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Per field discussions with ARUP, Airco is to hand tamp (not use the jumping jack) the geothermal trench only to ensure "tight" compaction. ISI will be onsite to visually verify the compaction efforts.

Per field walk on 02-13-14 ARUP has classified the top portion of Geothermal Field #10 and #11 as oversaturated/unsuitable/partially contaminated due to the inclement weather (rain from 02.06.14 through 02.09.14). It is recommended to scrape off the top layer immediately prior to the rat slab rebar install.

Please confirm it is acceptable to pour the rat slab in this area thicker to compensate for the scraped off unsuitable material.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Contractor should first perform the required treatment of wet soils resulting from unfavorable weather conditions specified in Spec. 31-23-34.

It is acceptable to pour the mud slab in this area thicker to compensate for the scraped off unsuitable material. However; Geothermal Piping must have suitable soils cover of minimum of 6" above top of geothermal piping within header trenches/trenches.

Adamson Associates Response:

CMGC shall verify the waterproofing sub-contractor, waterpoofing manufacturer, & sub-contractor's waterpoofing designer approve the proposal in this RFI to confirm the mud slab will provide a suitable installation surface for the waterpoofing system.

T-1173 **SSS - Grease at Light Column Anchor Bolts** **Closed** **02/18/2014** **02/28/2014** **02/27/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Drawings S1-6008 and S1-6009 as well as the specifications issued with the TG07.1 trade package do not provide requirements for the grease at the light column anchor bolts. Please review the product attached, which has been recommended by the basis of design post-tension anchor bolt supplier, Dywidag. Confirm that the proposed product is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

We have reviewed the product recommended by the post-tension anchor bolt supplier, Dywidag, and based on this recommendation we find this product acceptable.

T-1174 **BGP Horizontal Cast-In Inserts - W111, W165, W164** **Closed** **02/19/2014** **02/19/2014** **02/25/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

SCCI is in reciept of RFI response T-0599.1 and ASI 110 drawings.

I. Please confirm it is acceptable to install 1st lift Horizontal Cast-In inserts at elevations -22.25, - 27.08, &- 31.92, except:

2. Horizontal Cast-In inserts in 1st lift foundation wall 111 & 165 were installed at elvations -22.08, - 26.91 and - 31.75 respectively. Please confirm this is acceptable? See attached sketch.

3. 1st lift wall 164 2nd row up from bottom Horizontal Cast-In insert, was installed at elevation -27.20 for 13'-10" from the East end of Wall 164. Please confirm this is acceptable? Please note the remainder of the Cast-In insert in wall 164 was installed at elevation -27.08 (see #1 above). See attached sketch.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. It is acceptable to install 1st Lift Horizontal Cast-in inserts at elevations -22.25, -27.08, & -31.92.

2. 1st Lift Horizontal Cast-in inserts at Foundation wall 111 and 165 are confirmed at elevations -22.08, -26.91 and -31.75 respectively.

3. 1st Lift Horizontal Cast-in insert at Foundation Wall 164, 2nd row is confirmed at -27.20 13'-10" from East end and remainder installed at -27.08.

T-1175 **SSS - Rigging Schemes & Connections** **Closed** **02/19/2014** **02/19/2014** **02/25/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Skanska is reviewing the rigging schemes required to erec t the Train Box Columns, please confirm the concept of dri

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Proposed holes on the below grade steel column cap plates as detailed in this RFI are acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

lling additional holes for the bolted connection in the cap pl
ate as detailed in sketches R-3A, R-3B & R-
3C is acceptable.

T-1176 **SSS - Finish Requirements at BRBs** **Closed** **02/19/2014** **03/01/2014** **02/27/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Detail B/A1-8662 indicates that BRBs at Ground Level between GL D.4/28 and D.4/31 are to receive IFRM-2 fire protection. All other BRBs are to receive SFRM fire protection. Please refer to SK RFI 397 SK1 attached and clarify the following finish requirements for the BRBs:

1) Details 1, 3, and 5 on S1-4206 indicate that bottom gusset plates are to be galvanized. Please confirm that only the bottom gusset plates are to be galvanized.
2) For BRBs to receive SFRM fire protection:
a. Please confirm the extent of the SFRM at the braces as indicated by the red outline in details 2, 3, and 6. Note that all materials indicated to receive SFRM will be bare steel. Steel will be prepped in accordance with 07 81 00-3.2.B.
b. Please confirm the pin, bolts, plates, and top gussets shown in details 2 and 6 are to be bare steel in anticipation of receiving SFRM by others.
3) For BRBs to receive IFRM fire protection:
a. Please confirm the extent of the IFRM at the braces as indicated by the blue outline in details 2, 3, and 6. Materials indicated to receive IFRM will be prepped and primed in accordance with 07 81 23.
b. Detail B/A1-8662 graphically indicates that only the braces and not the gussets are to receive IFRM. Please confirm the final finish of the bottom gusset plates is to be galvanized and provide the finish requirements for the top gussets.
c. Please provide the finish requirements for the pins and 1" thick plates indicated on 6/S1-4206.
d. Provide the finish requirements for the bolts indicated in detail 6/S1-4206.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Item 1. Confirmed and as indicated on the documents referenced.

Item 2.

a. Extent of SFRM and shop prep as indicated in the documents referenced.

b. Extent of SFRM and shop prep as indicated in the documents referenced.

Item 3.

a. Extent of IFRM and shop prep as indicated in the documents referenced.

b. Confirmed and as indicated on the documents referenced.

c. Finish requirements are indicated in referenced drawings and specifications.

d. Finish requirements are indicated in referenced drawings and specifications.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1176.1	SSS - Finish Requirements at BRBs	Closed	03/18/2014	03/28/2014	03/18/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Skanska is proceeding as follows for BRBs based on the response to WOJV T-1176:
1) Bottom gusset plates shall be galvanized.

2) For BRBs scheduled to receive SFRM fire protection:
a. Materials in red indicated to receive SFRM will be bare steel. Steel will be prepped in accordance with 07 81 00-3.2.B.
b. The pins, bolts, plates, and top gussets shown in details 2 and 6 shall be bare steel to receive SFRM.

3) For BRBs to receive IFRM fire protection:
a. Prime coat for IFRM will be provided to the extent indicated by the blue outline in details 2, 3, and 6.
Materials indicated to receive IFRM will be prepped and primed in accordance with 07 81 23.
b. The response to WOJV T-1176 indicates finishes for top gusset plates shall be per the documents.
Note that the contract documents and specifications do not indicate whether top gusset plates are to be galvanized, bare steel to receive SFRM, or IFRM. Based on the interface between gussets, bracing, and pinned components, it appears that the top gusset plate shall be prepped and primed to receive IFRM. Please confirm.
c. The response to WOJV T-1176 indicates finishes for the pins, bolts, and 1" thick plates shall be per the documents. Note that the contract documents and specifications do not indicate whether these components are to be galvanized, bare steel to receive SFRM, or IFRM. Based on the interface between gussets, bracing, and pinned components, it appears that the pins, bolts, and 1" thick plates shall be prepped and primed to receive IFRM. Please confirm.

Please advise if exception is taken to any of the noted finishes.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. No exception taken.

2.

a. No exception taken.

b. No exception taken.

3.

a.Confirmed

b. Confirmed

c. Confirmed

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1177	SSS - Erection Aids	Closed	02/19/2014	03/01/2014	03/03/2014	Potentially	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Skanska proposes the erection aids detailed in attached sketches to position 8 No. W10 system support posts. Please confirm no exceptions are taken to hole locations and quantity drilled to accommodate these erection aids.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

TT takes no exception to the proposed erection aids as shown in the sketches attached to this RFI.

T-1178 **BGP - Concourse Typical Blockout Detail at Deck Penetrations** **Closed** **02/19/2014** **03/01/2014** **02/21/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please see attached concourse deck typical blockout detail at pile penetrations.

SCCI proposes to construct the temporary pile penetrations as shown in the attachment.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The accompanying calculations only include the required development lengths for the additional bars placed with couplers. The additional bars are placed at a lower level due to the form saver that reduce slab flexural capacity, therefore, additional bars are needed to make up for the reduced flexural capacity. A calculation justifying the number of additional bars required shall be submitted as a shop drawing for review.

For the case when the blockout is unfilled, the calculation was incorrectly done assuming #6 bar for calculating the moment capacity instead of #5s actually specified for RCS1. Update this calculation and resubmit for review, or clarify that shoring will be required while the blockout is unfilled.

Note that the application of the blockout detail at the specific field condition shall be incorporate into all applicable reinforcing submittals. Additionally a complete set of calculations addressing all temporary blockout conditions is required for submittal.

T-1179 **BGP Geothermal Manifold Location for Riser 11** **Closed** **02/19/2014** **03/01/2014** **03/04/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Per discussions with Geothermal EOR (WSP), SCCI was directed to route the geothermal risers below the bottom of the Air Duct and above the top of the conduit rack against the foundation wall. Due to the location of the Fremont St abutement, the penetration plate has been moved down between the bottom of the abutement and the top of the waler.

Please confirm the attached sleeve detail for Geothermal Riser 11 is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

WSP Response: Since piping is not installed per Detail A/M1-5002 With piping tight to slab, install as shown in the attached sketch (WSP Review-RFI_T-1179_BGP_-_Geothermal_Manifold_Location_for_Riser_11) with the piping and valves mounted as close as possible to the foundation wall.

Arup Response: Height of manifold below the top of shoring wall, as shown, is acceptable in this one instance.

T-1180 **SSS - Roof Level Support Framing to Drum Cafe** **Closed** **02/19/2014** **03/01/2014** **02/28/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Framing plan S1-2605 in ASI 105 shows support framing at roof level for the W20 Drum Café. A note (see attached sketch) indicates that steel beams are to be "aligned with each drum café column See S1-6100." Please provide the referenced drawing.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached sketch for the location of the W-20 columns.

T-1181 **BGP - Proposed Revised Location of the Reinforcement Lap Splices at the Lower (Closed** **02/21/2014** **03/03/2014** **03/04/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Further to discussion with Thornton Tomasetti design Engineer Kerem Gulec, WOJV is requesting that the horizontal reinforcement lap splices of the spandrel beams and the top horizontal reinforcement of the lower concourse slabs can both be located anywhere within the middle 1/3th span between the moment frame beams.

Please confirm it would be acceptable

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1182	BGP - Mat Slab - Top Rebar Splice Location at Light Tower Anchor Bolt	Closed	02/21/2014	03/03/2014	03/28/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

See attached sketches.

To accomodate the installation of Light Column Anchor Bolt assemblies, SCCI proposes to locally move the splice location of the top mat slab rebar towards the West.

Please confirm that this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is acceptable to locally move the top reinforcing lap splice west as described in the RFI. Along the bars affected it is also acceptable to maintain a lap splice in the original plan location to avoid excessive lengths of bar to the east.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1183	SSS - Interference at GL15	Closed	02/21/2014	03/03/2014	03/04/2014	Potentially	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On the attached sketches CD RFI # 298 SK1 & SK2 the double angle connections per S1-5010 are not possible at the noted location as the W16 & W24 are off-set 2 7/16" from each other.

Confirm it is acceptable to supply full depth shear plates as shown with plate thickness, welding and bolts per S1-5011

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Not acceptable. Provide double angle connection per 9/S1-5010 at the W24 beam. Provide shear plate connection at the W16 beam per 2/S1-5011 with 6 bolts (2 vertical rows of 3 bolts each).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1184	SSS - Steel Connection Interference GL 15D	Closed	02/21/2014	03/03/2014	03/04/2014	Potentially	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

At grid line D/15, the W40 to column connection will conflict with the W16 connection to the W40 (SK2). Please confirm it is acceptable to connect the W40 (SK1 & SK2) to the indicated column as shown, using 3 rows of 4 bolts in lieu of the 2 rows of 6 bolts per 5/S1-4206.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Not acceptable. Provide a shear plate connection per 1/S1-5011 at the W16 beams that are next to the W40 drag connection on both sides of GL D. Drag connection at the W40 beam shall be per 5/S1-4206 as noted on construction drawings. Note that the W40 beam is framed into the transfer girder and not a column as stated in the RFI.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1185	SSS - Shear Connection Bolt Layout at GL 19.1	Closed	02/21/2014	03/03/2014	03/04/2014	Potentially	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On the attached sketches CD RFI # 300 SK1 & SK2 the 11 bolts per 2/S1-5011 will not fit in a single row in the beams.

Confirm it is acceptable to locate the bolts as shown at 13 locations along Grid line 19.1.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed

T-1186 **SSS - W14 Connection Detail Between 19.9 & 20.1** **Closed** **02/21/2014** **03/03/2014** **03/04/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached sketches CD RFI # 301 SK1 & SK2 for items 1 & 2:

1) Supply a connection detail for the noted W14x61 to the Transfer Girder (both ends).

2) Confirm the W14x61 is located at elevation T/SLAB 18.22" minus S1 slab (7 1/2") per S1-2305.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) The T/steel of the W14 beam shall be 16' - 6 1/2". Provide connection to the transfer girder per 9/S1-5010 except that there is no WT at this beam.
2) See response to 1). Note that the beam is supporting W-3 anchorage cables and not the composite deck. The t/steel of the beam does not need to be flush with the bottom of the slab.

T-1186.1 **SSS - W14 Connection Detail Between 19.9 & 20.1** **Closed** **06/11/2014** **06/21/2014** **06/25/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

As per the response to RFI T-1186 item #2, the W14 beam is supporting W-3 anchorage cables and not the composite deck. Please confirm the (6) shear studs as indicated on the framing plan drawings are not required as the beam T/Steel elevation is 4" below the composite deck.

If required, please provide details for the composite deck at this location.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed that the shear studs are not required at the W14 beams indicated in the RFI.

☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1187	SSS - W16 Connection Detail Between 19.9 & 20.1	Closed	02/21/2014	03/03/2014	03/04/2014	Potentially	

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached sketches CD RFI # 302 SK1 & SK2 for items 1 to 3:
1) The line for the noted W16x26 is not shown. Confirm the beam in centered on the wall.
2) Confirm the connection for the W16 to the Transfer Girder is acceptable as shown with plate thickness, welding and bolts per 1/S1-5011. If not, supply a new detail.
3) Confirm the same connection may be used for the W16 to the Transfer Girder on Grid 20.1.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.
2) Connection detail proposed for W16 shown on SK2 is acceptable. Provide plate thickness, welding, bolt size and bolt edge distances per Detail 2/S1-5011.
3) Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1188	SSS - Finish Requirements at Basket Columns	Closed	02/21/2014	03/03/2014	03/03/2014	Potentially	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

A1-8660 conceptually indicates the boundaries of Category 2 and Category 3 AESS requirements for the basket columns. Based on this information and the documents provided for the TG07.1R trade package, SK1 has been provided to depict Skanska's understanding of the basket column finish requirements. Please review the following and confirm the various finish boundaries associated with the basket columns:

1) Confirm the Category 2 AESS boundary is from the Ground Level cast node to the end of the pipe column from the Ground Level to the Bus Deck Level as indicated in SK1.
2) Confirm the Category 3 AESS begins at the Bus Deck level cast node and extends through the pipe column to the Roof Level cast node as indicated in SK1.
3) Confirm the AESS boundary ends at the Roof Level cast nodes and that the Roof Level connection plates are to be delivered on site in the bare steel condition to receive SFRM.
4) Confirm the AESS boundary at the Bus Deck cast nodes extends to the cast node pad, with all shear plates, reinforcement plates, and perimeter beams to receive SFRM as indicated in SK1.
5) Confirm these boundaries can be typically applied to all perimeter basket columns at North, South, East, and West

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Boundaries indicated on SK RFI 418 SK1 generally appear to be OK. However, this information should be confirmed by the CM/GC, as this RFI states "by others", which is information for the CM/GC. All this information should be clearly submitted for review in shop drawing submittal per drawings and specification 05 12 14 Paragraph 1.4.

Additionally, see added notes on your SK RFI 418 SK1 attached. The elements currently highlighted in cyan color in the enclosed sketch should be AESS category 3 per A1-8660 and finished per specification section 09 97 16.

2. See response to item 1) above.

3. This statement is incorrect. Cast node connecting plates are AESS members that should be prepped and finished per specification section 09 97 16. SFRM fireproofing should be applied to perimeter beam per A1-8662 and details in sheets A1-8611 and A1-8612.

4. Please submit shop drawings submittals per specification 05 12 14 Paragraph 1.4 and as noted on item 1) above.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

exterior elevations.

5. See response to item 1) above.

T-1189 **SSS - Missing Dimensions and Connection Details** **Closed** **02/24/2014** **03/06/2014** **03/06/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

1) Work with SK2 and provide the missing dimension.
2) Detail 10/S1-7600 will not work as the noted posts are off-set from the beam. Provide a connection detail.
3) Supply the missing dimensions.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Missing dimensions have been provided on the attached sketch SKS-0332.

2) Beams shall be centered on the highlighted posts and detail 10/S1-7600 shall apply as noted on the drawings. See SKS-0332 for reference.

3) See response to 1).

T-1190 **16" Slab Negative Moments at North-South Walls** **Closed** **02/24/2014** **03/06/2014** **02/26/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please reference attached Memo from seers consulting Engineer.

There is a certain concern that once the LL= 150 PSF is imposed on the LCL deck there will be excess negative moments generated at the interface between weak axis of the supported slab and wall-spandrel beam. This may require additional top reinforcement in the weak axis of the one-way slab.

Please confirm that there are no additional bars neded at the LCL spandrel/wall interface, and that loading Table from S-1002 applies.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

No additional bars are required at the LCL spandrel/wall interface. Loading on S-1002 applies.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1191	SSS - Elevator Pit Framing Steel	Closed	02/24/2014	03/06/2014	03/04/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please confirm it is acceptable to drill (4) holes in the W18 x50 to hold it in position for field welding. See attached ske tches CD RFI # 311 SK1 & SK2 for clarification.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1192	BSE - Steel Plate at CDSM Piles 450-451	Closed	02/24/2014	03/06/2014	03/04/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Kelly Phariss

REQUEST:

During level 4 and 5 excavation, a high volume leak occurred in zone 4 between CDSM pile 450 and 451. In an effort to stabilize the CDSM panel and repair the leak, BBII installed a steel road plate between soldier piles 167-168 and injected grout behind it.

BBII is concerned that removing the plate will likely cause the panel to become destabilized and could reopn the flow of water. BBII survey of the plate indicates that the plate is behind the theoretical face of CDSM wall and does not encroach into the permanent structure - reference the attached drawing.

Please confirm is is acceptable to leave this plate in place. The edges of the plate may be grinded to provide a smooth transition to the CDSM wall for waterproofing.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed, it is acceptable to leave the steel plate in place, provided, as stated in the RFI, it does not encroach into the permanent structure and the edges of the plate are ground smooth. This location should be reviewed by the waterproofing manufacturer and details developed for the waterproofing and cushioning layers between the CDSM wall and foundation wall, to ensure a smooth transition for the CDSM wall waterproofing at this condition.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1193	BGP - Gridline Offset Discrepancies	Closed	02/24/2014	03/06/2014	03/03/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference called out dimensions on S1-2203 and S1-2204 for GL 12-13. SCCI believes that "42'-0" TO GRID 12" on S1-2204 is a typo and that dimensions shown on S1-2203 is accurate, which is consistent with the typical grid lines C-C.

Please confirm.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirm that the 42'-6" dimension between Grids 12 and 13 is correct.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1194	BGP - Unmarked Members on S1-2203	Closed	02/24/2014	03/06/2014	02/25/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference attached CD S1-2203

It is unclear what the clouded member along the South foundation depicts.
Is this member a wall of concourse beam?

Please clarify, and provide dimensions, offsets, and type.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Clouded members are future walls, as defined by legend on S-0010. Wall size and layout is provided in architectual drawings. See A1-2223 for wall plan and A-0022 for wall type.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1194.1	BGP - Unmarked Member on S1-2203	Closed	02/27/2014	03/09/2014	03/07/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

The response to RFI T-1194 conflicts with Submittal TG0600-364 response.

RFI T-1194 response noted that the curved member shown is future CMU wall. However,
response to TG0600-354 submittal noted that the member is Curved Concrete Beams- CB24,
CB55 and CB15.

Please clarify and provide latest drawings to reflect noted change shown in Submittal TG0600-
354 if the curved member is a beam.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Response to RFI T-1194 does not conflict with notes on Submittal TG0600-364.

Curved Concrete Beams CB24, CB55 and CB15 noted on submittal TG0600-364 are members to support future walls.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1194.2	BGP - Unmarked Member on S1-2203	Closed	03/10/2014	03/20/2014	03/14/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

Refer to RFI's T-1194, T-1194.1, and ASI 106 S1-2203

Based on previous RFI T-1194-series responses SCCI still doesn not have contract drawing that depicts details of the curved members, deck beams along B65 (South spandrel beam). The most current version of SI-2203, that is available to SCCI does not specify beam type, nor radius of these curved members.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per Structural Issues Review Meeting 03/13/2014, it was agreed that Sheet S1-2203 would not be re-issued in response to this RFI. The requested information is provided as follows:

-Curved CB24 spans between GL 8 and GL 9 -Curved CB55 spans between GL 9 and GL9.9 -Curved CB15 spans between GL10.1 and GL11

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please provide details for the curved beams along the South B65, i.e. issue most current version of S 1- 2200-series drawings with beam callouts and offsets (distances and radiuses).

As listed in Note 7 on Beam Schedule 1/S1-3401, 'C' before beam mark denotes beam to be centered on CMU or concrete wall. Please see arch drawings for wall layout.

T-1195 **BGP - Geothermal Header Pipe Size at Fields 13 and 14** **Closed** **02/25/2014** **03/07/2014** **03/07/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference attached drawing

Geothermal Fields 13, 14, and 15 have been condensed into two(2) fields (Geothermal Fields 13 and 14).

Please provide the pipe sizes for the header piping in these two fields.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached Sketch WSP response-RFI_T-1195_BGP_-_Geothermal_Header_pipe_Size_at_Fields_13_and_14 for pipe sizes.

T-1197 **SSS - Weld Access Hole for TG Stiffener Plate** **Closed** **02/25/2014** **03/07/2014** **03/10/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

A weld access hole is required where the direction of the weld changes from horizontal to vertical on detail 3/S1-4350.
Please confirm the weld access hole detailed on SK2 is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

T-1197.1 **SSS - Weld Access Hole for TG Shear Plate** **Closed** **03/24/2014** **04/03/2014** **04/04/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

On detail 3/S1-
4350 due to the weld prep required for a 3" shear plate as i
ndicated on SK1, the weld access hole
previously requested in RFI T-
1197 will not be adequate. Please confirm Option 1 or Opt
ion 2 on SK2 are acceptable
or provide an alternative detail.

Also please confirm the weld access hole dimensions may
be adjusted proportionally for a 4" shear plate as detailed
on 3/S1-
4351 in accordance AWS weld access hole requirements.

Option #2 on SK2 is acceptable. It is acceptable to apply similar detail (proportionally adjusted for increase in thickness) to the 4" PL in S1-4351.

T-1198 **SSS - Dimension Clarification for W-1 Fitted Stiffeners** **Closed** **02/25/2014** **03/07/2014** **03/04/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please provide the indicated dimension required to determine the depth of the 1¿ fitted stiffeners.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The dimension shall be 8 1/2" per Detail 3/S1-6091.

T-1199 **SSS - Bi-Fold Door Support Clarification** **Closed** **02/25/2014** **03/07/2014** **03/11/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached sketches CD RFI # 306 SK1 to SK6 for items 1 to 5:
1) The noted dimension does not match the information in details 9 & 10/S1-5020 (SK2 & SK3), which show 1'-11 from Grid G. Please clarify which dimension is correct.
2) Confirm the L8x8 extends from W27 to W27 as shown in detail 10/S1-5050 (SK3).
3) Supply missing dimension.
4) Confirm the HSS8x8 with PL1x8 at Grid 14 terminates as shown or supply more information.
5) Confirm the HSS8x8 with PL1x8 at Grid 15 terminates as shown or supply more information.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
3/10/2014

1. The noted dimension shall be 1'-11".
2. Confirmed.
3. TJPA and WJOV organized the fast track project delivery process and the Design Team has not reviewed the shop drawings of the W-2 Bi-fold door. This information can only be provided upon review of the W-2 Aluminum Curtain Wall and Loading Dock Bi-fold Door combined submittal shop drawings (see Spec Section 08 44 25, 1.7 H), because the components and location of equipment differ per

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

manufacturer.
4. See Response to 3).
5. See Response to 3).

Stacy Wilson
3/31/2014

WO has requested the secondary steel in support of the W-2 System/Bi-fold Doors to be removed from the TG07.1R contract. Forthcoming PCO seeking a credit from Skanska.

T-1200 **SSS - Doubler Plate Detail Clarification** **Closed** **02/25/2014** **03/07/2014** **03/11/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached sketches CD RFI # 307 SK1 & SK2 for items 1 to 4:
1) Confirm it is acceptable to cut the doubler plate as shown to clear the double angle connection.
2) Confirm it is acceptable to terminate the doubler plate 1/2" from the beam flange as shown as the beam flange is moment welded.
3) The shear plate connection for the W16 to the W33x221 fouls the bolts as shown.
Confirm it is acceptable to increase the 1'-7 dimension to 1'-10 1/2. If not, supply an alternate detail.
4) Confirm the shear plate may be partially welded to the doubler plate and partially welded to the web of the W33x221.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). Confirmed.

2). Confirmed.

3). Confirmed.

4). Confirmed.

T-1200.1 **SSS - Doubler Plate Detail Clarification** **Closed** **07/02/2014** **07/12/2014** **07/14/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 307.1 SK1:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

The noted W16x26 is not erectable unless the connection plate on the north end is pulled out as shown in SECTION 'B' due to the side plate at the south end.
Confirm the connection in SECTION 'B' is acceptable.

T-1201 **SSS - Double Angle Offset Clarification** **Closed** **02/25/2014** **03/07/2014** **03/11/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached sketches CD RFI # 308 SK1 & SK2 for items 1 & 2:
1) On S1-2404 the noted beams are offset from each other by 3 1/2" as shown. Confirm the connections as shown are acceptable or supply an alternate solution.
2) On S1-2504 the noted beams are offset from each other by 1 1/2" as shown and the double angle connection is not possible for both beams. Confirm the W24x68's may be connection with a shear plate per 1/S1-5011 as shown.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.
2) Not acceptable. Move the W24 beams 1 1/2" so that they align with the W27 beams on the other side and use double angle connection.

T-1202 **SSS - Drag Plate Material Clarification** **Closed** **02/26/2014** **03/08/2014** **03/06/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached sketch SK1 for reference:

1) Please confirm the 3" drag plates in detail 8/S1-5020 are A572 GR50 material and that CVN testing is not required.
2) Please confirm that the 3 ½" drag plates welded to the top of the moment frame columns, as shown in RFI T-1085 (SK RFI 325), are A572 GR 50 material and that CVN testing is not required.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Confirmed

2. Confirmed

T-1203 **SSS - Stair Escalator Framing Detail** **Closed** **02/26/2014** **03/08/2014** **03/11/2014** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On attached sketches CD RFI # 309 SK1 & SK2 confirm the connection for the W21x50 to the top of the W30x90 is acceptable as shown or supply a new detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed

T-1204 **SSS - Support Steel at Large Slab Openings** **Closed** **02/26/2014** **03/08/2014** **03/03/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

The perimeter support steel at large slab openings as deta iled on 12/S1-5003
will not work at GL 16.9/D as indicated on SK1 due to the 12" top of slab elevation changes around these openings. Please provide details for the support steel required at this location including all connection details.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The W33 beam is 1'-0" higher than the W24 as shown on the plan. The metal deck for the slab where those 2 openings occur is set by the low slab (similar to Typical Detail 10/S1-5002). The Typical Detail 12/S1-5003 applies. C8 channel shall have a shear connection per typical detail 1/S1-5011 (2 bolts).

T-1205 **BGP - Lower Concourse Blockouts to Pour Train Level Partition Walls** **Closed** **02/26/2014** **03/08/2014** **03/04/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

SCCI is planning on pouring as much of the Train Level Partition Walls in Area 3 and 4 prior to the Lower Concourse Deck being poured (see attached Structural Drawings for reference). However, some of the partition walls conflict with the Rakers used for bracing. Additionally, there are some partition walls in Areas 6-16 that are added in ASI #110 that is now included in TG06 scope.

Since the Rakers will not be removed until after the Lower Concourse Deck is poured, SCCI proposes installing blockouts in the Lower Concourse above the walls in order to complete the concrete pours for the partition walls in Areas 3 and 4. The same blockouts will be installed for the partition walls on the mat slab level in Areas 6-16, added as part of ASI 110. The blockouts will be 6"x 12" for RCS 1 reinforcement and 9"x l2" for RCS8 reinforcement, both at 4' O.C. The blockouts would be positioned in the space

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Conceptually, it is acceptable to provide blockouts in the Lower Concourse slab for the purpose of pouring the concrete partition walls below. It is noted that the RFI does not address the following conditions:

· Cases where a partition wall is below or partially below a parallel Lower Concourse beam
· Cases where a blockout coincides with features above, such as a CMU wall
· Means of preparing and pouring back the blockout

Contractor shall give due consideration to the above and revise the plan as required. Consideration shall be given to the differing heights of wall pours due to changes in the Lower Concourse soffit such as for perpendicular beams, particularly with regard to consolidation. Minimum separation gaps between top

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

between bars as to not affect the reinforcement layout.

Please confirm this is acceptable.

of partition wall and Lower Concourse elements shall be maintained as detailed.

T-1206 **BGP - Geothermal Header Pipe Size at Field 12** **Closed** **02/27/2014** **03/09/2014** **03/07/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

See attached drawing

The orientation and layout of Geothermal Field 12 has changed significantly.
Please provide the pipe sizes for the header piping in this Field.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached Sketch WSP Response-RFI_T-1206_BGP_-_Geothermal_Header_Pipe_Size_at_Field_12 for pipe sizes.

T-1207 **SSS - Missing Elevator Information** **Closed** **02/28/2014** **02/28/2014** **03/17/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

See attached CD RFI #314 SK1 to SK3 for items 1 to 8:
1) There appears to be a beam missing as there is no support for the slab edge plate per 8/S1-5000. Pleae advise.
2) The double angle connection per 1/S1-5010 will extend beyond the edge of slab located 5" from the center of beams. Confirm it is acceptable to connect the beams using the shear plates connection per 1/S1-5011 at the 7 locations noted.
3) Details 4-7/S1-5015 do not apply at the noted 4 locations. Please clarify which bracing detail is to be applied.
4) Details 4-7/S1-5015 do not apply at the noted 2 locations. Please clarify which bracing deatil is to be applied.
5) Confrim the noted stiffener is a 3/8" plate per 1/A1-7600.
6)Confirm the 3/8 side plates are to extend the full length

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Weld the edge angle per 8/S1-5000 to the drag beam along GL D at the highlighted location.

2) Move the short W12x14 beams at the highlighted locations (total 7) so that they are 6 1/2" away from the edge of slab in order to fit the double angle connection within the slab edges.

3) Provide bottom flange bracing per 4/S1-5015 at the highlighted locations.

4) See response to 3).

5) Confirmed.

6) Confirmed. Note that the side plates are not

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

of the elevator slab opening.
7) Confirm the noted weld is acceptable.
8) The double angle connection per 1/S1-5010 will fould the shear plate to the column web.
Confirm it is acceptable to connect the noted beam with a shear plate per 1/S1-5011

continuous and are interrupted by the perpendicular stiffener plates at the HSS post locations.

7) Acceptable. We assume that the weld shown on SK2 is between the side plate and the perpendicular 3/8" stiffener plate highlighted in 5). Note that the side plates are to be welded to top and bottom beam flanges with 5/16" welds as shown in the detail.

8) Acceptable.

T-1208 **SSS - Verify no Bent Plate Welds at Protected Zones** **Closed** **02/28/2014** **03/10/2014** **03/11/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Per the approval comment on A2647 and RFI T-1071 occurs North of line D and South of line F along line 10.1 for loose bent plate conditions and does not apply at this location. This beam is between greids D and F.
Please verify for the continuous shop attached bent plate condition no weld will occur within the noted protected zones.
Note this is the same for A2659 and other similar conditions.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Where the bent plate cross-section is continuous between the two outriggers on each side of the protected zone, it is confirmed that the bent plate shall not be welded to the beam along the protected zone and no additional revision is necessary to brace the bent plate. Response to RFI T-1071 applies where the bent plate cross-section changes within the protected zone for example at Bus Deck Level, south of GL 10.1/F and north of GL 10.1/D.

T-1209 **BGP - Plumbing Sleeve Manufacturer** **Closed** **02/28/2014** **03/10/2014** **03/10/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

The response to SCCI Submittal, TG0600-044-BGP-Concourse Plumbing and Piping Sleeves-Product Data and Shop Drawings, states that sleeves and flanges shall be 18 gauge minimum per specs. From the three manufactures, per Spec Section 22 05 30 - 2.1 .B, RK Industries is the only manufacturer that provides plumbing sleeves but with flanges that are 26 gauge only.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This RFI (and the submittal) refers to plumbing sleeves to be cast in lower concourse concrete slab. The 18 gauge sleeves with 26 gauge flanges are acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

In order to proceed, please provide a manufacturer that fabricates sleeves according to TG06.0 specs or allow flanges that are 26 gauge to be used.

T-1211 **BGP - Lower Concourse Blockout - Shifted Bars Near Piles** **Closed** **03/04/2014** **03/14/2014** **03/06/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Where trestle piles protrude through the lower concourse deck, block-outs in the concrete slab will be installed and interupted deck reinforcing will be spliced with formsavers. For bars near the extents of the trestle pile, please confirm if it is acceptable to shift the typical deck bars (#8 and #9) beyond the allowed placing tolerances to avoid interuption of the bar. If acceptable, please provide tolerances for shifting of the bar and minimum clear spacing between rebar similar to conditions listed in the response to RFI T-0631. See attached sketch for details.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is acceptable to shift Lower Concourse reinforcing for the purpose of minimizing the number of reinforcing intersections with openings, block-outs, and other obstructions thereby minimizing the attendant cutting of reinforcing and the addition of trim steel. The following shifts are acceptable:

1. Any single bar may be shifted to within a bar diameter of an adjacent bar so long as the resulting gap between any two adjacent bars does not exceed 12".

2. Any group of bars may be uniformly shifted to within a bar diameter of an adjacent bar so long as the resulting gap between any two adjacent bars does not exceed 12".

3. Any single bar may be removed from a module so long as it is replaced midway between adjacent modules and the resulting gap between any two adjacent bars does not exceed 12". An equivalent shift of two bars resulting in the same configuration is also allowed.

4. Lap splices may be offset up to 6" provided that the resulting gap between any two adjacent bars does not exceed 12".

T-1212 **BGP - Goethermal Manifold Sleeve Supports** **Closed** **03/04/2014** **03/14/2014** **03/07/2014** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Per discussions with EOR(WSP), please confirm geothermal contractor is to install temporary supports (see attached sketch) to facilitate the installation of the geothermal pipe sleeves(36" long) at the face of finish concrete(which is not in the current concrete package-TG06).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Temporary Supports are the means and methods of the contractor.

T-1213 **SSS - Transfer Girder End Bracing at 9.9 & 10.1** **Closed** **03/05/2014** **03/15/2014** **03/17/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 324 SK1 & SK2 for items 1 & 2:
1) Supply dimensions to locate the braces considering that the braces cannot be connected to the stiffener plates due to rebars.
2) Transfer Girders at other locations also have rebars passing thru the stiffener plates as shown here. Please provide a typical connection detail when this occurs.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). Provide braces per Detail 12/S1-3703. Braces are to be connected to the stiffener plates closest to Grid C. Some rebars might interfere with the braces, but they can be adjusted in field slightly.

2). See response to #1.

T-1214 **SSS - Transfer Girder End Bracing at 9.9 & 10.1** **Closed** **03/05/2014** **03/15/2014** **03/17/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

For the Transfer Girder end bracing at GL 9.9 & 10.1 as indicated on SK1 please confirm the following:
1)
The outer braces are to be modeled as per detail 12/S1-3703.
2)
The inner braces between 9.9 & 10.1 are to be modeled as per detail 81/S1-5015.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). The outer braces are to be modeled as per detail 12/S1-3703.

2). The inner braces between Grid 9.9 & 10.1 are also to be modeled as per detail 12/S1-3703.

T-1215 **SSS - Welding clarification** **Closed** **03/05/2014** **03/15/2014** **03/17/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached sketches CD RFI # 303 SK1 & SK2 for item 1:

1) Confirm the weld access hole as shown is acceptable.

SUGGESTION:

ANSWER: Confirmed.

Accept Suggestion: ☐

T-1216 **BGP - CDSM Soldier Pile Encroachment Area 13** **Closed** **03/14/2014** **03/24/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Reference Documents: Exhibits A - H

This RFI addresses the impact of the encroaching CDSM soldier piles (SP) on the north & south wall in mat slab pour Area 13 as well as all levels of the encroachment into the foundation wall between CDSM piles 265 to 288 on the north elevation and 495 to 517 to on the south elevation for location Plan see exhibit - A

Exhibit - B, & C depict the location and degree in which the SP are encroaching

WOJV proposal North elevation on gridline A: (See Exhibit - B) between CDSM pile 262-263 to 270, 272-273 to 276 WOJV is proposing to decrease the specified 36" wall thickness to 34" to clear the encroaching SP 266 to270,274 & 275. Originally these were WR1 reinforcement areas #11@8"oc EF vertically and would change to #11@6"OC, the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on Detail A/Sk.1 (Exhibit - D).

Between CDSM piles 280 to 281-282 & 284 to 290, WOJV is proposing to decrease the specified 36" wall thickness to 33" to clear the encroaching SP 281,284,285,286,288-290. This foundation wall area was originally a WR1 reinforcement area #11@8"oc EF vertically and would change to #11@6"OC this reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on detail A/Sk.1 (Exhibit -D).

Between CDSM piles 270 to 272-273 & 281-282 to 283-

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

284, WOJV is proposing to decrease the specified 36" wall thickness to 32" & 33" respectively to clear the encroaching SP 271,272 & 282. This foundation wall area was originally a embedment column with reinforcement in this area was a double layer of #11@6"oc EF vertically and would change to double layer of #11@5"OC this reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on Detail A/Sk.4 option 1 (Exhibit -F).

WOJV proposal on the South elevation: (See Exhibit - B) Between CDSM piles 503 to 506 WOJV is proposing to decrease the specified 36" wall thickness to 34" to clear the encroaching SP 504, originally this was a WR1 reinforcement areas #11@8"oc EF vertically and would change to #11@6"OC, the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on Detail A/Sk.1 (Exhibit - D).

In all other areas without CDSM pile encroachment issues the reinforcement will remain unchanged as per the Contract drawings.
See Exhibit - G & H showing details of transition between modified reinforcement to contract reinforcement.

These solutions if approved would be incorporated into the TG06 shop drawings.

Please confirm if these solutions would be acceptable.

T-1216.1 **BGP - CDSM Soldier Pile Encroachment Area 13** **Closed** **03/24/2014** **03/31/2014** **03/27/2014** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: Exhibits A - H

This RFI addresses the impact of the encroaching CDSM soldier piles (SP) on the north & south wall in mat slab pour Area 13 as well as all levels of the encroachment into the foundation wall between CDSM piles 265 to 288 on the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The contractor proposed revisions to foundation wall reinforcement due to encroaching CDSM Piles in Area 13 are acceptable. Update Area 13 shop drawings affected by the shoring encroachment info presented in this RFI and submit them for record.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

north elevation and 495 to 517 to on the south elevation for location Plan see exhibit - A

Exhibit - B, & C depict the location and degree in which the SP are encroaching

WOJV proposal North elevation on gridline A: (See Exhibit - B) between CDSM pile 262-263 to 270, 272-273 to 276 WOJV is proposing to decrease the specified 36" wall thickness to 34" to clear the encroaching SP 266 to270,274 & 275. Originally these were WR1 reinforcement areas #11@8"oc EF vertically and would change to #11@6"OC, the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on Detail A/Sk.1 (Exhibit - D).

Between CDSM piles 280 to 281-282 & 284 to 290, WOJV is proposing to decrease the specified 36" wall thickness to 33" to clear the encroaching SP 281,284,285,286,288-290. This foundation wall area was originally a WR1 reinforcement area #11@8"oc EF vertically and would change to #11@6"OC this reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on detail A/Sk.1 (Exhibit -D).

Between CDSM piles 270 to 272-273 & 281-282 to 283-284, WOJV is proposing to decrease the specified 36" wall thickness to 34" & 33" respectively to clear the encroaching SP 271,272 & 282. This foundation wall area was originally a embedment column with reinforcement in this area was a double layer of #11@6"oc EF vertically and would change to double layer of #11@5"OC this reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on Detail A/Sk.4 option 1 (Exhibit -F).

WOJV proposal on the South elevation: (See Exhibit - B) Between CDSM piles 503 to 506 WOJV is proposing to decrease the specified 36" wall thickness to 34" to clear the encroaching SP 504, originally this was a WR1 reinforcement areas #11@8"oc EF vertically and would change to #11@6"OC, the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on Detail A/Sk.1 (Exhibit - D).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

In all other areas without CDSM pile encroachment issues the reinforcement will remain unchanged as per the Contract drawings.
See Exhibit - G & H showing details of transition between modified reinforcement to contract reinforcement.

These solutions if approved would be incorporated into the TG06 shop drawings.

Please confirm if these solutions would be acceptable.

T-1217 **BGP - CDSM Soldier Pile Encroachment Area 14** **Closed** **03/21/2014** **03/31/2014** **03/27/2014** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: Exhibits A - H
This RFI addresses the impact of the encroaching CDSM soldier piles (SP) on the north & south wall in mat slab pour Area 14 as well as all levels of the encroachment into the foundation wall between CDSM piles 288 to 318 on the north elevation and 465 to 495 to on the south elevation for location Plan see exhibit - A.
Exhibit - B & C depict the location and degree in which the SP are encroaching.

WOJV proposal North elevation on gridline A: (See Exhibit - B) Between CDSM piles 284 to 290, WOJV is proposing to decrease the specified 36" wall thickness to 33" to clear the encroaching SP 284,285,286,288-290. This foundation wall area was originally a WR1 reinforcement area #11@8"oc EF vertically and would change to #11@6"OC this reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on detail A/Sk.1 (Exhibit -D).

Between CDSM pile 299 to 301,305 to 312 & 315-316 to 322-323 WOJV is proposing to decrease the specified 36" wall thickness to 33.5" to clear the encroaching SP 299 & 301. Originally these were WR1 reinforcement areas #11@8"oc EF vertically and would change to #11@6"OC,

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The contractor proposed revisions to foundation wall reinforcement due to encroaching CDSM Piles in Area 14 are acceptable. Update Area 14 shop drawings affected by the shoring encroachment info presented in this RFI and submit them for record.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on Detail A/Sk.1 (Exhibit - D).

Between CDSM piles 290 to 294-295, WOJV is proposing to decrease the specified 36" wall thickness to 33" to clear the encroaching SP 291,292 & 293, Originally this was a WR2 reinforcement areas #11@6"oc EF vertically and would change to #11@5"OC, the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on Detail A/Sk.3 option 2 (Exhibit - E)

Between CDSM piles 301 to 305, WOJV is proposing to decrease the specified 36" wall thickness to 33.5" to clear the encroaching SP 301,302 & 304. Originally this was a WR2 reinforcement areas #11@6"oc EF vertically and would change to #11@5"OC, the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on Detail A/Sk.3 option 2 (Exhibit - E)

WOJV proposal on the South elevation: (See Exhibit - B) Between CDSM piles 473 to 475 WOJV is proposing to decrease the specified 36" wall thickness to 34" to clear the encroaching SP 474, originally this was a WR1 reinforcement areas #11@8"oc EF vertically and would change to #11@6"OC, the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on Detail A/Sk.1 (Exhibit - D).

In all other areas without CDSM pile encroachment issues the reinforcement will remain unchanged as per the Contract drawings.

See Exhibit - F G & H showing details of transition between modified reinforcement to contract reinforcement.

These solutions if approved would be incorporated into the TG06 shop drawings.

Please confirm if these solutions would be acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1218	BGP - CDSM Soldier Pile Encroachment Area 15	Closed	04/02/2014	04/12/2014	04/13/2014	Potentially	☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: Exhibits A - G

This RFI addresses the impact of the encroaching CDSM soldier piles (SP) on the north & south wall in mat slab pour Area 15 as well as all levels of the encroachment into the foundation wall between CDSM piles 318 to 343 on the north elevation and 440 to 465 to on the south elevation for location Plan see exhibit - A.
Exhibit - B & C depict the location and degree in which the SP are encroaching.

WOJV proposal North elevation on gridline A: (See Exhibit - B) Between CDSM pile 315-316 to 322-323, 326 to 330 & 334 to 337-338. WOJV is proposing to decrease the specified 36" wall thickness to 33.5¿ to clear the encroaching SP 316 to 322. Originally these were WR1 reinforcement areas #11@8"oc EF vertically and would change to #11@6"OC, the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on Detail A/Sk.1 (Exhibit - D).

Between CDSM piles 322-323 to 326, 330 to 334 & 337-338 to 341 WOJV is proposing to decrease the specified 36" wall thickness to 33.5" to clear the encroaching SP 323 to 326 & 330 to 335, 338 & 339 Originally this was a WR2 reinforcement areas #11@6"oc EF vertically and would change to #11@5"OC, the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on Detail A/Sk.3 option 2 (Exhibit -E)

WOJV proposal on the South elevation: (See Exhibit - B) Between CDSM piles 438 to 442 & 445-446 to 448 WOJV is proposing to decrease the specified 36" wall thickness to 34" to clear the encroaching SP 441,446 & 447, originally this was a WR1 reinforcement areas #11@8"oc EF vertically and would change to #11@6"OC, the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on Detail A/Sk.1 (Exhibit - D).

In all other areas without CDSM pile encroachment issues the reinforcement will remain unchanged as per the Contract drawings.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The contractor proposed revisions to foundation wall reinforcement due to encroaching CDSM Piles in Area 15 are acceptable. Update Area 15 shop drawings affected by the shoring encroachment info presented in this RFI and submit them for record.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

See Exhibit - F & G showing details of transition between modified reinforcement to contract reinforcement. These solutions if approved would be incorporated into the TG06 shop drawings.

Please confirm if these solutions would be acceptable.

T-1218.1 **BGP - CDSM Soldier Pile Encroachment Area 15** **Closed** **05/02/2014** **05/12/2014** **05/08/2014** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: Exhibits A - G

Due to revised surveying information received it become necessary to revise the area 15 wall encroachments fixes.

This RFI addresses the impact of the encroaching CDSM soldier piles (SP) on the north & south wall in mat slab pour Area 15 as well as all levels of the encroachment into the foundation wall between CDSM piles 318 to 343 on the north elevation and 440 to 465 to on the south elevation for location Plan see exhibit - A.
Exhibit - B & C depict the location and degree in which the SP are encroaching.

WOJV proposal North elevation on gridline A: (See Exhibit - B) Between CDSM pile 315-316 to 322-323, 326 to 330 & 334 to 337-338, 341 to 344. WOJV is proposing to decrease the specified 36" wall thickness to 33.5" to clear the encroaching SP 316 to 322 & 343. Originally these were WR1 reinforcement areas #11@8"oc EF vertically and would change to #11@6"OC, the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on Detail A/Sk.1 (Exhibit - D).

Between CDSM piles 322-323 to 326, 330 to 334 & 337-338 to 341 WOJV is proposing to decrease the specified 36" wall thickness to 33.5" to clear the encroaching SP

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The contractor proposed revisions to foundation wall reinforcement due to encroaching CDSM Piles in Area 15 are acceptable. Update Area 15 shop drawings affected by the shoring encroachment info presented in this RFI and submit them for record.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

323 to 326 & 330 to 335, 338 & 339 Originally this was a WR2 reinforcement areas #11@6"oc EF vertically and would change to #11@5"OC, the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on Detail A/Sk.3 option 2 (Exhibit -E)

WOJV proposal on the South elevation: (See Exhibit ¿ B) Between CDSM piles 438 to 442 & 445-446 to 448 WOJV is proposing to decrease the specified 36" wall thickness to 33" to clear the encroaching SP 441,442,445,446 & 447, originally this was a WR1 reinforcement areas #11@8"oc EF vertically and would change to #11@6"OC, the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on Detail A/Sk.1 (Exhibit - D).

Between CDSM piles 441-442 to 445-446, WOJV is proposing to decrease the specified 36" wall thickness to 33" to clear the encroaching SP 442 & 445 Originally this was a WR2 reinforcement areas #11@6"oc EF vertically and would change to #11@5"OC, the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on Detail A/Sk.3 option 2 (Exhibit - E)

In all other areas without CDSM pile encroachment issues the reinforcement will remain unchanged as per the Contract drawings.

See Exhibit - F & G showing details of transition between modified reinforcement to contract reinforcement.

These solutions if approved would be incorporated into the TG06 shop drawings.

Please confirm if these solutions would be acceptable.

T-1219 **BGP - Spandrel Beam Modifications in Area 11** **Closed** **04/03/2014** **04/13/2014** **04/11/2014** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Further to response to RFI T-637 please find attached proposed changes to the spandrel beams in pour Area 11 for location plan see exhibit - A
Exhibit - B shows the plan view of the modification necessary to the spandrel beam on the north and south elevations due to the revised reinforcement width of the foundation wall due to encroachment of the CDSM beams as well as typical cross sections of the revised spandrel beams.
RFI T - 0783 shows the extent of the modification to the foundation wall on the north and south elevations of Area 11.

Please confirm that these modifications as outlined at these locations are acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Modifications for the spandrel beam at locations outlined are acceptable.

T-1220.1 **BGP - SFPUC Grounding Details** **Closed** **03/24/2014** **04/03/2014** **03/24/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

The response to RFI T-1220 stated that drawing E1-3212 had been issued in an ASI. This drawing has not been issued For Construction.

Please provide sheet E1-3212

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

WOJV has been provided E1-3212 in a previous bid and ASI package. The document will also be "Issued for Construction" on April 1, 2014.

RESPONSE:
Judy Long 3-28-14
Drawing E1-3212 is attached for your reference and coordination for construction

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T-1221 **BGP - 36" Pile Sleeve Joint** **Closed** **03/06/2014** **03/16/2014** **03/14/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Scott Bunnell

REQUEST:

Please reference attached sketch, photo, and Contract Drawings Sl-3003 and Sl-2025. SCCI welded the 36" pile sleeve (see S 1-2025) vertical CJP as

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The proposed method and testing described in this RFI is acceptable at this location only.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

depicted in the attached sketch due to a shop fabrication error (see attached photo). Per AWS DI .1, the pre-qualified joint designation B-U2a-GF for FCAW allows a 65 degree groove angle with detail and fit up tolerances. The welded joint is approximately 15 degrees out of tolerance and is on one side of the sleeve only (2 joints per sleeve).
Due to the member considered as non-structural, SCCI requests this joint to be acceptable as welded at this location only. SCCI will adhere to Spec Section 05 50 10 - 2.5.C.2 - "Weld mat foundation sleeve components continuously and test their water tightness by filling with water. Monitor water level for 48 hours minimum. Dry and correct faulty welds and re-test until proven watertight." Is this acceptable?

T-1222 **SSS - Filler plate weld access at CP2 connection** **Closed** **03/07/2014** **03/17/2014** **03/17/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please reference Details 4 and 7 on sheet S1-8001.

Detail 7 specifies a 1" thick filler plate between the beam web and the 2 1/2" thick backing plate. Detail 4 Section E notes 1" typical from the edge of the fill plate to the adjoining stiffener or beam web. 1" opening does not allow for adequate access to perform the welding.

Oregon Iron Works(OIW) is requesting that all filler plates for CP2 connections have a minimum clearance of 1 1/2" from any adjoining edges. Additionally, OIW is requesting that this minimum clearance be applied to any similar areas that exhibit this limited access for welding.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Welding of the vertical stiffener should be done prior to installing the filler plate, hence there should be no weld access issue.
The proposal to increase the 1" gap to 1 1/2" gap is acceptable.

T-1223 **SSS - Elevator Edge of Slab Clarifications** **Closed** **03/07/2014** **03/17/2014** **03/21/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

At SE401 see attached CD RFI # 317 SK1 to SK5 for items 1 to 7:
1) It is not clear what is meant by the noted slope designation.
Confirm the roof slab slopes and the top of pad slab is EL 56'-11 per A1-2894 (SK3).
2) Confirm the noted dimension is 1'-2 3/4 per 8/S1-5004 (SK4).
3) This note is pointing to the edge of slab and giving a top of steel elevation. Work with SK5 and clarify.
4) Confirm the noted dimensions should read 1'-9 & 9'-2 per 1/S1-7113 & RFI T-0965 (SK251, CD 200). If not, clarify.
5) The noted HSS members are not shown on S1-2504 (SK1) or 3/S1-7113 (SK2) but this detail is referenced on both plans noted above.
a) Please confirm the HSS members are required.
b) If yes, supply the size.
c) Supply the horizontal locations on plan
d) Supply the elevation
e) Supply connection details
f) NOTE: the elevator post connections per 1/S1-7600 may foul the HSS members (work with SK5)
6) Confirm the slab edge plate terminates below the 10" raised slab as shown.
7) Confirm detail 1/S1-7600 with the full depth stiffener and kicker brace applies in the noted cases with no elevator post on top of the beam.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) The roof slab does not slope. T/Slab of the elevator shaft roof slab is 56' - 11" as noted on A1-2894.
2) Confirmed.
3) The note is pointing to the horizontal steel beams shown on 8/S1-5004 and notes the T/steel of these members.
4) No. The 10'- 3" and 1'-3" dimensions noted on A1-2894 are correct. The edge of slab for SE 401 at the top of the elevator shaft size increases at the top of the elevator shaft. Also see revised dimensions in the attached sketch SKS-0333.
5a) Yes, beams are required at these locations. These members shall be W18x50 beams. Refer to attached sketch SKS-0333. Note that there are four beams ,one on each side of the shaft.
5b) See response to 5a).
5c) Centerlines of the W18 beams shall be 3 ¾¿ from the edge of the elevator shaft opening (see note on sketch SKS-0333) .
5d) Elevation is 54' - 5" as noted on 3/S1-7113 (see note on sketch SKS-0333). Also see response to 3).
5e) Connection at the elevator machine support beams is shown in the attached sketch SKS-0333.
5f) See response to 7.
6) Confirmed.
7) The elevator rail posts shall be connected to the depressed W18x50 beams per 1/S1-7600. See detail in attached sketch SKS-0333.

T-1223.1 **SSS - SE401 Bus Deck Level Connection Clarification** **Closed** **04/11/2014** **04/21/2014** **04/22/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

This is a follow-up RFI to RFI T-1223 (SK 426, CD 317)
See attached CD RFI # 317.1 SK1 & SK2 for items 1 & 2:
1) Confirm the beam locations from the edge of slab as shown are acceptable.
2) The L5x5 angles will foul the shear plate for the W30 to the column connection if we use the double angle connection per 1/S1-5010 to connect the W16 to the W30. Confirm it is acceptable to connect the W16 to the W30

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.

2) Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

using a shear plate per 1/S1-5011.

T-1224 **BGP - Concourse Top Bars at Column Embedded Plates** **Closed** **03/10/2014** **03/20/2014** **03/18/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Reference: SKS-0324 and SKS-0325
Per SKS-0324 and SKS-0325, where the top bars for the concourse slab intersect type 1 B and 1 C embedded base plates, the bars are to be trimmed and supplemented with a matching slab dowel in MF beam layer 1. The typical deck top reinforcing consists of a continuous run of #9 bars @ 12" and alternates with a #9 x 28'-0" long bars@ 12". See attached sketch for details. To avoid trimming a 28'-0" bar and splicing it with a 17'-0" bar, please confirm if it is acceptable to relocate the #9 x 28'-0" top bars@ 12" to the MF beam layer 1. The continuous #9 bars@ 12" will remain at 3/4" from the top of concrete and trimmed according to SKS-0324 and SKS-0325.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is acceptable to relocate the discontinuous T2 bars to the lower layer with the typical continuous T1 bars remaining in the top layer. We note that the RFI mentions the matching dowel length as being 17'-0". For RCS1, this would be a #9 bar with a splice length of 122" for Top Bar, Category II. Given a 42" base plate and either a 3" or 6" oversized block-out, the minimum length of the dowel would be 292" (24'-4") or 298" (24'-10"). The appropriate splice category and block-out size shall be considered when determining the length of the matching dowel.

Alternatively, the Contractor may place the T2 bars that conflict with the base plate in the lower layer.

T-1225 **BGP - Level C Bracing Removal Sequence West Side of Zone 1** **Closed** **03/10/2014** **03/20/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Following response and discussing with TJPA and Arup to RFI T-1077 and to submittal TG0300-535.5 WOJV is proposing the following sequence for bracing removal level C GL 1 - 7.5
See sketch SK -1 attached.
Sequence is as follows:
1. install re-bracing struts RB-01,02 & 03 within this green clouded area (GL-06 to GL-7.5) area to East already completed.
2. install re-bracing rackers RB-01 to 09 within this pink

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

clouded area
3. Remove level C struts numbers 77-81 and walers from south west corner once the walls have reached required strength and RB re-bracing rackers are installed per Note 2
4. install re-bracing rackers RB-10 to 20 within this red clouded area
5. Remove level C struts STC-01 to 12, 78 & 79 and corresponding walers from the walls once the RB re-bracing is completely installed within this area and the walls have reached the required design strength, the sequence for
de-stressing the struts should be all diagonals completed prior to the de-stressing of the 3 cross lot struts (10,11 & 12)

Please confirm if this sequence would be acceptable for Level C bracing removal.

T-1225.1 **BGP - Level C Bracing Removal Sequence West Side of Zone 1** **Closed** **03/14/2014** **03/24/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Following response and discussing with TJPA and Arup to RFI T-1077 and to submittal TG0300-535.5 WOJV is proposing the following sequence for bracing removal level C GL 1 - 7.5

See sketch SK -1 attached.

Sequence is as follows:

1. install re-bracing struts RB-01,02 & 03 within this green clouded area (GL-06 to GL-7.5) area to East already completed.
2. install re-bracing rackers RB-01 to 09 within this pink clouded area
3. Remove level C struts numbers 77-81 and walers from south west corner once the walls have reached required strength and RB re-bracing rackers are installed per Note

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

2
4. install re-bracing rackers RB-10 to 20 within this red clouded area
5. Remove level C struts STC-01 to 12, 78 & 79 and corresponding walers from the walls once the RB re-bracing is completely installed within this area and the walls have reached the required design strength, the sequence for
de-stressing the struts should be all diagonals completed prior to the de-stressing of the 3 cross lot struts (10,11 & 12)

Please confirm if this sequence would be acceptable for Level C bracing removal.

T-1225.2 **BSE - Level C Bracing Removal Sequence West Side of Zone 1** **Closed** **03/19/2014** **03/29/2014** **03/31/2014** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

See sketch SK -1 attached.

Sequence is as follows:

1. install re-bracing struts RB-03,04 & 05 within this green clouded area (GL-06 to GL-7.5) area to East already completed.

2. install re-bracing rackers RB-01 to 09 within this pink clouded area

3. Remove level C struts numbers 77-81 and walers from south west corner once the walls have reached required strength and RB re-bracing rackers are installed per Note 2

4. install re-bracing rackers RB-10 to 20 within this red clouded area

5. Remove level C struts STC-01 to 12, 75 & 76 and corresponding walers from the walls once the RB re-

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Arup takes no exceptions.

RESPONSE:
Judy Long 4/1/2014
URS has no response for the RFI. See attached.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

bracing is completely installed within this area and the walls have reached the required design strength, the sequence for de-stressing the struts should be all diagonals completed prior to the de-stressing of the 3 cross lot struts (10,11 & 12)

Please confirm if this sequence would be acceptable for Level C bracing removal.

BSE - Level C Bracing Removal Sequence West Side of Zone

T-1226 **SSS - Gap between bus deck perimeter beam and cast node** **Closed** **03/10/2014** **03/20/2014** **03/11/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 334 SK1:
Per detail 1A/S1-5017 confirm it is acceptable to maintain the existing cut on the beam considering the additional 1/4" machining at the cast nodes. The actual gap is now 1" plus 1/4" for machining.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed

T-1227 **BGP - SFPUC Transformer Pad Grounding** **Closed** **03/10/2014** **03/20/2014** **03/24/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference sheets E1-2202, E1-2203, E1-2205 and transformer rooms B1223, B1323, B1562.

Each room requires embedded steel plates for which the future transformers are to be welded to. Are all of the embedded plates tied to the same building ground system as shown for the vault room itself? If so, does SFPUC have a specific requirement for plate grounding?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Yes, SFPUC is requiring steel plates within the transformer vaults to be bonded to the same ground as the 3/0 copper pigtails that are being brought to the vault. There are no other special requirements.

Webcor/Obayashi Joint Venture

PROJECT MANAGEMENT - REQUEST AND ANSWERS LOG

30100 - Transbay Transit Center Project

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1227.1	BGP - SFPUC Plate Grounding	Closed	04/21/2014	05/01/2014	05/02/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

See attached Sketch corresponding to sheet E1-2203

Does the attached sketch clarify the intent of requiring grounding for each SFPUC Transformer mounting plate? If so, is the intent to extend the same grounding conductor type/size from the already contracted embedded conductor? If not, please provide requirement assembly details.

Additionally, will SFPUC require any testing prior to conductor embedment at the concourse level?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The proposed connections meet the grounding requirements provided to the WSP from the SFPUC: however, the specific detailing of the grounding electrode system connections within the vaults must be reviewed and approved by the SFPUC representative. Inspection of the grounding installation shall be provided by the SFPUC representative. Refer to note B on sheets E1-3208, E1-3209 and E1-3210.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1228	BGP - Geothermal Riser Location for Field 12	Closed	03/12/2014	03/22/2014		Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Shimmick Construction Company, Inc Ryan Brekke

REQUEST:

Please confirm the riser for geothermal field 12 is to be located between soldier piles 316 and 317 (approximately GL 30.4)

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1228.1	BGP - Geothermal Riser Location for Field 12	Closed	03/17/2014	03/27/2014	03/26/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Webcor Construction LP Stephanie Azzolino

Co-Author: Shimmick Construction Company, Inc Ryan Brekke

REQUEST:

Per field conversation with ARUP, SCCI was directed to locate the riser for Geothermal Field 12 between Soldier Piles 317 and 318 because of a leak in the CDSM wall between piles 316 and 317.

Please confirm this location is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Location is acceptable to WSP.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1229	BGP - As-Built Location of Sump Pit Near GL 14/G	Closed	03/12/2014	03/22/2014	03/14/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference attached sketch that show as-built location of sump pit near GL 14/G.

Please confirm this as-built location is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The RFI and as-built sketch refers to a sump pit at west of Gridline 14-G. However, on comparing with the slab edge and reviewed matt slab submittal drawings, the location reference for the subject sump pit should be west of Gridline 16-G.

The sump pit is to serve an escalator which will be installed in Phase 2. The as-built location is not acceptable as the sump pit will not be accessible under the landing for clean-out once the escalator is installed.

Please provide a solution to revise the sump location to its correct position.

T-1230 **SSS - Machined Cap Plate Surface Finish** **Closed** **03/12/2014** **03/22/2014** **03/14/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please confirm it is acceptable to provide the machined surface of the train box column cap plates with a prime coat finish in lieu of the rust inhibiting coating. The surface prep will be SSPC-SP6 commercial blast cleaning with International Interzinc 315B primer (attached).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The specified product (Interzinc 315) calls out for a zinc load in the dried film of 83%, where as the proposed product (Interzinc 315B) has only 80%.

The Design Team does not object to this substitution as long as the application meets the performance requirements; it meets the SSPC Paint 20 standard for organic zinc rich primers; it is acceptable to the manufacturer and the entire work receives the specified warranty.

T-1230.1 **SSS - Machined Cap Plate Surface Finish** **Closed** **03/24/2014** **04/03/2014** **04/04/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

To clarify, the specifications section 05 10 00 - 3.2.P.2 requires finished bearing surfaces to be protected with a rust-inhibiting coating (which is typically a petroleum/grease or wax based product) which is to be removed immediately prior to erection. The Train Box Column Cap Plate is a finished bearing surface.

The Interzinc 315 product referenced in the response to RFI T-1230 is specific to the IFRM Coating System. Skanska/TMF proposed an organic zinc rich primer (Interzinc 315B) as the rust inhibiting coating, which would not need to be removed prior to placement of the TG atop the cap plate. The proposed product meets or exceeds the primer specified in the 05 10 00 - 2.2.A spec section as noted in the attached manufacturer's letter.
Please confirm this is acceptable.

It is acceptable to use the Interzinc 315B coating at the cap plate bearing surface in lieu of a temporary rust-inhibiting coating.

T-1231 **BGP - Zone 2 Lower Concourse Openings** **Closed** **03/13/2014** **03/23/2014** **03/21/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

There are multiple discrepancies between Zone 2 Lower Concourse Drawings, recently issued in ASI #112 and ASI #113. See attached drawings. The discrepancies have been highlighted in yellow.

Al-2842 (Lower Concourse Slab Edge Plan) generally does not show openings at these highlighted areas, while Al-2222 (Lower Concourse Wall Plan) do show openings. Please clarify whether the highlighted areas are openings or plumbing penetration. If they are plumbing penetrations, please provide sizes and sleeve sizes

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For the updated slab edge plans, please refer to the Architectural Sketches (SKAs) attached to the response for RFI T-1156.1 BGP.

T-1232 **BGP - CDSM Wall Movement in Area 3 and Area 1 - West Wall** **Closed** **03/13/2014** **03/23/2014** **03/24/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

SCCI performed a survey of the CDSM Soldier Piles approximately March 2013 for the North of Area 3 and West of Area 3 and Area 1. SCCI re-surveyed the soldier piles again this year (March 2014) and have found that the Soldier Piles in the area have displaced into the structure by
approximately 1.5" at both the North Wall and the West wall. Please find attached survey information and the changes noticed in the past year.

I. Please confirm that the additional encroachment and future potential movement of wall into the structure will not cause conflict with current and future rebar installation.

2. Please confirm and demonstrate that the future potential movement will not cause additional stress to the Wall Lift 1, which will be poured in the next week.

3. Please confirm that future potential CDSM movement in this area will not impact any of SCCI's future permanent work.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is requested this RFI be withdrawn as discussed with Turner.

WOJV - 4/23/14
In addition to this WOJV request more information and request that each CDSM wall pile is resurveyed after the level C bracing is removed prior to waterproofing . Two points per pile one at top elevation (similar elevation of the previous surveys) and the other at an elevation of approximately -16'. This survey information should then be then sent to both WOJV and the design team highlighting any additional encroachment which has not been already taken in to account with the current RFI for the relevant area.

T-1234	SSS - Continuity Plate Thickness		Closed	03/14/2014	03/24/2014	03/31/2014	Potentially ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

1) Confirm it is acceptable to connect the W30x90 to the column with the bolts located as shown and the web extended as shown.
2) Confirm it is acceptable to connect the W12x40 to the W30x90 using a shear plate per 1/S1-5011.
3) At 19.9, gridlines C & G, the top flange of a BU-56x30x1.5x4 and sloping W40x327 weld to the continuity plate at the bus deck level. In order to provide a CJP between the aforementioned members and continuity plate, as well as keeping the moment frame members in line with the continuity plate, the continuity plate will need to be increased by 5/8". Please confirm this plate thickness increase to 4 5/8" is required or provide an alternate detail.
4) Please confirm that the solution provided for 3) can be

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.

2) Confirmed.

3) Not acceptable. Taper the top flange of W40 beam to match the top of the continuity plate and provide a CJP weld as shown in attached sketch SKS-0334. The taper angle shall be 1:2-1/2 as shown in the sketch.

4) This condition occurs at total 8 locations: 4 at GL 9.9/10.1 and 4 at GL 19.9/20.1. Solution provided in 3) noted above may be provided at these 8 locations.

Note that top of the top 4" thick continuity plate shown on SK3 shall be aligned with top of the top flange of

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

used at other locations where the continuity plate thickness needs to be increased.

the MF beam.

T-1235 **SSS - Thermally Cut Holes in Transfer Girders** **Closed** **03/14/2014** **03/24/2014** **03/19/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please confirm it is acceptable to thermally cut the rebar holes and the column post-tensioned rod holes in the Transfer Girders using an automated (oxy-fuel) process. All other holes in the primary member will be drilled or punched.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Holes in transfer girder flanges for column post-tension rods shall not be thermally cut.

2). Holes in transfer girder web for rebars may be thermally cut only if the hole is undercut and reamed to the specified size.

T-1236 **SSS - Slab Support Details at GL19E Opening** **Closed** **03/17/2014** **03/27/2014** **03/19/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 327 SK1:

The deck support detail per 4/S1-7660 & 10/S1-5002 will not work at the noted location.

Please supply a detail for this deck support.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For deck support at the W16 beam highlighted on SK1, provide a continuous 8x4x7/16 angle (LLV) welded to the beam bottom flange at the beam web centerline. Weld between the angle and beam flange shall be a double sided fillet weld with size and spacing as indicated on 10/S1-5002. The deformed bars anchors shall be welded to the vertical leg of the angle.

T-1237 **SSS - Base Plate Interference at 19.9G** **Closed** **03/17/2014** **03/27/2014** **03/21/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 328 SK1:
The column base plate fouls girder TR19.9 at grid line G a

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

At GL 19.9/G, move the transfer girder step (where TG depth transitions from 64.75" to 56") 9" towards north

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

s shown. Please provide a solution.

to clear the column base plate. Extend the slotted flange plate below in the same direction with the same amount (9"). Flag this revision in the shop drawings for final review and approval by design team.

T-1238 **SSS - Shear Plate Interference w Pretensioned Rod** **Closed** **03/17/2014** **03/27/2014** **03/21/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 335 SK1:

The pretensioned rod per detail 2/S1-5052 fouls the beam connection as shown. This occurs on S1-2305 at Grids 19.9/C,G; 20.1/C,G; 22/C,G & 24/C,G.

Please provide a solution.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Detail 5/S1-5026 has two connection details for drag beams at Gridlines C & G / C.3 & F.7. First detail is for typical conditions and the second detail applies at Gridlines 19.9, 20.1, 22 and 24 as indicated in the construction drawings. For the conditions shown in this RFI, the second detail applies.

T-1239 **SSS -Deck Support Details at Protected Zones** **Closed** **03/17/2014** **03/27/2014** **03/31/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 339 SK1 for items 1 & 2:
1) Provide a typical detail showing how the decking for the lower slab is to be supported at the "Protected Zone".
2) Supply a typical detail for deck support across the colu mn flange if required.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Provide L3 x 3 x 12 gage similar to Typical Metal Deck Detail 1/S1-5000. L 3 x 3 is to be supported on W27 on the north end and W24 at the south end (as close as possible to the web of MF beam).

2) Provide 3/8" bent plate at the column flange similar to Detail 3/S1-5000 for deck support.

T-1239.1 **SSS - Deck Support Details at Protected Zones** **Closed** **04/02/2014** **04/12/2014** **04/16/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

This is a follow-up to the response to RFI T-1239 (SK-454, CD 339):
Confirm the Engineer is referring to drawing S1-5001 in his response to question 1 & 2 or provide clarification.
1) Detail 1/S1-5000 is Typical Headed Stud Spacing Detail not Typical Metal Deck Detail
2) Per the latest S1-5000 Rev5 (issued as ASI 114) there is no detail 3/S1-5000.

1. Reference to 1/S1-5000 is a typo, it should be referenced to 1/S1-5001

2. Reference to 3/S1-5000 is a typo, it should be referenced to 3/S1-5001.

T-1239.2 **SSS - Deck Support Details at Protected Zones** **Closed** **04/21/2014** **05/01/2014** **05/01/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please reference RFI T1239 response.
The L3x3x12ga proposed to support the deck will have an approximate span of 8'. This is a concern for 12 gauge material to carry 7-1/2" of nominal weight concrete over an 8' span.
1)
We propose to span the gauge angle from the L4x4 where it terminates on the girder web at the protected zone, which will shorted the span of the angle by approximately 3'. See SK1 for clarification. Please confirm this is acceptable.
2)
A closure piece will need to be added and tack welded to the girder web. This was previously closed by the removed L4x4. Please confirm this is acceptable.
3) Confirm 1 & 2 are acceptable at similar conditions.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.

2) Tack weld the closure piece to the metal deck.

3) Confirmed.

T-1240 **SSS - Bus Deck Level Fouled Beam Connections at GL18** **Closed** **03/17/2014** **03/27/2014** **03/18/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

See attached CD RFI # 329 SK1 & SK2:

The connection for the W36 beams will foul the connection for the W21 to the W40.

Please provide a solution.

Adjust the work point for W21 slightly north to clear the W36 connection.

T-1241 **SSS - Ground Level Perimeter Framing Clarification at GL 19.1** **Closed** **03/17/2014** **03/27/2014** **03/31/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 330 SK1:

The connection for the raised W14 beam per detail 1/S1-5028 with S<12" will not work at the noted locations and will foul the W40 beam connection into the Transfer girder.

Please provide an alternate connection detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Provide connection at the W14 beam as shown in the attached sketch SKS-0335.

T-1242 **BGP - Geothermal Manifold Location for Fields 12, 13, and 14** **Closed** **03/17/2014** **03/27/2014** **03/26/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please provide exact required elevations for the geothermal riser manifold stub outs for Fields 12, 13 and 14. Please include the exact elevation for the temperature probe in Geo Field 14.

Note this information is HOT due to the recovery schedule in Fields 12, 13 and 14.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Manifold stub outs bottom of lower pipe to be 8'-0" minimum above lower concourse level. Temperature probe bottom of pipe to be 8'-0" above lower concourse level.

T-1243 **SSS - Missing beam connection to TPG3 at GL 18, D & F** **Closed** **03/17/2014** **03/27/2014** **03/19/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Skanska USA Civil West California Dis Ryan Clayton

REQUEST:
See attached CD RFI # 332 SK1 & SK2:

Confirm it is acceptable to connect the W14x22 to the 2" stiffener plate/4" flange of the TPG3 as shown. If not, supply an alternate connection detail.

SUGGESTION:

ANSWER: Accept Suggestion: ☐
Confirmed.

T-1244 **SSS - Bus Deck Level Perimeter Framing Clarification at GL 16.9** **Closed** **03/17/2014** **03/27/2014** **03/18/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:
See attached CD RFI # 340 SK1:
Please confirm the beam flanges can remain as shown and a 1:2.5 tapered cut is not required.

SUGGESTION:

ANSWER: Accept Suggestion: ☐
Tapered cut is required per AWS D1.8, paragraph 4.2, Transition in Thickness and Width.

T-1245 **SSS - Deviation - Cast Node Type 3 WC0003 - Dimensional Results** **Void** **03/17/2014** **03/27/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Bradken, Inc. Wayne Braun

REQUEST:
See attached dimensional report and numbered print.

Bradken has found dimensional deviations due to tooling on Cast Node Type 3 PN WC0003.

Please confirm attached dimensions are acceptable.
Please provide disposition on out-of-tolernace conditions.

SUGGESTION:

ANSWER: Accept Suggestion: ☐

T-1246 **SSS - Deviation - Cast Node Type LC 202 WC0055 - Dimensional Results** **Void** **03/17/2014** **03/27/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Bradken, Inc. Wayne Braun

REQUEST:
See attached dimensional report and numbered print.

Bradken has found dimensional deviations due to tooling

SUGGESTION:

ANSWER: Accept Suggestion: ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

on Cast Node Type LC 202 PN WC0055.

Please confirm attached dimensions are acceptable.
Please provide disposition on out-of-tolerance conditions.

T-1247 **SSS - Deviation - Cast Node Type LC 203 WC0056 - Dimensional Results** **Void** **03/17/2014** **03/27/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Bradken, Inc. Wayne Braun

REQUEST: **SUGGESTION:** **ANSWER:** **Accept Suggestion:** ☐

See attached dimensional report and numbered print.

Bradken has found dimensional deviations due to tooling on Cast Node Type LC 203 PN WC0056.

Please confirm attached dimensions are acceptable.
Please provide disposition on out of tolerance conditions.

T-1248 **SSS - Deviation Request Cast Node Type LC 204 WC0057 - Dimensional Results** **Void** **03/17/2014** **03/27/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Bradken, Inc. Wayne Braun

REQUEST: **SUGGESTION:** **ANSWER:** **Accept Suggestion:** ☐

Please see attahced dimensional report and numbered print.

Bradken has found dimensional deviations due to tooling on Cast Node Type LC 204 PN WC0057.

Please confirm attached dimensions are acceptable.
Please provide disposition on out-of-tolerance conditions.

T-1249 **SSS - Second Level HSS Connection Clarification at GL8** **Closed** **03/17/2014** **03/27/2014** **03/31/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST: **SUGGESTION:** **ANSWER:**

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Accept Suggestion: ☐

See attached CD RFI # 341 SK1 & SK2:
Confirm the closure plates and welding as shown is acceptable at the coped HSS elevator beam.

Confirmed.

T-1250 **BGP - Lower Concourse Beam Discrepancies** **Closed** **03/18/2014** **03/28/2014** **03/28/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

Reference atached contract drawings.

Latest CDs S1-2203. S1-2210, and S1-2211 have added curved CB16 and CB&B7 downturned beams which appear to be concerntric to South spandrel beam B65. However, no dimensions have been provided, i.e. redius, offset etc.
Furthermore, CD s1-2211 shows tat CB16 and CB&B7 do not follow the same radius. There appears to be an offset between the CB16 and CB/B7 at the MFB at GL 6, and the offset dimensions are not shown.
If architectural drawings are used to find the missing radius (reference SKA-3017 and SKA-3026), one can find that the future partition walls at the South corridor have R=647' - 7 1/2" on both East and West side of MFB at GL6. This implies that the partition walls in this area would off center (non-concentric), and the South corridor would taper (or narrow) Down towards East. SCCI. believes that this was not designer's intent.

Please provide accurate and consistent dimensions and offsets for the LCC beams and future partition walls.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed, there is an offset between CB16 Curved beam and CB7 Curved beam. Please see the attached SKA-3105~SKA-3111 for clouded dimensions.

CB16 Curved beam between gridline 5 and 6 to follow radius of curved beam CB16/partition to the west.

T-1252 **SSS - Deviation Due to Tooling - Cast Node Type LC 301 WC0058 - Dimensional Re Void** **03/18/2014** **03/28/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Bradken, Inc. Wayne Braun

REQUEST:

See attached Dimensional report and numbered print.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Bradken has found dimensional deviations due to tooling on Cast Node Type LC 301 PN

WC0058. Please confirm attached dimensions are acceptable.

Please provide disposition on out of tolerance conditions

T-1253 **SSS - Deviation Due to Tooling - Cast Node Type LC 303 WC0061 - Dimensional R Void** **03/18/2014** **03/28/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Bradken, Inc. Wayne Braun

REQUEST:

See attached Dimensional report and numbered print.

Bradken has found dimensional deviations due to tooling on Cast Node Type LC 303 PN

WC0061. Please confirm attached dimensions are acceptable.

Please provide disposition on out of tolerance conditions

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T-1254 **SSS - Deviation Due to Tooling - Cast Node Type 7 WC0007 - Dimensional Result Void** **03/18/2014** **03/18/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Bradken, Inc. Wayne Braun

REQUEST:

See attached Dimensional report and numbered print.

Bradken has found dimensional deviations due to tooling on Cast Node Type 7 PN

WC0007. Please confirm attached dimensions are acceptable.

Please provide disposition on out of tolerance conditions.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1254.1	SSS - Deviation Due to tooling - Cast Node Type 7 WC0007 - Dimensional Results	Void	03/19/2014	03/29/2014		Potentially	☐

From: Webcor Construction LP — Claude Titche — **To:** Turner Construction Compan — PHIL MILITELLO — **Answered By:**

Co-Author: Bradken, Inc. — Wayne Braun

REQUEST:

See attached dimensional report and numbered print.

Bradken has found dimensional deviations due to tooling on Cast Node Type 7 PN WC0007.

Please confirm attached dimensions are acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1255	SSS - Deviation Due to Tooling - Cast Node Type 15 WC0016 - Dimensional Result	Void	03/18/2014	03/28/2014		Potentially	☐

From: Webcor Construction LP — Stephanie Azzolino — **To:** Turner Construction Compan — PHIL MILITELLO — **Answered By:**

Co-Author: Bradken, Inc. — Wayne Braun

REQUEST:

See attached Dimensional report and numbered print.

Bradken has found dimensional deviations due to tooling on Cast Node Type 15 PN

WC0016. Please confirm attached dimensions are acceptable.

Please provide disposition on out of tolerance conditions.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1256	SSS - Deviation Due to Tooling - Cast Node Type LC 101 WC0050 - Dimensional R	Void	03/18/2014	03/28/2014		Potentially	☐

From: Webcor Construction LP — Stephanie Azzolino — **To:** Turner Construction Compan — PHIL MILITELLO — **Answered By:**

Co-Author: Bradken, Inc. — Wayne Braun

REQUEST:

See attached Dimensional report and numbered print.

Bradken has found dimensional deviations due to tooling on Cast Node Type LC 101 PN WC0050 (2 castings - LC 101-1 & LC 101-2).

Please confirm attached dimensions are acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1257	SSS - Deviation Due to Tooling - Cast Node Type LC 103 WC0052 - Dimensional R	Void	03/18/2014	03/28/2014		Potentially	☐

From: Webcor Construction LP — Stephanie Azzolino — **To:** Turner Construction Compan — PHIL MILITELLO — **Answered By:**

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Bradken, Inc. Wayne Braun

REQUEST:

See attached Dimensional report and numbered print.

Bradken has found dimensional deviations due to tooling on Cast Node Type LC 103 PN WC0052 (2 castings LC103-1 & LC103-2).

Please confirm attached dimensions are acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T-1258 **SSS - Stair and Elevator SFRM Clarification** **Closed** **03/18/2014** **03/28/2014** **03/27/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Reference is made to the Fire Proofing Schedule on A1-8662 where Note 2 indicates that all elevator and stair structures are to use SFRM. It appears that architectural drawings, issued for reference, indicate various HSS posts are to receive alternate coating systems or finishes. For example:

- Detail 3 on A1-7576 indicates two HSS "Divider Beams" to be painted to match shaft walls
- Detail 1 on A1-7870 indicates HSS outriggers are to be galvanized

Please confirm that all stair and elevator members are to receive SFRM. This is inclusive of framing which extends above the Roof Level and west of Grid 1.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Not all stair and elevator steel members are to receive SFRM, it is only when a steel member interrupts a rated wall assembly that a fire resistance rating is required for the steel. The various HSS members referenced are not part of the building structural frame nor do they interrupt a rated wall assembly, therefore no fire resistance rating is required at these locations.

T-1259 **SSS - Deviation Due to Tooling - Cast Node Type LC 201 WC0054 - Dimensional Re Void** **03/18/2014** **03/28/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Bradken, Inc. Wayne Braun

REQUEST:

See attached Dimensional report and numbered print.

Bradken has found dimensional deviations due to tooling on Cast Node Type LC 201 PN WC0054 (2 castings LC201-1 & LC201-2).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please confirm attached dimensions are acceptable.

T-1260 **SSS - Deviation Due to Tooling - Cast Node Type 6 WC0006 - Dimensional Results** **Void** **03/18/2014** **03/28/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Bradken, Inc. Wayne Braun

REQUEST: **SUGGESTION:** **ANSWER:** **Accept Suggestion:** ☐

See attached Dimensional report and numbered print.

Bradken has found dimensional deviations due to tooling on Cast Node Type 6 PN WC0054 (6 castings 6-1 thru 6-6).

Please confirm attached dimensions are acceptable.

T-1261 **SSS - Deviation Due to Tooling - Cast Node Type 5 WC0005 - Dimensional Results** **Void** **03/18/2014** **03/28/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Bradken, Inc. Wayne Braun

REQUEST: **SUGGESTION:** **ANSWER:** **Accept Suggestion:** ☐

See attached Dimensional report and numbered print.

Bradken has found dimensional deviations due to tooling on Cast Node Type 5 PN WC0005 (6 castings 5-1 thru 5-6).

Please confirm attached dimensions are acceptable.

T-1262 **SSS - Deviation Due to Tooling - Cast Node Type 71 WC0048 - Dimensional Result** **Void** **03/18/2014** **03/28/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Bradken, Inc. Wayne Braun

REQUEST: **SUGGESTION:** **ANSWER:** **Accept Suggestion:** ☐

See attached Dimensional report and numbered print.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Bradken has found dimensional deviations due to tooling on Cast Node Type 71 PN WC004 (67 Castings starting with 71-02).

Please confirm attached dimensions are acceptable.

T-1263 **SSS - Deviation Due to Tooling - Cast Node Type 72 WC0049 - Dimensional Result** **Void** **03/18/2014** **03/28/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Bradken, Inc. Wayne Braun

REQUEST:

See attached Dimensional report and numbered print.

Bradken has found dimensional deviations due to tooling on Cast Node Type 72 PN WC0049 (67 Castings starting with 72-02).

Please confirm attached dimensions are acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T-1264 **SSS - Bus Deck Level Missing Post Sizes at GL 15 & 16** **Closed** **03/18/2014** **03/28/2014** **03/19/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Turner Construction Comp Stacy Wilson

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 342 SK1:
Confirm the (12) posts are the same sizes as the ones shown on the Second Level in detail 3/S1-7009.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The TJPA will not reply and has rejected the RFI for the following reason:
01 10 40 1.6 C 2 f. "The TJPA will reject requests for interpretations or clarifications of the Contract Documents which can reasonably be derived from a review of the Contract Documents".
Confirmation of these sizes can also be resolved through the shop drawing process.

T-1265 **SSS - Approval Comment Clarification on CS2 Submitted Drawing** **Closed** **03/19/2014** **03/29/2014** **03/31/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

See attached CD RFI # 343 SK1:
The approval comment on A4714 (CS2) is contrary to the information issued in RFI T-1111, item #7 (SK 327, CD 254)
Confirm the response to RFI T-1111, item #7 is valid and the approval mark-up may be ignored.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

T-1266 **SSS - ST304 Framing Details** **Closed** **03/20/2014** **03/30/2014** **03/31/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer
To: Turner Construction Compan PHIL MILITELLO
Answered By: Adamson Associates, Inc George Metzger
Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 364 SK1 to SK3 for items 1 to 4:

1) Confirm the (4) W10x22 beams are located on the center of the supporting posts. If not, supply the location dimensions.
2) Supply the clouded dimensions (4 total).
3a) Confirm the stair stringers do not connect to the W12x14.
3b) If yes, supply a connection detail as 1 or 3/S1-7601 will not work with the 5" offset dimension.
3c) If yes, please supply east/west location dimensions for the stair stringers.
4) Confirm it is acceptable to prep the flanges of the WT5x15 for the 1/4" PJP weld in lieu of the beam flange as shown.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) The stair framing is a design/build item and comes under the stair contractor's scope (W/O to verify). The W10 x 22 is to be provided by stair supplier.

2) See response to 1).

3a) Stringer is to be designed by the stair supplier, however, we anticipate that it is to be connected to W12x14.

3b) See response to 1).

3c) See response to 1).

4) Confirmed.

T-1266.1 **SSS - ST304 Framing Details** **Closed** **04/04/2014** **04/14/2014** **04/16/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer
To: Turner Construction Compan PHIL MILITELLO
Answered By: Adamson Associates, Inc George Metzger
Co-Author: Webcor Construction LP Jeff Galoyan

REQUEST:

Reference RFI T-1266 (attached) and the associated SK1 & SK2 for the following:

1) The (4) W10x22 beams are in Skanska's scope. Only the stringers are design built and provided by the stair supplier. Please confirm these beams are located on the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.

2) The east-west dimensions to locate the posts have been noted on 1/S1-7008. The outer north-south W10x22 beams at the landings shall be 8" 7/8" from the centerline of the posts typically. The intermediate

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

center of the supporting posts or supply the location dimensions.
2) The (6) W10x22 beams in question are also in Skanska's scope. Please supply the requested dimensions (4 total).
3a) W/O agrees that the stringer is to be designed by the stair supplier, however, we anticipate that it is to be connected to the W12x14. Typically the stringer is connected to the bent plate that is part of the W12x14. This member would also include web stiffeners. If a typical detail is not available, please provide stiffener details and leave the stringer connection to be designed by the stair supplier.
3b) See above, the offset dimension for bent plate should work with 3a.
3c) Please provide location of stringers as requested.

moment connected W10x22 beam shall be aligned with the stringer coming from above at the landing per 10/S1-7601.

3a) Stiffener plates are not required at the W12x14 beam.

3b) The W12x14 beam centerline to the edge of slab distance shall be 4". We anticipate that the stringer will be connected to the bent plate.

3c) Refer to Architectural drawings A1-7007, A1-7501, A1-7502, & A1-7503 for stair 304 stringer locations.

T-1266.2 **SSS - ST304 Framing Details** **Closed** **04/30/2014** **05/10/2014** **05/06/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

This is a follow-up RFI to RFI T-1266.1 (SK 484 (CD 364)

See attached CD RFI # 364.1 SK1:

The noted dimension is shown on S1-2403 and reflects what is currently shown in the model and shop drawings. RFI T-1266.1 (SK 484, CD 364) states that this dimension is to be 4". Since this steel in CS1 is currently being fabricated, confirm that the beam may remain at 5" from the edge of slab to avoid cost and schedule impacts.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

T-1267 **SSS - Weld Detail at Escalator Support** **Closed** **03/20/2014** **03/30/2014** **04/01/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

See attached CD RFI # 255.1 SK1:
Please supply the welding for the L8x8x3/4 to the PL 3/8".

Provide a double sided 1/4" fillet weld between the 3/8" plate and L8x8x3/4 angle.

T-1268 **SSS - Escalator framing details at gridline 11** **Closed** **03/21/2014** **03/31/2014** **03/31/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 344 SK1 to SK3 for items 1 to 5:
1) RFI T-1111 (SK 327, CD 254) confirmed the edge plate to match the thickness of the slab but the approval comment of CS2 drawing 4714 requests a bent plate as shown in SK3. Which is correct?
2) The detail on SK3 is per approval mark-ups on CS2 drawings 4766 & 4767 (noted with an arrow) with references to detail 2/S1-7661 but the approval comments do not occur on the other beams at the yellow walls. Confirm the detail on SK3 applies at all (8) beams next to the concrete walls noted in yellow.
3) Confirm the wall terminates at the lower slab.
4) This detail is per approval mark-ups on CS2 drawings 4766 & 4767 with references to detail 2/S1-7661. Detail 2/S-7661 is not referenced on S1-2403 or 2/S1-7302. Confirm the detail as shown is acceptable.
5) Confirm edge plate per 8/S1-5000 is not required.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Provide edge closure plate per typical detail 8/S1-5000 as noted in response to RFI T-1111. The tall bent plate and 3/8" stiffener plate per comment and markups on CS2 shop drawings are not required.

2) Response in 1) also applies at the 8 beams highlighted in yellow on SK1.

3) Confirmed.

4) See responses to 1) and 2).

5) Confirmed.

The edge closure plate is required per typical detail 8/S1-5000, hence, there should be no cost and schedule increase.

T-1269 **SSS - GL 15 Dimension Clarifications** **Closed** **03/21/2014** **03/31/2014** **03/31/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 346 SK1 to SK3 for items 1, 2 & 3:

1) The noted dimension should be 4'-7 1/2 per A1-2904 (SK2) but 4'-6 is shown in the Revit model which appears to be supported by 1/S1-7010 (SK1) which shows this beam off center from the wall. Confirm 4'-6 is acceptable.
2) The noted beam should be 9" from Grid D per A1-2904 (SK2) but it will foul the W44x290 on Grid D. Confirm the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) The noted dimension shall be 4' - 7 1/2" so that the beam is centered on the wall.

2) Confirmed.

3) Confirmed. Note that per contract document the W44x290 should have a double angle connection. However, to avoid conflict at the tapered girder drag

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

location of the W27x84 is acceptable as shown.
3) The noted W44x290 is to be located 3'-10 1/2 north of Grid D per A1-2904 as shown. However, the shear plate connection fouls the web stiffener plates per 2/S1-5016 on TPG2. Confirm it is acceptable to locate the W44x290 4'-0 1/2 from Grid D to avoid the fouling.

NOTE: Items 1, 2 & 3 are symmetrical about Grid E and also occur at Grid F.

connection plate, it is acceptable to provide a shear plate connection. Provide 3 equally spaced bottom flange braces per 8/S1-5015 at the W44x290 beam from the north side (south side for W44 beam near GL F).

T-1269.1 **SSS - GL 15 Dimension Clarifications** **Closed** **04/09/2014** **04/19/2014** **04/21/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

This is a follow-up RFI to RFI T-1269 (SK 461, CD 346)
See attached CD RFI # 346.1 SK1 & SK2:
It is not possible to supply 3 equally spaced bottom flange braces per 8/S1-5015 as requested in the above noted RFI item 3 due to the existing framing. Confirm it is acceptable to supply a brace per 4/S1-5015 at each W27x84 and 1 brace per 8/S1-5015 as shown.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Provide 3 equally spaced bottom flange braces per response to RFI T-1269. When there is a conflict with the parallel W16 as shown in SK2, provide brace from the other side of the W44 beam.

T-1270 **SSS - ST401 Geometry Clarification** **Closed** **03/21/2014** **03/31/2014** **04/01/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 347 SK1 to SK3 for items 1 & 2:
1) Shown are two versions of the slope geometry for ST401 with the variations noted. Please clarify which geometry is to be used.
2) Confirm a bent deck support plate per 9/S1-5012 will not be required on top of the W12x14 with the beams aligned as shown.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Provide the geometry shown on the top half of SK1. Note that the starting point of slope at the top of the slab which is noted to be 2-7/16" on SK1 has been revised to 5-1/8" in the TG 7.02 IFB Addendum #1 (See A1-2904). Consequently, the slope angle changed to 32.552 degrees with the end of the slope at the bottom terminating at GL D.4. With the new geometry, the S4 slab does not foul the beam flange at GL D.

2) We confirm that bent plate is not required per 9/S1-

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

5012 at the top of W12x14 on GL D.4.

T-1271 **SSS - ST401 Dimension and Connection Clarifications** **Closed** **03/21/2014** **03/31/2014** **04/08/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 348 SK1 to SK3 for items 1 to 8:
1) Supply location of sloping W16 beams from face of concrete wall.
2) Confirm location of W44x335's is acceptable as shown or supply the location.
3) Confirm HSS8x8x5/8 post locations are acceptable or supply the locations.
4) Clarify/supply edge plate requirements for the 'S4' slab at EL. 74'-10 as well as the sloping 'S4' slab.
5) Confirm dimension is acceptable or supply dimension.
6) Confirm dimensions per A1-2904.
7) The connection for the W40 to the HSS8x8 per 6/S1-7661 will not work at the corner. Supply an alternate connection.
8) It appears this detail will not work with the elevations noted. Please supply an alternate detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Locate the sloping W16x26 beams as close to the center of the concrete walls as possible without conflicting with the W27x84 beams above at the roof level.

2) The noted dimension shall be 1' - 1". Note that the 8x8x5/8 posts are to be connected to the top of the W44x335 per 10C/S1-7630, except that the 8x8x5/8 posts will be partially welded to the flange due to offset between the posts and the W44 beam centerline. Provide bottom flange bracing for the W44x335 girder per 4/S1-5015 at the W14x61 beams (total 4 locations).

3) Confirmed.

4) Provide edge plate per typical edge of slab details on S1-5000. Also refer to response to RFI T-1279.

5) Confirmed.

6) Confirmed.

7) Connection at the W40 framing into the HSS post shall be similar to 8/S1-5012.

8) Provide a full depth shear plate connection per 1/S1-5013 at the two W10 beams except, 1) cope only one side of beam flange at top and bottom and 2) Provide 4 bolts at the connection (2 vertical rows of 2 bolts each) with a 3" horizontal spacing between the bolts. Bottom flange brace per 2/S1-7604 is not required at these connections.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1271.1	SSS - ST401 Dimension and Connection Clarifications	Closed	05/13/2014	05/23/2014	05/27/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 348.1 SK1 for items 1 & 2:

1) The connection per 8/S1-5012 fouls the connection for the W27 as shown. Please supply a solution.

2) Verify shim extension and weld.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Provide connection per 3/S1-5012 by moving the shear plate on the other side of the W40 beam web. Provide a shim plate between the shear plate and beam web if required.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1272	SSS - GL 7 Framing Clarification	Closed	03/21/2014	03/31/2014	04/07/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 356 SK1 & SK2:
Due to the limited space between the top flange of the TR7 and the PL 4", it is not possible to supply the connection for the W40x183 per 1/S1-5011.
Confirm it is acceptable to connect the W40 to the TR7 as shown. (All not shown is per 1/S1-5011).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Connection shown on SK2 is acceptable except provide 1" diameter A490-X bolts.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1273	SSS - Bus Deck Level Kicker Brace Material	Closed	03/21/2014	03/31/2014	04/08/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 362 SK1 & SK2 for items 1 & 2:
1) Per S1-0007 (SK2), ASTM A709 applies only to connection material on the Bus Deck Level and braces are not
considered connection material. Confirm ASTM A36 is acceptable.

2) Notes:
a) The same approval comment occurs on drawings 9233, 9317, 9368 & 9378.
b) The approval comment identified above was not included in Sequence CS1.
Confirm the response to item 1 applies to all braces on the Bus Deck Level.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.

2) Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1274	SSS - A4786 Edge Distance	Closed	03/21/2014	03/31/2014	04/04/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 361 SK1:
On A4786 (CS2) the connection angles have been located at the top to clear the 'k' of the W40X324 supporting beam.
The depth of the bottom cope matches the 'k' of the W40x199.
Therefore it is not possible to achieve the requested 1 3/4" edge distance.
Confirm the 1 5/16" edge distance is acceptable as it exceeds the 1 1/8" minimum at a gas cut edge.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1275	SSS - PE 403404 Dimension Clarifications	Closed	03/21/2014	03/31/2014	04/01/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 358 SK1:
The noted dimensions do not match.
Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Dimensions marked up on the RFI showing 10'-3" and 17'-11" for PE 403/404 Elevator Pit between GL 16 to 16.9 / E are correct. See also A1-2844 of 100% Main Package Issued for Construction dated March 31, 2014.

TT Response:

Elevator pit to be located per architectural drawings. Align framing beams with clear opening.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1276	BGP - Lower Concourse Future Wall and Column Conflicts	Closed	03/21/2014	03/31/2014	04/01/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ryan Brekke

REQUEST:

The blockouts for the column steel and baseplates appear to be in conflict with concourse walls at a number of locations, see attached mark-up.
Please confirm no formsavers are to be installed at the column locations. In addition, please provide details for the walls at these column locations.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached SKS-0337 for guidelines of partition wall reinforcing at blockout and partition wall dowel conflicts locations at the lower concourse.

For those locations that are not included in the sketch, but highlighted as part of the RFI, please provide minimum one curtain of vertical wall reinforcement

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

dowels. Second curtain of dowels can be omitted provided vertical wall reinforcement starts at top of baseplate.

For continuous walls where both curtains of dowels clash with the blockout, the dowels can be omitted across the blockout provided the vertical wall reinforcement starts at top of baseplate.

T-1277 **BGP - Lower Concourse Discrepancies** **Closed** **03/24/2014** **04/03/2014** **04/02/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

See attached CD's

There is a dimensional discrepancy between current structural and architectural drawings, at the concourse oppening around GL C13.

Oppening called out on A1-2844 (ASI 113) is larger than clear space between deck beams B9 and B10.

Please Clarify

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

AAI Response:
Slab opening dimensions for future ST-402 reflected on A1-2844 are correct - 26'-3" x 9'-1 ¼". Beams are aligned with clear opening. See attached SKA-3116 for updated A1-2224 showing updated slab opening. Refer also to A1-2204 and A1-2844 of 100% Main Package Issued for Construction dated April 1, 2014

TT Response:
Structural drawings are not intended to show the EOS dimensions per sheet note 5 on S1-2202. Scaling from drawings is not permitted per GR-12 on S-0005.

T-1278 **SSS - W40 Moment Connection at Roof Park Level** **Closed** **03/24/2014** **04/03/2014** **04/07/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 363 SK1:
Detail 8/S1-
5032 applies at the noted locations but a full depth shear p late cannot be supplied due to the moment connection on the W40x392's as shown.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Confirm it is acceptable to stop the shear plate as shown o
r supply an alternate detail.

T-1279 **SSS - PE403, PE404 Dimension Clarifications** **Closed** **03/24/2014** **04/03/2014** **04/07/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:
See attached CD RFI # 365 SK1 & SK2:
Supply the edge of slab locations as shown.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
See the additional dimensions on the attached drawing.

T-1280 **SSS - ST403 Missing Dimensions and Connections** **Closed** **03/24/2014** **04/03/2014** **04/16/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:
See attached CD RFI # 366 SK1 to SK5 for items 1 to 6:

1) Supply the missing clouded dimensions at (5) locations shown.

2) The connection for the W10x22 to the HSS post per 3/S1-5012 will interfere with the W10x22 to W10x22 beam

connection as well as the WT5x15 per 6/S1-7601 at (6) locations noted. This is a typical condition on all landings in ST403.
Please provide a solution.

3) Depending on the noted missing dimension, the beam to HSS6x6 post connection per 3/S1-5012 may not work. Please supply an alternate connection as necessary.

4) Supply the missing clouded dimensions at (5) locations shown.

5) Supply the missing clouded dimensions at (5) locations shown.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
TT's response:
1. See requested dimensions on SKS-0338.

2. Shear plate connection at the W10x22 beam is acceptable at the 6 locations as shown on SK2. It is acceptable to shift the location of the WT10x15 by 1" max to accommodate detail 6/S1-7601.

3. See sketch SKS-0338.

4. See sketch SKS-0338.

5. See sketch SKS-0338.

6. See sketch SKS-0338.

Adamson's response:
For stringer location refer to detail 4/A1-7502 to be 1" min from face of wall.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

6) Supply the missing clouded dimensions at (5) locations shown.

T-1280.1 **SSS - ST403 Missing Dimensions and Connections** **Closed** **06/30/2014** **07/10/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

1) The WT5x15 interferes with the connection for the W10x22 to the HSS12x6x5/8 post. Please supply a solution.

2) Confirm the connection for the W10x22 to the HSS6x6 post is acceptable as shown or supply a new detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) We assume that the "interference" noted in item 1 refers to the accessibility issue for bolt tightening. If the WT5x15 restricts the accessibility for bolt installation, the nuts may be tack welded to the beam web and bolts may inserted from the other side and tightened once the beam is in place. Or, bolts may be tack welded to the beam web on the WT side and nuts may tightened from the other side once the beam is in place.

2) Acceptable, except, provide a 1/4" fillet weld on three sides

---

T-1281 **SSS - W8, W12 Connection Clarifications** **Closed** **03/24/2014** **04/03/2014** **04/16/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

1) Confirm the spacing is correct as shown for the W-8 anchorage per 1/S1-8008 at Grids D.4 & E.6. If not, supply the spacing.
2a) Detail 1/S1-8006 is cut thru grid 16.9 but no spacing is provided for the W-8 anchorage. Please clarify and provide the spacing.
2b) Detail 1/S1-8006 is cut thru grid 16.9. Detail 1/S1-8006 shows the elevation at the top of the curb wall as EL. 86'-8 but A1-2904 shows the top of wall at EL. 85'-7. Please clarify.
3) Supply the dimensions to locate the HSS10x10x1/2 posts for the W-12 anchorage per details 1 & 3/S1-8016.
4) Confirm all the hi-lited locations summarize the W-12

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Refer to W-8 drawing 1/S1-6043.

2a) Refer to W-8 drawing 1/S1-6043.

2b) EL. 86¿-8¿ per 1/S1-8006 is confirmed.

3) Refer to W-12 drawing A/S1-6030.

4) Refer to W-12 drawing A/S1-6030.

5) The HSS post face shall align with the curve of the 18" thick wall.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

anchorage steel per details 1, 3 & 4/S1-8016.
5) Confirm the HSS10x10x1/2 posts per detail 1/S1-8016 are orientated radially on the center of the 18" thick wall.

T-1281.1 **SSS - W8, W12 Connection Clarifications** **Closed** **06/10/2014** **06/20/2014** **06/20/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

This is a follow-up RFI to RFI T-1281 (SK 467, CD 350)

See attached CD RFI # 350.1 SK1 & SK2 for items 1 & 2:

1) It is not clear where the posts per 1/S1-8006 are to be located. Work with SK2 and clarify where the posts are located on Grid 16.9 relative to the east-west beams west of Grid 16.9.

2) Confirm it is the intent to have the noted dimensions as shown or should they be the same?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Provide HSS posts per 1/S1-8006 centered at WP41, WP46 and at midpoints between WP42 & WP43 and WP44 & WP45. Concrete fins are also to be provided at these locations as shown in detail 1/S1-8006. Adjust the W21x50 beam locations west of GL 16.9 to align with the post and fin wall locations.

2) The dimensions shown in SK1 and SK2 per S1-6043 are incorrect. Revised dimensions were provided on Sheets S1-6040 (detail 6) and S1-6043 (detail 1), issued in package TG08.10 DB IFB Addenda #11 on 5/16/2014. Revise the dimensions to match the current drawings.

T-1281.2 **SSS - W8, W12 Connection Clarifications** **Closed** **07/08/2014** **07/18/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 350.2 SK1:

1). The dimensions provided in 1/S1-6043 and 6/S1-6040 are not the same. Provide the clouded dimensions to the posts from the grids as shown.

2). In conjunction with question # 1 and the response to RFI # T-1281.1, the drawings from TG08.10 DB IFB Addenda # 11 (5/16/14) have not been issued for construction. Please issue these drawings for

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). CD RFI # 350.2 SK1 is OLD information that was correctly answered in previous RFI.

2. All drawings previously issued with DB Addendum 11, which are in the hands of the CM/GC are being issued "for construction" dated 07/11/14 in ASI 0120.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

construction or supply them as sketches in response to this RFI.

T-1282 **BGP - Lower Concourse - Latest Drawing Request** **Closed** **03/25/2014** **04/04/2014** **03/28/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Per the meeting between TCCO, WOJV, SCCI, and AAI on Monday 3/24/14, it was made clear that AAI believes that all documents have been issued to WOJV in order for construction of the lower concourse deck. WOJV stated that there are currently drawings out to bidders (for TG 07.2 /TG10 MEPS Series) and in Pre-Construction, but that WOJV has not been provided direction by TJPA/TCCO to proceed with construction in the field, nor to utilize the most current drawing sets. Prior to this meeting, WOJV requested that all IFB drawings be issued as an ASI's in order to coordinate with current and continuing construction. ASI's 112 and 113 drawings were issued, however they are not complete per our initial request. AAI has responded to RFI's and submittals referring to sheets that have yet to be issued for construction. This has caused confusion and frustration for all parties. Therefore, in lieu of continuing to request ASI's to address this specific issue at the lower concourse, WOJV/Turner have agreed to utilize the RFI process to construct the lower concourse deck.

For the list of series of drawings below, please note and/or provide the latest drawings or ASI(s) that should be used to construct the lower concourse deck. We understand that there are drawings issued for pre-construction, that will not be issued for construction for multiple bid packages. For those cases, TJPA/TCCO needs to inform and provide WOJV with the set of the most current and coordinated drawings to be used for construction of the lower concourse, including (but not limited to) blockouts, deck penetrations (such as MEPS), beams, dowel/formsaver locations, and electrical conduit locations.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See the "Issued for Construction" drawings dated April 1, 2014 for the most current drawings.

RESPONSE:
Judy Long 3/28/14
The drawings, some issued with ASI 115, forthcoming CR-104, are attached for your use and coordination with construction.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Architectural Drawings : A1-2200 Series
Architectural Drawings : A1-2800 Series
Architectural Drawings : All sheets providing complete wall dimensions whether floor plan/wall plan/ or enlarged details
Structural Drawings : S1-2200 Series
Plumbing Drawings : P1-2200 Series
Electrical Drawings : E1-2200 Series and E1-3200 Series
TE Drawings : TE-2200 Series

T-1283 **SSS - Drag Beam Double Connection** **Closed** **03/25/2014** **04/04/2014** **04/04/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 354 SK1 to SK3 for items 1 & 2:

1) Confirm the double angle connection per 5v/S1-5026 (SK2) occurs at all locations noted with an arrow on SK1 (16 total).

2) The double angle connection per 5v/S1-5026 & 6/S1-5026 does not allow access to install the threaded rod nuts (4-3/4" long x 4-1/2" wide) and washers in the field. Please confirm it is acceptable to provide two elongated hand holes (6" wide x 10" long) in each full height shear plate either side of the beam. Due to the restricted access, the post
tensioning operation will need to be done from the top of the rod, contrary to the response to RFI T-0970.1. This will require the 6x6" oversized washer to be installed at the bottom and the standard flat washer to be installed at the top. Please confirm this is acceptable

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.

2) Providing a hole in the stiffener plates for access to threaded rod nuts is acceptable in concept. Hole shall not be located near the top of the stiffener plate. Final review of the hole location to be done with review of shop drawings. Cloud the hole locations on shop drawings to call the attention of the reviewer. Post tensioning from the top of the rod is acceptable at these locations.

T-1284 **SSS - Erection of Drag Beam at Double Connection** **Closed** **03/25/2014** **04/04/2014** **04/04/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

See attached CD RFI # 355 SK1 & SK2:
The connection per 5v/S1-
5026 creates erectability issues for the beams on Grids C & G.
Please confirm it is acceptable to cope the bottom flange o f the drag beam to clear the double angles.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is acceptable to cope the bottom flange of the drag beam up to 8" from the bolt centerline at locations highlighted on SK1.

T-1285 **BGP - Anchor Bolt Placement Tolerance** **Closed** **03/26/2014** **04/05/2014** **03/26/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche

To: Shimmick Construction Comp Sylvia Hartanto

Answered By: Webcor/Obayashi Joint Ve Spencer Sayles

Co-Author:

REQUEST:

Under the Below Grade Concrete TG-06 Contract, SCCI is bound by concrete standard for Anchor Bolt placement. Concrete industry standard, ASI 117-90, Section 2.3 allows a tolerance of vertical, lateral and level alignment of+- l ".

Per Anchor Bolt DFOW meeting on 112912014, SCCI proposed to use ASCC (American Society of Concrete Contractors) "Anchor Bolt Tolerances" Position Statement #14 (attached) with the following tolerance for each bolt location:
-3/4 and 7/8 diameter bolts : +-1/4in
- 1-, 1-1/4, and 1-1/2in diameter bolts: +-3/8in ; and
- 1-3/4, 2-, and 2-1/2-in diameter bolts: +-1/2in

Please confirm that the proposed anchor bolt placement tolerance as prescribed by ASCC "Anchor Bolt Tolerances" Position Statement #14 is acceptable. Please note that this tolerance is more stringent than ACI Concrete Standard ACil 17-90, Section 2.3.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Under TG06 contract SCCI is required to place all light column and steel column anchor bolts supplied by TG07.1 in accordance with the contract documents.

- 03 20 00 Concrete Reinforcement and Embedded Assemblies - Section 3.2 A. 1 States: "Set and secure embedments, including embedded plates, bearing plates, and anchor bolts per approved setting drawings and in such a manner to prevent movement during placement of concrete and to allow removal of formwork without damage."
- 03 10 00 Concrete Formwork - Section 3.1 B. 1. a. States: "Use setting drawings, diagrams, instructions and directions by suppliers of items to be attached."
- Structural Drawing Sheet S-0005, GR-2 lists both ACI and AISC reference standards for this project. At the bottom of GR-2 it states: "THE MORE STRINGENT REQUIREMENT IN THE CODES LISTED ABOVE GOVERNS".
- 01 10 90 References - ASCC reference standard discussed in SCCI RFI 452 is not listed in project standards.
- ACI 117-10
  - 1.1.2 States: "Tolerances in this specification are for typical concrete construction and construction procedures and are applicable to exposed concrete and to architectural concrete. Materials that interface with or connect to concrete elements may have tolerance requirements that are not compatible with those contained in this document." - AISC

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requirements for anchor bolts are more stringent and govern.

- 1.1.3 States: "A series of preconstruction tolerance coordination meetings shall be scheduled and held prior to the commencement of the work. The Contractor, subcontractors, material suppliers, and other key parties shall attend. All parties shall be given the opportunity to identify any tolerance questions and conflicts that are applicable to the work with materials, prefabricated elements, and Work assembled/installed in the field by the contractor."

At the 3.5.2014 meeting Skanska stated that the ASCC Position Paper would not be acceptable for the installation of their structural elements over the anchor bolts. AISC needs to be followed. See attached letter 027 for additional info from Skanska.

T-1286 **SSS - Bus Level Beam Splice at GL 18** **Closed** **03/26/2014** **04/05/2014** **04/16/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

At the Bus deck level see attached CD RFI # 368 SK1 & SK2:
With the limitations of the B.U. Beam and the dimensions per 2/S1-5026 (SK1), we cannot fit 28 bolts in 4 rows per beam. Confirm 24 bolts per side are acceptable or supply an alternate solution.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed

T-1287 **BGP - Mat Slab - Train Platform Future Wall Discrepancies** **Closed** **03/26/2014** **04/05/2014** **03/28/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

See attached CDs. It appears that all of the future platforms walls along GL E are encroaching into the columns along GL D.8 by 1 1/2".

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed. It is intended that the identified walls cope at the "bull nose" columns. In all cases, these are walls which will be constructed in Phase 2 and are all escalator pits below the future train platform. The

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Please confirm that the designers' intent was for the walls to cope around the "bull nose" column along GL D.8. If so, please provide further details for this column/wall interface.

Otherwise, please provide new offset dimensions, so that the walls clear columns.

escalators will be above the platform and are designed to clear within the paired columns.

No further details are required.

T-1288 **BGP - Lower Concourse Testing and Curing Conflict** **Closed** **03/26/2014** **04/05/2014** **04/02/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference Specification Section 03 30 20 - Cast-In-Place Concrete.

Spec Section 03 30 20 - 3.6.A.3 states "For shored floor construction: Floor flatness/floor levelness tolerance compliance testing is to be performed prior to the removal of shores and forms but not later than 72 hours of concrete placement by the TJP A Representative." SCCI intends on providing a moist cure on the concourse slab per Spec Section 03 30 20 - 3.7.A.5.b.3 - cover concrete surface with
specified absorptive cover, thoroughly saturate cover with water, and keep continuously wet. The absorptive cover is to remain for 10 days for type II cement (Mix #1558218) per Spec Section 03 30 20 - 3. 7 .A.2 and is to be installed as soon as free water has disappeared from concrete surface and finishing has been completed. The FF/FL 72 hour testing requirement is in conflict with the immediate installation of the moist cure cover requirement.

SCCI requests either of the following:

1. Waiving the FF /FL requirement on the lower concourse slab due to the later installation of the 5" topping slab it will receive. SCCI will maintain its adherence to dimensional tolerances per ACI 117 and flatness variance per ACI 318 and provide a stiff broom finish per Spec Section 03 30 20 -3.6.B.1.c. (similar to mat slab).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Neither request is acceptable. FF/FL testing within the 72 hour time limit and curing are not mutually exclusive.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

2. Extending the FF/FL 72 hour requirement out past the 10 day cure time requirement. SCCI does not want to compromise the immediate moist cure cover installation due to the sensitivity for potential shrinkage cracking in the slab.

Are either of these requests acceptable?

T-1289 **SSS - ST401 Missing Dimensions and Connections** **Closed** **03/26/2014** **04/05/2014** **04/16/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 367 SK1 to SK6 for items 1 to 13:
1) Review all the east/west post location dimensions on SK1 to SK6 and confirm they are correct as RFI T-1189 (SK419, CD 313) does not show the dimensions at all Levels.
2) The 18'-6 dimension to the edge of slab minus the 6" set-back dimension per S1-2304 locates the beam 18'-0 from Grid 15. This does not match the 18'-8 supplied in RFI T-1189 (SK 419, CD 313). Please clarify the discrepancy in beam and edge of slab location.
3) Confirm the noted section reference is correct.
4) The actual condition does not reflect what is requested in detail 3/S1-7601. Please clarify what is required.
5) Supply the missing clouded dimensions at (4) locations shown.
6) The detail shows the minimum offset dimension from the center of posts to the W10x22's in order to make the requested connections. Please review this with the actual dimensions and supply revised connection details as necessary.
7) Supply the missing clouded dimensions at (8) locations shown.
8) Supply the missing clouded dimensions at (8) locations shown.
9) Supply the missing clouded dimensions at (8) locations shown.
10) Connection section references are missing. Confirm they are correct as shown.
11) Supply the missing clouded dimensions at (8)

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) All East/West post location dimensions are correct as noted on SK1 through SK4. On SK5 and SK6, the dimensions noted as 2' - 1" and 8' - 7 1/8" shall be 1' - 10" and 8' - 10 1/8", respectively.
2) The 18' - 8" dimension was specified in response to RFI T-1189 for the HSS 12x6x5/8 posts and the W12x14 and W14x22 beams only. The W12x26 beam shall be 18' - 2 3/4" from GL 15 so that the flange edge aligns with the edge of slab at the opening.
3) The detail reference shall be 11/S1-7601.
4) See response to 2). Detail 3/S1-7601 will reflect the actual condition at the location.
5) See attached sketch SKS-0341 for dimensions. Refer to Architectural drawings A1-7011, A1-7012, & A1-7013 for locations of all stair stringers.
6) Shear plate connections may be provided at the W10 beams and at similar locations at this stair if the double angle connection cannot fit within the available distance.
7) See attached sketch SKS-0341 for dimensions.
8) See attached sketch SKS-0342 for dimensions.
9) See attached sketch SKS-0342 for dimensions.
10) Confirmed.
11) Dimensions are the same as those at the level below. See attached sketch SKS-0342 for dimensions.
12) Confirmed.
13) Dimensions are the same as those at the level below. See attached sketch SKS-0342 for dimensions

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

locations shown.
12) Connection section references are missing. Confirm they are correct as shown.
13) Supply the missing clouded dimensions at (8) locations shown.

T-1289.1 **SSS - Stair ST401 dimension clarification** **Closed** **05/23/2014** **06/02/2014** **05/27/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc Erick del Angel

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

This is a follow-up RFI to RFI T-1289 (SK 487, CD 367)

See attached CD RFI # 367.1 SK1 to SK3:
The indicated dimensions between the stair stringers supplied in above noted RFI SSK-0341 & SSK-0342 (see SK1 & SK2) will not work. The width of the flange on the C12x20.7 = 3" and therefore the stringers will foul with the 2 3/4" dimensions supplied. See SK3 and clarify the dimensions between the stringers.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1/CD RFI 367.1 SK1: The dimensions noted on this detail are not correct, see the original SSK-0341 issued in response to T-1289.0 where the dimensions from gridline to stringer face of web is noted as 4 ¼". Architectural detail 8/A1-7503 notes the stringer clear spacing as 2 ½". The Stringer having a 3" width, the total dimension from face of web to face of web equals 8 ½". See response 4 below for clarification on the 7" dimension.
2/CD RFI 367.1 SK1: The 2 ¾" dimensions are noting the location (center line) of the W10x22, not the stringer web face. To locate stringers refer to response 1.
3/CD RFI 367.1 SK2: The 2 ¾" dimensions are noting the location (center line) of the W10x22, not the stringer web face. To locate stringers refer to response 1.
4/CD RFI 367.1 SK2: The 2 ¾" dimensions are noting the location (center line) of the W10x22, not the stringer web face. To locate stringers refer to response 1.
CD RFI 367.1 SK3: (the added sketch information is not correct. (Refer also to 8/A1-7503) The 7" highlighted dimension locates the outside face of the guardrail, not the web face of the stringer. Total dimension from stringer face of web to stringer face of web is 8 ½".

T-1290 **SSS - Mean Temperature in Service** **Closed** **03/26/2014** **04/05/2014** **04/01/2014** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

The contract specifications state that steel fabrication and erection are to:
"Compensate for the difference between the temperature at the time of fabrication and the mean temperature in service." - Spec 05 10 00 - 3.2.B.1
"Compensate for the difference between the temperature at the time of erection and the mean temperature in service." - Spec. 05 10 00 - 3.3.A

Mean service temperature is referenced, but not defined. So that we are coordinated in our efforts, please identify the "Mean Service Temperature."

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For the work in the referenced specification section 05 10 00, assume Mean Service Temperature equal to 60 deg F.

T-1291 **SSS - Engineer's Comments on 643AC & 645AC** **Closed** **03/26/2014** **04/05/2014** **04/04/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 372 SK1 & SK2 for items 1 & 2: Drawings 643AC and 645AC from TG0701-075 SSS - Structural Steel Shop DWG (CS3) GL 12-13 are attached for your reference

1) The noted approval comment does not help as the plate will foul the rebar holes when located 11" down. See SK2 and confirm the 8 7/8" dimension is acceptable or supply a workable solution.

2) The weld is not missing. It is shown in Detail 1 on drawing 643AC as WD1Q, which is correct per 6/S1-4350 as the
weld is non-DCW.
NOTE: The same applies to drawing 645AC.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). Agree the 8 7/8" dimension as detail is okay to clear the holes.

2). Noted. WD1Q is okay, but we still think that it is more appropriate to show the weld on sheet 643AC, not in Detail 1.

T-1292 **BGP - Lower Concourse Electrical Room Layout** **Closed** **03/26/2014** **04/05/2014** **03/31/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please see attached layouts for Lower Concourse Electrical Rooms B2280, B1563, B1644 and B1325.

Please confirm the layouts are ecceptable.

For confirmation of the equipment layouts, please document on shop drawings. All further layout confirmations for panels and conduits should be submitted in shop drawing format. Please refer to the attached sketch when documenting shop drawings for submittal.

T-1293 **BGP - Lower Concourse Shear Wall Inconsistency** **Closed** **03/27/2014** **04/06/2014** **04/08/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

See attached Contract Documents, A1-2202 and S1-2202.

An inconsistency was discovered between drawing A1-2202 and drawing S1-2202 regarding the West Throat Shear wall above the Lower Concourse. Sheet A1-2202 shows the shear wall stopping at the corridor, sheet S1-2202 shows the shear wall penetrating the corridor.

Please confirm which drawing, A1-2202 or S1-2202 governs.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Wall to be located per A1-2202. Please see attached SKS-0339 and SKS-0340 updates to the west throat shear wall above the lower concourse level.

T-1293.1 **BGP - Lower Concourse Shearwall Inconsistency** **Closed** **05/19/2014** **05/29/2014** **05/20/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

RFI T-1293 response directed Webcor to modify the boundary of West Throat Shearwall W191F above the Lower Concourse per SKS-0339 and SKS-0340 to match drawing A1-2202. The response did not address the impact to Column C17 shown on 1/S1-2250. Please confirm that SKS-0348, SKS-0351, and SKS-0352 will be used in lieu of the RFI-1293 response and accompanying sketches.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1294	SSS - Bus Deck Level Drag Beams Connection Clarification	Closed	03/27/2014	04/06/2014	04/08/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Per detail 1/S1-5018 see attached sketch CD RFI # 371 SK1

1). Due to the shear plate locations and erection clearance for the noted beams please verify one side of the bottom flange can be cut flush to the beam web in order to drop the beam straight down for erection. If not please supply an alternate connection.

2). From CS7 and on verify the bottom flange holes can start 4 1/2" from the required cope as shown.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.
2) Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1295	SSS - Extent of IFRM-1 Finishes	Closed	03/27/2014	04/06/2014	04/09/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 359 SK1 to SK5 for items 1 to 7:
1) Confirm that only steel visible inside the slab opening between the slab edges is IFRM-1 and the unexposed portion of these members is SFRM. If not, supply specific information for the extent of IFRM-1 including the beam end connection per 5/S1-5017.
2) Supply specific information for the extent of IFRM-1, including the beam end connection per 8/S1-5025.
3) Supply specific information for the extent of IFRM-1, including the beam end connection per 9/S1-5025.
4) Supply specific information for the extent of IFRM-1, including the beam end connection per 7/S1-5012.
5) Per S1-2606 & A/S1-4114, this beam is cantilevered over columns on each end. Supply specific information for the extent of IFRM-1 on each end of the cantilevered portion of the beam (Ref: A/S1-4114).
6) Confirm that only steel visible inside the slab opening between the slab edges is IFRM-1 and the unexposed portion of these members is SFRM. If not, supply specific information for the extent of IFRM-1 including the beam end connection per 4/S1-5012.
7) Detail 4/A1-8663 indicates that four MF Beams at the W-12 glass floor are to receive IFRM-1 coating. The MF beam along GL 19.1 is not indicated to receive IFRM coating, but spans a similar opening adjacent to the W-12

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.

2) Refer to 4/A1-8178 & 4/A1-8180.

3) Refer to 4/A1-8178 & 4/A1-8180.

4) Extent of IFRM-1 occurs only at exposed steel in visible areas between edges of slab.

5) Extent of IFRM-1 occurs only at exposed steel in visible areas between edges of slab, including cantilevered portions of the beam up to the slab edge. Columns are SFRM, full height to the bottom of the beam.

6) Confirmed - Reference Architectural details 2, 3 & 4/A1-8615 (IFC submission - 03/31/2014). See A1-8614 for detail Elevations.

7) Beams at 19.1, 19.9, 20.1, 21, & 22 have IFRM-1. See A/A1-6005; 1 & 2/A1-8614; and 2, 3 & 4/A1-8615.

Note: Second Level beams with exposed surfaces

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

system. Please confirm that the beam indicated on SK4 along GL 19.1 is to receive SFRM and not IFRM-1.

shall receive IFRM-1 - Reference S1-2402 W40x297 at gridline 3 (two locations): refer to 2 & A/A1-7310, 1/A1-8152, and 2/A1-8176. Reference S1-2406 MF at gridline 28: refer to 1/A1-7306, A/A1-7307 and 4/A1-7836.

T-1296 **BGP - Concrete Plant Recertification Test Batch** **Closed** **03/31/2014** **04/10/2014** **04/02/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

The 4th review comment to SUBM TG0600-095 (document enclosed as reference) states after plant recertification a "test batch" will be prepared and tested for accuracy. Attached is SCCI's concrete supplier (CEMEX) responses to the submittal review comments.

Regarding the test batch, is it acceptable to either:

1) Have an Owner's representative perform a plant visit during production operations to observe batching tolerance during normal business hours?

or

2) Neither perform the test barch nor plant visit?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

After further discussion with Bob Foley of CEMEX, we are satisfied with the corrective actions CEMEX has already taken. The proposed plant visit and batch constituent verification are not required.

T-1297 **SSS - EoS Bent Plate at Knock-out Slab GL11-12** **Closed** **03/31/2014** **04/10/2014** **04/11/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 378 SK1 & SK2:
The knock-
out slab extends 1 1/4" onto the flange as shown. Confirm that is acceptable or provide alternate direction.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Move the East-West direction W21x50 beams to GLs D.8 and E.2 so that the slab will overhang the beam flange.

☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1298	SSS - Lift Eyes on Ground Cast Nodes	Closed	03/31/2014	04/10/2014	04/09/2014	Potentially	

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

The contract drawings indicate that lift eyes will be provided for shop handling:

"Provide picking eye(s) as required for the handling of the cast node in the foundry AND the shop of the steel fabricator. Picking eye(s) to be located withing the interior of the casting's nozzle(s)"

The lift eyes that were cast into the back side of the ground level cast nodes have now been machined off by Bradken, leaving only the lift eyes inside the nozzles. In order to safely handle these castings, new lift features need to be added to the back side to replace those that were machined off.

OIW notes that if the castings are picked using only the lift eyes inside the nozzle, the center of gravity causes the castings to rotate into an unworkable position. Some other manner of rigging must be employed in order to manipulate the castings into positions required for shop fabrication work. CastConnex noted exactly the same issue in their Release 1 Pre Shipping Inspection Summary, even noting that the improvised and awkard handling was causing damage to the castings:

"The lifting lugs are located inside the nozzle-end on these parts making the machined nodes difficult to manipulate. Often the parts have to be lifted using straps thru the pin hole causing some broken edges on the radius of the pin hole."

To facilitate handling the cast nodes in the shop in a way that is safe and that avoids damaging the castings, OIW proposes that drilled and tapped holes be added. The attached sketches (2773-SK-401 and 2773-SK-402) show a proposed arrangment of these holes. Note that the proposed locations are in areas that will not be visable in the final product, and also are in areas of minimal stress. OIW requests that the engineer of record

review the attached drawings and determine if the proposed modifications to the cast node are acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
4/9/2014

Taping holes at the back side of the cast node for erection is a means and methods issue.

Stacy Wilson
4/9/2014

To note, the referenced Cast Connex report was in regards to the roof nodes, not the ground floor nodes. In addition, the contract drawings never called for eyes on the backside of the ground floor nodes, therefore at the contractor's option, the addition of drilled and tapped holes shall come at no cost to the TJPA.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1299	SSS - Off-Set Beam Connection Modification at PE 403/404	Closed	04/02/2014	04/12/2014	04/11/2014	Potentially	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 377 SK1 & SK2 for items 1 & 2:

1) Confirm the connections as shown are acceptable at the noted off-set beam locations. If not, supply an alternate
connection detail.

2) Confirm the details shown on SK2 may be applied typically at future similar cases. If not, supply the missing detail
for off-set beam connections with double angles per 1/S1-5010.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.

2) Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1300	SSS - Carboline AESS Primer	Closed	04/02/2014	04/12/2014	04/04/2014	Potentially	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Turner Construction Comp Stacy Wilson

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Specification section 05 10 00-2.2.B.2.b indicates that Carboline Carbozinc 621 is to be used for non-galvanized steel
to receive high performance coating. Reference is made to the letter provided by Carboline attached, which publishes that this (nearly obsolete) product has a recoat window of only 2-3 hours, which cannot be achieved on the Transbay

project since subsequent overcoats will be installed in the field by others.

Carboline has provided information and validation for use of the Carbozinc 859 Organic Zinc Rich Epoxy as a replacement for Carbozinc 621, which provides protection and performance equal to or greater than Carbozinc 621. The Carbozinc 859 product provides an unlimited recoat window, allowing for intermediate and top coats to be applied by others in the field, in accordance with the project's schedule and contractual requirements.

Please confirm the Carbozinc 859 product is acceptable for use as the AESS primer.

Note: Specification section 09 97 16-2.2.A states that the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

RFI is rejected per Specification Section 01 10 40 1.6 C 2 a. "RFIs shall not be used for the following; the TJPA will not reply and will reject the RFI: Product or material Substitution".

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

listed manufacturers are acceptable subject to conformance
to requirements of Drawings, Schedules and Specifications. For this reason, Carbozinc 859 is proposed as the
recommended product by the basis of design manufacturer, Carboline, rather than a product substitution.

T-1301 **SSS - Erection Aid at Roof Spandrel Beams** **Closed** **04/02/2014** **04/12/2014** **04/07/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Reference SK-4.7 attached, which details the erection aid for the perimeter roof beams. The connection plate shown in A/SK-4.7 and B/SK-4.7 will also serve as the back-up bar for the CJP weld at the beam web.

Our intent is to leave the connection plate/back-up bar in place after welding. Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Not acceptable. Please note Detail 1/S1-5014 requires a double bevel weld.

T-1302 **SSS - CP5 Connection Points** **Closed** **04/02/2014** **04/12/2014** **04/16/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Detail 1/S1-8003 shows a corner to corner joint between the 2.5" mounting plate and the two supporting vertical stiffeners and the single horizontal stiffener on top.

Please confirm the two vertical stiffeners can be repositioned 1/4" in towards the center of the connection as well as lowering the horizontal stiffener. These adjustments will provide a land for the specified fillet weld and minimize melt through and weld splatter at the corners of each plate. Backside stiffeners will be repositioned to match as required.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1303	Wall Rebar in conflict with raker base plate 13 (GL1.5,D.8)	Closed	04/03/2014	04/03/2014	04/08/2014	Potentially	☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Due to a conflict between the rebar dowels and the raker base plate 13.
WOJV is proposing to cut the existing rebar dowels flush with the mat slab and drill and epoxy in a new same sized bar beside the existing one once the re-bracing raker is removed.

Please confirm if this would be acceptable

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed for this location.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1304	SSS - Follow-up to CS3 Approval Comments	Closed	04/04/2014	04/14/2014	04/21/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please review and confirm the items below regarding the TG0701-075 SSS - Structural Steel Shop DWG (CS3) GL 12-13 approval comments:

1) Drawing 2669 ~ the noted beam is not sloping per S1-4004. Confirm the drawing is correct as submitted and no action is required.

2) Drawing 2707 ~ the noted beam is not sloping per S1-4015 (S1-4004 is not the correct drawing reference). Confirm the drawing is correct as submitted and no action is required.

3) Drawings 2706, 2710, 2713AB ~ the 3 1/16" dimensions are necessary as the beam webs vary in thickness. The 3" dimension on the angles has been used at the thickest beam web. Confirm the drawings are correct as submitted and no action is required.

4) Drawings 3792, 3793 & 3794, 4933, 4935, 4994, 4995, 4998 ~ The top cope on the right end is correct as shown. The Approver's reference to a 2" flange is incorrect as the TPG1 on Grid 13 has a 3 1/2" thick flange per S1-4200. We have limited the clearance at the top to 1/4" be able to fit the number of bolts per S1-5010. Confirm the drawings are correct as submitted and no action is required.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.
2) Confirmed.
3) Confirmed. Note that there is another comment on sheet 2706 for which the sheet needs to resubmitted for record.
4) Confirmed.
5) Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

5) Drawings 4832 & 4924 ~ RFI T-0857 (SK 117, CD 089) asked for permission to cope the beam as shown on the submitted drawings on SK2 item 1 and the cope was approved in the response. Cutting one side of the flange is not sufficient to clear the brace. Confirm the drawings are correct as submitted and no action is required.

T-1306 **BGP - Geothermal Field 11 Mud Slab Rebar** **Closed** **04/07/2014** **04/17/2014** **04/13/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please confirm it is acceptable to remove rebar in the mud slab of geothermal field 11 via contractors discretion. Please note rebar will be placed where micropiles are to be tested.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:

Arup does not require any rebar to be placed in the mudslab. We recommend that rebar is placed in the mudslab for locations where the micropiles will be tested on the mudslab.

T-1307 **SSS - Ground Level Connection GL 8** **Closed** **04/07/2014** **04/17/2014** **04/16/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 379 SK1 & SK2:
Confirm it is acceptable to terminate the PL2x3/8 per 12/S1-5010 as shown to avoid fouling the connection angles.
If not, supply a new detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

T-1308 **BGP - Geothermal Field 11 Disturbed Unsuitable Material** **Closed** **04/08/2014** **04/18/2014** **04/13/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

During backfill activities in Geothermal Field 11 inclement weather occurred and as a result isolated areas of bay mud/clay are deemed unsuitable. Per field walk on 04-07-2014 with Arup these soft areas are found unacceptable to place mud lab. What are the procedures required to satisfy and meet an acceptable substrate for the mud slab.?

ARUP Response:

Remove disturbed material from the top of undisturbed soil in geofield 11. The geothermal trenches are okay as is. Arup will review the condition on Monday, 04-14-14 to confirm that the mudslab is ready to pour.

T-1309 **SSS - Missing Stair ST202 information (GL 1.4-2)** **Closed** **04/08/2014** **04/18/2014** **04/25/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 387 SK1 to SK6 for items 1 to 15:
1) Supply all clouded dimensions on SK1 thru SK6.
2) [Issue has been resolved, no further action necessary]
3) Supply the top of concrete elevation for the (4) posts.
4) This detail shows horizontal HSS beam but the beam is not shown here or on S1-2202.
Please clarify.
5) This detail does not allow for any horizontal adjustment for concrete +/- location variances.
Please review and advise.
6) [This item is to be resolved by Skanska]
7) Confirm these posts are continuous from 1/S1-7400 (SK1) to here.
8) Clarify the noted landing steel and supply the member sizes, elevations & dimensions.
9) The minimum distance between the center of post and the W10x22 must be 1'-1 3/4 in order to connect per 3/S15012
and 1/S1-5010. Supply alternate connection details if the dimension is less.
This is a typical occurrence on all stairs.
10) Confirm all stair landing beams are centered on the posts or supply offset dimensions.
11) Supply a connection detail.
12) The noted 2 braces per 1/S1-7600 will span across the slab opening. Confirm that is acceptable or give direction.
13) Do the posts starting above the Lower Concourse Level in detail 2/S1-7400 (SK2) extend to the underside of the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Refer to attached sketch SKS-0347 for missing dimensions.

3) Refer to 1/A1-7004 for top of concrete elevations.

4) Detail 4/S1-7600 does not apply and is incorrectly called out at the highlighted location.

5) The statement "this detail does not allow any adjustment for concrete +/- location variances" is not entirely clear. Up to a 1" gap is allowed between the end of steel beam and concrete wall therefore there should be enough tolerance for placing steel as long as concrete walls are constructed within tolerances. If the intent of the question was different, please clarify, or alternatively add this item to the next structural coordination meeting agenda for further discussion.

7) Confirmed. The guide rail posts are continuous in between floor levels.

8) Detail 3/S1-7004 was updated in IFC Main Package dated 3/31/2014. See attached sketch SKS-0347 that shows the updated framing.

9) Provide shear plate connection per 1/S1-5011 at the W10 stair beams typically for such instances.

10) Confirmed. Refer to latest architectural issued A1-

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

HSS beams? Please clarify.
14) Clarify what supports the noted steel.
15) Supply a corner connection detail.

7XXX series sheets for correct post locations.

11) Provide connection detail per 3/S1-7600 except, The W10 beam connects to the HSS post per 3/S1-5012.

12) Provide full depth stiffeners on both sides of the beam web in lieu of the braces per detail 1/S1-7600.

13) Yes. See attached sketch SKS-0347 that shows the HSS posts.

14) Detail 6/S1-7004 was updated in IFC Main Package dated 3/31/2014. See attached sketch SKS-0347 that shows the updated framing.

15) See attached sketch SKS-0347 that shows connection detail callouts.

T-1310 **SSS - CS3 Review Clarifications for Spandrel Beams** **Closed** **04/09/2014** **04/19/2014** **04/22/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 374 SK1 & SK2 for items 2 to 4, as a follow up to the review comments provided in Submittal Package TG0701-075 SSS - Structural Steel Shop DWG (CS3) GL 12-13:

1) [Item 1 has been responded to internally by Skanska. No further action is required]
2a) The approver's reference to T-0923 has been superseded by follow-up RFI T-0923.1. This RFI confirmed 2'-0 1/4 to match the W-1 Rhino model. Please confirm the RFI response to T-0923.1 remains valid.
2b) Not all CP6 connections are located 2'-0 1/4 below the top of steel on the Bus Deck Level. The dimensions shown on this drawing match the W-1 Rhino model. Please confirm that the dimensions provided in the Rhino model are to be followed and that no further action is

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

2a) We confirm that the RFI response to T-0923.1 remains valid..

2b) We confirm that the dimensions provided in the Rhino model are to be followed.

3) Confirmed no further action required.

4) The requested cope dimensions as shown cannot be confirmed by the Design Team. Please provide a 3D model of the entire connections, so that the Design Team can coordinate with the Rhino 3D model. Specifically, we would like to have the beam flange coping and cast node perimeter beam drag connection tabs with all other connection elements, so that we may confirm it fits with the W-18 and W-9 cladding

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

required.
3) Refer to RFI T-0738, which confirmed modifications to the plate thicknesses. Confirm no further action is required.
4) The requested cope dimensions are shown. Confirm no further action is required.

Rhino model.

T-1311 **SSS - Rolled Pipe Seam Location at Basket Columns** **Closed** **04/09/2014** **04/19/2014** **04/16/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Reference Submittal Package TG0701-075 SSS - Structural Steel Shop DWG (CS3) GL 12-13, sheet 1205 that indicates Skanska is to "confirm seam locations for rolled
members." AESS specification section 05 12 14 only provides criteria to fully shape rolled members in shop to final
curved shape (2.3.C.12) and to minimize distortion (3.7.C.1.a). No direction is provided in the specifications or

contract drawings to orient the seam in any particular direction.

Please advise if a specific orientation of rolled members is to be accommodated for upper basket column pipes (AESS
Category 3) with wall thickness less than or equal to 1". Note that the seam location must not come in conflict with erection aids or other attachments. See drawing 1268 attached which indicates the orientation of erections aids.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The comments (blue text) in question on the shop drawings are from W/O. Please note TT review stamp on the shop drawings sheet 1268 was marked as "Approved

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T-1312 **SSS - Hanger Above Connection Clarification** **Closed** **04/09/2014** **04/19/2014** **04/21/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 390 SK1 for items 1 & 2:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

1) Confirm a 2" gap is acceptable.

2) The bolts cannot be located as shown in detail 4/S1-5026. Confirm the bolt locations as shown are acceptable with the bottom flange of the beams coped for bolt access. If not, supply an alternate solution.

2) Confirmed.

T-1313 **SSS - Deck Support Detail at Column** **Closed** **04/09/2014** **04/19/2014** **04/21/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please reference detail 1/S1-5001. The L3x3x12ga deck support angle is shown coping into the web of the girder. At the majority of the conditions where this may occur the girders have thick and wide flanges. After the angle is coped as detailed we will have very little material to work with and is unlikely to have much structural integrity.

Please see attached alternative sketch. In this condition the angle is lapped on top of the girder and connected with fillet welds. The depth of the girder has no impact on the detail. This is a common detail in the metal decking industry.

Please confirm the proposed column angle support sketch is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Alternative deck support detail shown in the RFI can be used at the Contractor's option.

T-1314 **SSS - Basket Column Grout Hole Clarifications** **Closed** **04/09/2014** **04/19/2014** **04/16/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 370 SK1 to SK5 for items 1 to 10:
1) Confirm the fully grouted vertical column indicated shall have type 2 holes (per S1-4003, Note 2) with a pattern similar to that shown in detail B/S1-4018 for vertical

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. See updated S1-4018 issued with the Main Package 2. Confirmed.

3. Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

columns filled with concrete. Reference SK1 & SK5.
2) Please confirm the grout port and vent hole locations for the noted vertical column are to be located similar to S1-4003 as indicated for diagonal pipe columns.
3) Please confirm the vent hole locations for the noted vertical column are to be located similar to S1-4003 as indicated for diagonal pipe columns.
4) Confirm the fully grouted vertical column indicated shall have type 2 holes (per S1-4003, Note 2) with a pattern similar to that shown in detail B/S1-4018 for vertical columns filled with concrete. Reference SK2 & SK5.
5) Confirm the fully grouted vertical column indicated shall have type 2 holes (per S1-4003, Note 2) with a pattern similar to that shown in detail B/S1-4018 for vertical columns filled with concrete. Reference SK3 & SK5.
6) The same column on the south elevation shown on S1-4007 (SK2) references B/S1-4018 (SK5) for the grout holes. Confirm that the typical grout holes per S1-4003 are to be applied at the noted column on the north elevation or clarify.
7) The noted column is shown concrete filled per A-S1-4017 (SK4) and grout filled per A/S1-4018 (SK5). Please clarify.
8) Confirm the vertical column indicated shall have type 2 holes (per S1-4003, Note 2) with a pattern similar to that shown in detail B/S1-4018 for vertical columns filled with concrete. Reference SK4 & SK5.
9) The same column on the south elevation shown on S1-4002 (SK1) references B/S1-4018 (SK5) for the grout holes. Confirm that the typical grout holes per S1-4003 are to be applied at the noted column on the north elevation or clarify.
10) Supply vertical dimensions to locate the grout holes in the upper columns.

4. See updated S1-4018 issued with the Main Package.

5. See updated S1-4018 issued with the Main Package.

6. See updated S1-4018 issued with the Main Package.

7, 8, 9 & 10. See updated S1-4018 issued with the Main Package.

T-1315 **BGP - Concourse Transformer Vaults - Curb and Pad Dowels** **Closed** **04/09/2014** **04/19/2014** **04/15/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Transformer Vaults detail drawings A1-3001 & A1-9235 (for vaults on A1-2222); A1-3002 & A1-9236 (for

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is acceptable to provide mechanical couplers or drilled and bonded dowels for detail 4, 5 and 6 on S1-

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

vaults on A1-2223); A1-3003 & A1-9237 (for vaults on A1-2225), and pad details S-3002 of the IFC 3.31.2014 drawing set.

The IFC set curb & pad details 4, 5 & 6/S1-3002 appear to require #4 rebar dowels to be cast into the Concourse slab. Please confirm if this is the designer's intent or if details similar to 2&3/S1-3002 can be applied at the Contractor's option for the concourse level transformer pads and curbs, i.e. couplers or drilled & bonded dowels.

3002 at contractor's option. Contractor to ensure that the drilling does not expose or damage the existing rebars in the slab.

T-1316 **SSS - Missing Stair ST203 information (GL 5)** **Closed** **04/11/2014** **04/21/2014** **04/25/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 388 SK1 to SK6 for items 1 to 6:
1) Supply all clouded dimensions on SK1 thru SK6.
2) Confirm all landings have 1/4" checker plate.
3) Please clarify which stringers go up and which stringers go down and add stair to landing connection references as was done on S1-7004.
4) How are the (3) W10x22's supported/connected?
5) How are the noted (2) W10x22's supported/connected?
6) The noted 6" dimension does not work with detail 3/S1-7601 which shows the stringer attaching at the toe of the beam flange. Please clarify.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Refer to attached sketches SKS-346 and SKS-349 for missing dimensions. SKS-349 shows how the stair landing beams that are perpendicular to the stringers can be located based on architectural drawings.

2) Refer to Specification "Steel Stairs and Railings 05 51 00" under 2.2 Materials -B Checker Plate Treads and Landings.

3) See attached sketch SKS-0346 for clarification of stringer direction. Also refer to architectural drawings A1-7005 and A1-7104.

4) The W10 beams frame into CMU walls and are shown on S1-7005 that was updated in IFC Main Package dated 3/31/2013. See attached sketch SKS-0346.

5) See response to 4).

6) Move the W16 beam closer to the edge of slab for detail 3/S1-7601 to work at the location.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1317	SSS - Second Level Connection clarifications GL 1.4 - 2	Closed	04/11/2014	04/21/2014	04/22/2014	Potentially	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 386 SK1:

The gusset plate per 6 & 9/S1-4206 fouls the WT/pretensioned rod connection per 3/S1-5050 & S1-5052.

Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

There is no fouling. 24" dimension between the bottom of Steel Beam and the top of WT section per Detail 3/S1-5050 does not apply at BRB frame connections, see note 2 in detail 3/S1-5050. Where BRB gussets are present, the distance between the bottom of gusset plate and the WT section is 12" as indicated in Details 4 & 8/S1-4206.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1318	SSS - Second Level Protected Zone Connection Clarification GL 7	Closed	04/11/2014	04/21/2014	04/22/2014	Potentially	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 381 SK1 & SK2 for items 1 & 2:
1) The noted brace connection occurs within the "Protected Zone" per 1/S1-4201. Confirm that is acceptable or supply an alternate solution.
2) The gusset plate per 8/S1-5015 will foul the top bolts in the double angle connection per 1/S1-5010. Confirm it is acceptable to use a shear plate connection per 1/S1-5011 at this location or supply an alternate solution.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Provide the brace connection to the moment frame column using a bent plate as shown in the attached sketch SKS-0345.

2) It is acceptable to move the gusset plate and the brace per 8/S1-5015 slightly to clear the bolts.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1318.1	SSS - Second Level Bent Shear Plate Around Protected Zone	Closed	05/07/2014	05/17/2014	05/21/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 381.1 SK1 & SK2 for items 1 & 2:
1) The bent plate shown on TT SK-0345 cannot be bent with a sharp 90 degree bend as shown. Confirm the cold bending radius shown is acceptable or supply the bending radius to be used.
2) Confirm the welding as shown is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.

2) Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1319	SSS - Missing beam sizes and connection clarification Ground Level GL 1.4	Closed	04/11/2014	04/21/2014	04/21/2014	Potentially	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 380 SK1 for items 1, 2 & 3:
1) Confirm the noted missing beam size is W12x14.
2) Confirm the noted missing beam size is W16x26.
3) Confirm the PL2x3/8 per 12/S1-5010 may terminate as shown to avoid fouling the connection for the W12x14 per 1/S1-5010. If not, supply a new detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.

2) Confirmed.

3) Provide a shear plate connection at the W12x14 beam and extend the 2 x 3/8 stiffener plate per 12/S1-5010. The stiffener plate may be stopped short at the shear plate connection to avoid conflict.

T-1320 **BGP - Dewatering Sleeve at Mat Slab Depression** **Open** **04/14/2014** **04/24/2014** **04/16/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Grace requires that there be a minimum 8" clear horizontal plane to allow for the waterproofing membrane transition. Dewatering sleeve #38 is located on the edge of a sloped mat slab depression. Please confirm it is acceptable to lower the flat the mud slab to provide a sufficient horizontal plane to accommodate waterproofing. Sides of depressions will be sloped at 45deg.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The TJPA Representative does not object to the Contractor's proposal to adjusting the mud slab as described at Dewatering sleeve #38 to suit the waterproofing manufacturer's requirements.

T-1321 **BGP - Geothermal Riser Location Field 14** **Closed** **04/14/2014** **04/24/2014** **04/22/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ryan Brekke

REQUEST:

Please confirm the riser for Geothermal Field 14 is to be located between Soldier Piles 349 and 350. In addition, please confirm the temperature probe in Geothermal Field 14 is to be located between Soldier Piles 350 and 351.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

WSP take no exception to the proposed location of the Riser and Temperature probe.

T-1322 **SSS - West Zone Bus Level and Roof Level Grade Clarifications** **Closed** **04/14/2014** **04/24/2014** **04/25/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

See attached CD RFI # 383 SK1 to SK3 for items 1 to 3:
Drawings A1-2502 (SK1), A1-2892 (SK2), A1-2951 (SK4), and 1/A1-2951 (SK5) show a valley. A valley is not shown on S1-2502 and S1-2602 and it is not clear what the intent is for the structural framing:
1) In order to keep the diagonal brace framing along Grid H in one plane (shown in blue), it is necessary to introduce a valley as indicated by the red line. If not, twisting will be introduced into the framing and connection details 3/S15025 at Grid 1.4 and 1/S1-5018 at Grid 2. Per Note 6 on S1-2602 the beams are canted to match the slope of TPG1 on Grid 2 but the BU-40 on Grid 1 is horizontal. This will result in the beams having to twist. To avoid this a valley as shown on the architectural drawings is required. Please confirm a valley as indicated by the red line is required or clarify/supply the top of steel elevations between grids 1-2.
2) If a valley is introduced, all beams crossing the red valley line will need to be broken-back/bent beams. Please supply a detail showing the splice at the bend lines.
3) If the valley is to occur, please clarify the location of the valley as drawings A1-2502 (SK1) and A1-2892 (SK2) show conflicting information. The same condition shown here also occurs between Grids 1-2/B-D, 32.4-33.5/B-D & 32.433.5/F-H. The same condition except opposite shown here occurs between Grids 1-2/F-H on the roof park level.
4) It is not clear on S1-2606/S1-2607 where the east-west slopes start east of Grid 31.7. Please clarify the framing.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1.) A valley is not required. See specific comments for Bus Deck and Roof Park Levels below:

At Bus Deck Level, an additional top of steel elevation is provided within the deck zone bounded by Gridlines 1&2 and E.6&H. Top of Steel at Gridline 2/G can be calculated as 55' 10 3/8" by linear interpolation using the top of steel information provided at Gridlines 2/E.6 (at column face) and 2/H. At GL 1.4/G top of steel can be assumed the same as 2/G therefore the diaphragm truss is in single plane. Metal deck will need to be slightly warped at other parts of this zone, where two way slopes are present. Ultimately, thickness of the structural topping slab can be adjusted locally to achieve the slab slopes per architectural drawings.

At the Roof Level, following info is provided for the deck zone bounded by Gridlines 1&2 and E.6&H. East-west running beams are to be set perpendicular to TPG1. These beams will land on the Gridline 1 slightly rotated however rotation is small resulting in an approximately +/- 1/8" vertical deviation at the tips of the east west running beams' flanges with respect to the GL 1 beam. Metal deck will be slightly warped at this zone. Per our estimations, metal deck steel beam gap/clash is in +/- 1/16" range which can be addressed by small amount of warping in the metal deck.

2.) See response to (1).

3.) A valley is not required. Information provided in item 1 is applicable to the locations noted in this question at the Bus Deck and Roof Levels.

4.) In Sheet S1-2607, East-West slope starts at GL 32.4 as indicated Sheet S1-2607 (between gridlines 32.4/D4 & 32.4/E.6). As indicated in item 1, metal deck will be slightly warped in this area where two way slopes are present.

T-1322.1	**SSS - West Zone Bus Level and Roof Level Grade Clarifications**	**Closed**	**05/16/2014**	**05/26/2014**	**06/02/2014**	**Potentially**	☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 383.1 SK1 to SK6 for items 1 to 10:
The noted (2) skewed W40x277 form part of the bracing system and must remain in the same as the other braces.

This means that the noted W40x149 & W36x231 will not align with the top of the W40x297 on Grid 1.
1) Please advise how to make the moment weld for the for the W40x149 to the W40x297 with the flanges not aligned.

2) Please supply a detail showing how the deck will be supported at the (2) lowered beams.
3) Due to the beams not being aligned, confirm it is acceptable to connect these beams with shear plates per 1/S1-5011
4) Confirm it is typically acceptable to lower the beams to align the corner of the flange with the top of the supporting beams as some connections are moment connections.
5) Review all items on SK2 and confirm they meet the design intent.
6) The noted (2) skewed W40x277 form part of the bracing system and must remain in the same as the other braces. This means that the (4) noted beams will not align with the top of the W40x297 on Grid 33.5. Please supply a detail showing how the deck will be supported at the (4) lowered beams.
7) Confirm the T/Steel elevation at this location is EL. 55'-8 9/16 based on the north/south slope to keep the diagonal bracing in the same plane.
8) Confirm the noted (2) beams will be canted to match the other beams based on the slope on TPG1 on Grid 2.
9) Review all items on SK5 and confirm they meet the design intent.
10) This is to confirm the response in RFI SK515 item 4: All beams within the blue boundaries on SK6 will slope as needed the have the top of beams flush with the top of the supporting beams per the noted T/Steel elevations. The east/west beams between Grids 32.4-33.2 will be canted to match the canted beams west of Grid 32.4.The east/west beams between Grids 33.2-33.5 will be canted to match the slope of the beams on Grid 33.2. Please confirm.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). The W40x149 (0.83" thick flange) may be lowered so that the complete penetration weld can be made for the top flange because W40 x 297 has a 1.65" thick flange. For the bottom flange weld, a plate might need to be added in order to achieve the complete penetration weld.

2). The T/STL for W40 x 149 is not necessarily controlled by the diagonal brace, as the type G drag connection detail (1C/S1-5018) has called for shim plates as required.

W 36 does not need to support the metal deck.

3). Yes, the E/W beams between Grids 1 & 2 may be changed to a single shear plate connection as shown on 1/S1-5011 with the following 2 conditions:

a) Type X bolts should be used for W21 and W24 beams.

b). One row of bottom flange bracing should be provided for the W21 and W24 beams between Grid 1.4 & 2 per detail 8/S1-5015.

4). Confirmed

5). Confirmed.

6). See responses #1 & 2

7). Confirmed

8). Confirmed

9). Confirmed, Also see response to items 1 & 2.

10). Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1323	SSS - Bus Deck Level Slab Clarification	Closed	04/14/2014	04/24/2014	04/22/2014	Potentially	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Bus Deck Level drawings S1-2502 thru S1-2507 indicate an S8 type slab, as per metal deck schedule 2/S1-5000, S8 is a 10" structural slab with 4" second pour topping slab. Sheet note #6 on S1-2502 indicates "shear studs are to extend a minimum of 2" into the second pour UON. See detail 9/S1-9004 for perimeter EoS conditions" (S1-9004 has not been provided).

Drawings A1-2892 thru 2987 show a 1" topping slab typically between 10' north of GL D and 10' south of GL F. The slab outside of that region is typically shown as structural slab only.

Confirm that decking drawings will be modeled as per the information provided on the structural contract drawings unless otherwise directed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed. Note that the 4" second pour topping slab is part of the structural slab and studs are to be extended 2" into this 4" topping slab as shown on 4/S1-5003. Studs do not extend into the architectural topping slab. Also, the correct detail reference for perimeter EOS condition is 9/S1-5004.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1324	SSS - BRB Clevis Plate Detail	Closed	04/14/2014	04/24/2014	04/24/2014	Potentially	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Skanska is the process of incorporating the AAN BRB Shop Drawings from Star Seismic into the Tekla model.

During the integration process we have identified a deviation from certain dimensions shown in the contract documents. Specifically, the 2" dimension shown from edge of clevis to top of concrete at the ground level connection and the 5" dimension shown from edge of clevis to the bottom flange of W section above.

Below, is a table showing the "As Detailed" dimensions at each BRB.

Please confirm that the 2" & 5" dimensions shown on S1-4206 are not controlling dimensions and the lengths of the BRB's from WP-WP as designed, detailed and approved, control.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Provided dimensional deviations from contract documents are acceptable at all locations except for BRBs at GL 4-5/F; 28-29/D.4, 29-30/D4 and 30-31/D.4.

At GL 4-5/F, provide bottom clearance between 2" and 3" (2" ideal) and a top clearance between 5" and 6" (5" ideal).

At East Building BRBs (28-29/D.4, 29-30/D4 and 30-31/D.4), it is not clear from the RFI that the contractor understood the design intent at the bottom clevis plates. At the bottom, 2" clearance to the clevis plate applies from the top of the finished floor (not the top of structural concrete slab) since these braces are exposed. See BRB elevations (S1-4150) and the corresponding detail (1/S1-4206) for this info. Note that the finished floor at this location slopes down to East and this information shall be coordinated per

civil/landscape drawings as applicable. For these BRBs, top clearances indicated in the RFI are acceptable in current form.

T-1324.1 **SSS - BRB Clevis Plate Detail** **Closed** **05/08/2014** **05/18/2014** **05/21/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Skanska has incorporated the response to RFI T-1324 into the drawings and made the necessary adjustments, while maintaining the required stiffness factor, at gridlines 28-29/D.4, 29-30/D4 and 30-31/D.4. These adjustments have been submitted under submittal package TG0701-415.4.

However, after discussions with Star Seismic, at GL 4-5/F the stiffness factor plays a limiting role into modifying the length of the brace. Please see the attached stiffness and over strength analysis, provided by Star Seismic, and confirm that the brace lengths may stay the same as previously approved in TG0701-415.2.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

GL 4-5/F dimensions shall be as indicated in RFI T-1324. It is acceptable to have a stiffness ratio of 11% as shown in the calculation submitted by the Contractor. We also note that there may also be other ways to achieve the required pin-to-pin dimension and the required stiffness multiplier called out on the contract drawings. Also, it is not clear why the yield zone length is reduced by 16" whereas the pin-to-pin dimension is reduced by 6" in the calculation. With a longer yield zone length a lower stiffness multiplier can be achieved.

T-1325 **BGP - Partition Wall Details From ASI 110** **Accepted** **04/15/2014** **04/25/2014** **04/15/2014** **Potentially** ☐

From: Shimmick Construction Company, Inc Sylvia Hartanto **To:** Webcor Construction LP Claude Titche **Answered By:** Webcor Construction LP Claude Titche

Co-Author:

REQUEST:

Please provide elevation and reinforcement details for partition walls on the Train Level added to TG0600's scope as part of ASI 110.

Additionally the dimensions for the partition walls were deleted between ASI 107 and 110. Please confirm ASI 107 dimensions or provide new dimensions for ASI 110 drawings. The ASI 110 drawings in question are AI-2122-2127, AI-2222-2227, and AI-2230.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please refer to Field Order 00027, 100% Main Package Drawings, "Issued for Construction" dated 3/31/14

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1326	BGP - Vehicle Ramp End Support Beams	Closed	04/16/2014	04/26/2014	04/22/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference AI-7401 rev 4 and SI-2251 rev 5. Please also reference RFI T-0835

1. S1-2251 shows additional beams added to vehicle ramp that intersect the South and West foundation walls. A 1-7401 does not appear to show the same quantity of beams intersecting the south perimeter wall. Please supply a revised architectural drawing or detaill that shows any/all beams that are added from S1-2251, and that shows the angles at which those beams intersect walls.

2. Please confirm AI-7401 revises the beam intersecting angles that were provided in RFI T-0835.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. A1-7401 has been updated to show beams, including angles at which they intersect the foundation wall. Refer to SKA-3138 attached.

2. The intersecting angles for Beam B142 (previous beam mark B43), B125 and the 16" wall are confirmed. B132 has been removed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1327	BGP - Lower Concourse Beam Locations	Closed	04/16/2014	04/26/2014	04/19/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please confirm the bellow structural beam updates should be incorporated into the TG06 Scope of work.

1. CB24 is required between Grids 4 and 5. Beam centerline to be located 12'-3" south of Grid C.3.
2. B1 shown west of Grid 5 at approximately Grid B.6 is not required and can be deleted from scope.
3. The pair of B4's shown east of Grid 5 near Grid B are not required (opening has been removed). Beams can be deleted from scope.
4. B24 is required between Grids 6 and 7. B23 is required between Grids 7 and 8. South face of both beams shall be located approximately 27" north of Grid E.6 and align with the northern most face of trestle pile blockouts in order that they not be interrupted by the blockouts. The coordinated location of the beam with blockouts will be submitted on the comprehensive layout drawings. RFI T-1040 response is superseded as is RFI T-876. Section 2/S1-3501 does not apply. SKS-0343(attached) will detail the section across drop.
5. B25 is required between Grids 7 and 8 near Grid B.6. Beam will align with B29 to the west.
6. CB15 is required between Grids 10.1 and 11 near Grid

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Confirmed.
2. Confirmed.
3. Confirmed.
4. Confirmed.
5. Confirmed.
6. Confirmed.
7. Confirmed.
8. Confirmed.
9. Confirmed.
10. Confirmed.

Stacy Wilson 4/21/2014
Pending TJPA approval, a CR will be issued seeking a credit for the deleted beams

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

C.7. Beam centerline to be located 10'-4 north of Grid D.
7. Beam between Grids 13 and 14 near Grid B.5 will frame escalator opening and be marked B12. Beam will be located at edge of opening shown on A1-2844. To minimize potential congestion at overlapping beams, beam between Grids 12 and 13 near Grid B.6 marked B9 will be located such that the north face of beam aligns with the south face of adjacent beam B12.
8. B15 is required between Grids 14 and 15, 5'-10" south of Grid B.
9. B53 is required between Grids 20.1 and 21 near Grid C.4 at the north face of the escalator pit. A B53 is also required at the south face of escalator pit. B4A is required at the west face of escalator pit between B53's. Companion B54's between Grids 21 and 22 will align with B53's. Beams will be located per pit dimensions given on A1-2845.
10. CB8 is required between Grids 33.2 and 34. Beam centerline will be located 6'-4" south of Grid G.

Beam locations will be submitted for review with the comprehensive layouts.

T-1328 **BGP - Vehicle Ramp End Support Embeds** **Closed** **04/16/2014** **04/26/2014** **04/21/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference Sl-2251 rev 6, Sl-3401 rev 7and S1-3411 rev 3.

1. Clouded area of attached Sl-2251 shows beam types: B125, B132, B141 and B142. B125 is a 24" wide beam, B132 is a 22" wide beam, B141 is a 48" wide beam and B142 is a 30" wide beam. Sl-3411 DI & DI0 depict the beam support embed. These two (2) details are for a 24" wide beam and a 48" wide beam only. Please provide details for 22" and 30" wide beams.

2. See attached Sl-3411 DI & DI0. Embed details call out 1-1/4" threaded rod Fl554 GR55 w/ 2-1/2" x 2-1/2" x 1/2"

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. End support for beam B132 (22" wide beam) to follow detail 1/S1-3411 as shown on plan 1/S1-2251; corbel width to be 2'-0". For end support of beam B142, see SKS-0344 attached.

2. Rods to be provided with matching nuts as required Specification 03 20 00, Section 2.3.F. Welding of plate washer to L8x8 is not required.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

PL washer. Please clarify how the plate washer will be attached to the threaded rod and/or embed? Will the designer require any type of nut or weld that is not depicted?

T-1329 **BGP - Lower Concourse Beam Locations, Added Beam** **Closed** **04/17/2014** **04/27/2014** **04/21/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please confirm the below structural beam update should be incorporated into the TG06 Scope of work.

1. CB15 is required between Grids 14 and 15 near Grid C.3. Beam centerline to be located 7'-1 ¼" south of Grid C.3.

Beam locations will be submitted for review with the comprehensive layouts.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed

T-1330 **BGP - Glass Guardrail Embeds at B1 Beams** **Closed** **04/17/2014** **04/27/2014** **04/24/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference RFI #T-0440 and #T-0440.1 responses and the attached Contract Drawings S1-3410, Sl -2203, and Sl-2204.

The detail for the glass guardrail embed depicted in 7/Sl-3410 calls for a 3/8"x7" embed with an 8" minimum coverage for the top embed and a 6 1/2" minimum coverage for the bottom embed. The guardrail embeds located at B1 beams on the east side of openings between GL 11/12 and D.8/E.2 (Sl-2203) and GL 18/19 and B/C (Sl-2204) will not have minimum sufficient coverage due to the 18" beam depth of Bl beams (see attached photo).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Bottom embed plate at B1 members not required. Additional supporting member to be included as part of Phase 2 scope. Top embed plate at B1 to be placed with 8" min coverage and align with top embed at supporting concrete girders.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please provide a detail for glass gaurdrail embeds at the B1 beams. Please note, these specific embeds have been fabricated and are onsite

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T-1331 **SSS - Missing Stair ST301 Information** **Closed** **04/17/2014** **04/27/2014** **05/05/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 389 SK1 to SK7 for items 1 to 12:
1) The noted W16x26 beams are centered below the concrete wall on S1-2303. Confirm the lower beam may be moved below the stair post or supply an alternate solution.
2) The noted W16x26 beam is centered below the concrete wall on S1-2303. Confirm it may be moved below the stair post or supply an alternate solution.
3) Supply all clouded dimensions on SK2 thru SK7.
4) Confirm equal spacing.
5) It appears the noted stair stringer connects to the HSS post. Please supply the missing connection detail.
6) The plan shows a moment connection but detail 3/S1-5012 does not. Please clarify the intent for the beam to post connections at (8) locations.
7) 9/S1-7601 is not the correct detail because it shows an HSS beam and we have a W21x50 at this location. Please clarify and note that detail 3/S1-7601 will not work as the edge of slab is 7" from beam center.
8) This dimension is 7" per S1-2403. Confirm 7" is correct.
9) Confirm the "CB" notation should be removed.
10) The minimum distance between the center of post and the W10x22 must be 1'-1 3/4 in order to connect per 3/S1-5012 and 1/S1-5010. Supply alternate connection details if the dimension is less.
This is a typical occurrence on all stairs.
11) The red dimensions match the dimensions shown in detail 3/S1-7006 (SK3). Please clarify the discrepancy in dimensions.
12) 9/S1-7601 is not the correct detail because it shows an HSS beam and we have a W21x50 at this location. Please clarify and note that detail 3/S1-7601 will not work

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Not acceptable. Provide a W16x26 beam centered on the two HSS posts as shown in the attached sketch SKS-0350. Provide shear plate connections per 1/S1-5011 at the ends of this beam. The W16x26 beam will be added on the structural drawings in the next ASI.

2) See response to 1).

3) Refer to architectural drawings A1-7006, A1-7501, A1-7502 and 3/A1-7506 for the stringer and landing beam locations.

4) Align the intermediate W10 beams to the stringers.

5) Correct detail reference at the 8 locations should be 6/S1-5012.

7) Detail at the highlighted location is similar to 3/S1-7601 except the stringer shall be welded to the bent plate at the edge of slab and not the WT.

8) Confirmed.

9) Confirmed.

10) Provide shear plate connection per 1/S1-5011 at the W10 stair beams typically at such locations where double angle connection is not possible.

11) Refer to architectural drawing A1-7006 for correct post locations.

12) See response to 7).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

as the edge of slab is 6" from beam center.

T-1331.1 **SSS - Missing Stair ST301 information** **Closed** **05/15/2014** **05/25/2014** **05/29/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

This is a follow up to Skanska RFI 521 which was sent on April 14, 2014. Please answer question #6 below which was
not answered in the RFI response T-1331.

See attached CD RFI # 389 SK1 to SK7 for item 6:

6) The plan shows a moment connection but detail 3/S1-5012 does not. Please clarify the intent for the beam to post
connections at (8) locations.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Moment connection symbol shown on the plan is correct. The referenced detail should be 6/S1-5012.

T-1332 **SSS - Offset Connection Details at PE301-302** **Closed** **04/17/2014** **04/27/2014** **04/28/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 392 SK1 & SK2 for items 1 to 7:
1) Confirm connection at offset beams as was typically requested in RFI T-1299.
2) Confirm connection at offset beams as was typically requested in RFI T-1299.
3) Confirm connection at offset beams.
4) Confirm connection at offset beams as was typically requested in RFI T-1299.
5) Confirm the short W16x26 beam on the west side of Grid 8 may be relocated to align with the W30x108.
6) Connections will foul. Supply an alternate detail.
7) Connections will foul. Supply an alternate detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.

2) Confirmed.

3) Confirmed. We assume that the 9" offset shown from the W24x76 beam is to the C-channel adjacent to the circular opening.

4) Confirmed.

5) Confirmed.

6) Reduce the "Leh" distance to 3" and the distance between the beam end and the column flange to 1/2" at the W40x493 connection. Provide shear plate

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

connections per 1/S1-5011 at the W30x90 and W33x118 beams framing into the W40x593 beam.

7) Reduce the "Leh" distance to 2", number of bolt columns "N" to 4 and the distance between the beam end and the column flange to 1/2" at the BU56 connection. Provide shear plate connections per 1/S1-5011 at the W30x90 and W16x36 beams framing into the BU56 beam. The W30x90 and W16x36 beams may be moved by a maximum of 2" to clear the connection.

T-1333 **SSS - Bolt Edge Distance at Weld Access Hole** **Closed** **04/17/2014** **04/27/2014** **04/28/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 395 SK1 & SK2:
The weld access hole as shown on SK1 will create an insu fficient edge distance for the 1 1/2" diameter bolt at this lo cation.
Please confirm this will be acceptable as modeled.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

RESPONSE 2
George Metzger 4/28/14

Bolt nearest to the weld access hole as shown on SK2 need not be provided.

T-1334 **SSS - Curved Vertical E.O.S. Plate Connection at Light Column** **Closed** **04/17/2014** **04/27/2014** **04/28/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached detail titled, "Built-Up Plate Assembly" (Skanska RFI SK1) for radius plate assembly.
Confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

T-1335 **SSS - Roof Deck HSS Bracing** **Closed** **04/17/2014** **04/27/2014** **04/28/2014** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 319.1 SK1 to SK3 for items 1 to 4:

1) Confirm this general layout locating the shop splices is acceptable.
2) Confirm dimensions.
3) Confirm dimension.
4) Confirm location points for 1/2x3 stiffeners.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.

2) Confirmed.

3) Not acceptable. The weld between the thru shear plate and the HSS column shown on 9/S1-7632 varies from 1/2" to 3/4" per schedule 8/S1-7632. The dimension should vary accordingly.

4) It is unclear what is referred to as "location points" and what needs confirmation. PJP welding shown on the sketch to connect the 1/2 inch thick stiffener plates to the column and the beam comply with what is called out on detail 4/S1-7632 and are acceptable.

T-1336 **SSS - API 5L X65 Pipe to A216 WCC Casting (Field Weld) PQR** **Closed** **04/17/2014** **04/27/2014** **04/29/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Skanska is currently procuring weld test plates for qualifying field welds to API-5L Grade X65 pipe. For this, we
propose to use API 2W plate. Whereas API 5L is strictly a pipe specification, API 2W is a plate specification but is commonly rolled and welded to create API 5L pipe. Below is a direct comparison between API 5L Gr. X65 allowable chemical and mechanical properties with our proposed API-2W plate material. Values for the plate are taken directly
from the MTR for the plate we propose to use (attached and highlighted). All values for the API 2W plate we propose
to use meet the requirements of the API 5L Grade X65 specification. Please confirm it is acceptable to use the API 2W
plate for our PQRs.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractor's request is not acceptable in current form. Please provide additional information. Is this request for welding qualifications only? Which grade of API 2W is to be used? Provide API 2W corresponding specification with the RFI or mill report that shows that the material qualifies for API 5L X65 use. Verify if the material that is being proposed to be used for welding qualifications is subject to Buy America clause or not. If it is, please verify it complies with it.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1337	SSS - Train Box Column Cap Plate at GL18	Closed	04/17/2014	04/27/2014	04/29/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

The Train Box Column cap plates at GL 18 as shown on 5 A/ S1-5050 have been ordered and modeled as 3-1/2" thick
plate instead of the 3-1/4" shown. The column flange and web length have been adjusted accordingly.
Please confirm it is acceptable to proceed with the 3-1/2" thick cap plate.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1338	SSS - Gridline 18 - Gravity Moment Connections	Closed	04/17/2014	04/27/2014	04/25/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Adamson Associates, Inc. Paul MacPhail **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

At the Roof Park level drawing S1-2604 at near grids F/18 & D/18 detail 8/S1-5032 is called out at the noted locations

shown on sketches CD RFI 394 SK1 to SK3.
Due to the large tapered girder and the requirement of a moment connection at these locations the doubler plate size
has been modified to allow for the 11/16" all around fillet weld called for in detail 8/S1-5032.
1) Confirm that doubler plate modifications shown on CD RFI 394 SK2 are allowed.
2) Confirm that doubler plate modifications shown on CD RFI 394 SK3 are allowed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1-) Confirmed.

2-) Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1339	SSS - Deck Support Steel at Step in Slab GL 12-14	Closed	04/17/2014	04/27/2014	04/30/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Refer to SK-1 thru SK-3 for 3 locations at step in slab between GL 12 - 14:
1) At section A-A on SK-2 an extended WT will expose the flange through the conc rete. Confirm a bent plate as per SK-3 is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed. Provide a 3/8"x3" full depth stiffener at the W24 beam (same side as the bent plate). Provide 1/4" double sided fillet welds for the stiffener (3 sides - web, flanges). The stiffener shall be located at the middle of the bent plate span.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

2) At section B-B on SK-2 support is required at the extended upper deck over the W12x14 (A4987). Confirm a WT can be added per section B-B.

2) WT is not required. Provide an 18 gauge Z-shaped closure plate to close between the upper and lower decks.

T-1339.1 **SSS - Deck Support Steel at Step in Slab** **Closed** **05/23/2014** **06/02/2014** **06/13/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

RFI SK534 (T-1339) addressed steps in the ground floor slab which occurred between grid lines 12-14. This condition also occurs between the following grids: 2-3, 3-4, 8-9 & 9-9.9 (16 locations).

Item #1 added a 3/8" bent plate to support the upper level deck and can be applied at two locations between grid 2-3 as indicated on SK1. At the other 14 locations the step is similar to item #2 of T-1339 which added an 18 gauge Z closure. At grid 12-14 the perpendicular support beam is located within 1'-9" of the step, at the 14 locations listed above the support beam varies from 2'-0" to 6'-0" and at two locations at grid 2-3 no support beam is provided. Refer to SK3 for clarification.

Please confirm the 18 gauge Z is sufficient to carry the load of the deck at the 14 locations or provide an alternative detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Provide a WT per 4 or 5/S1-5002 at locations where the distance between supporting beams is greater than 3'. At other locations where the distance between beam is less than 3', a Z closure plate is sufficient, however, the Z closure plate is not correctly shown on SK3. See attached sketch SKS-0357 for correct extents of the Z closure plate.

T-1339.2 **SSS - Deck Support Steel at Step in Slab** **Closed** **06/18/2014** **06/28/2014** **07/09/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

The response to RFI T-1399.1 indicated the zee closure was incorrectly shown on SK-3 and shall be supported on

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Option 1 is not acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

the lower beam, not on top of the deck. We agree the closure would be best supported on the lower beam, however the closure was placed on top of the deck so that the lower deck could bear 3" on the beam as is required for a type 3 deck as per 2/S1-5000.

SSK-0355 revises the closure so that the bottom leg is underneath the lower deck and the top leg is above the upper deck. This creates several problems for installation. The most significant being that the closure now needs to be installed before the deck. Typically closures are installed after the deck so that the deck can be used as a working platform. SSK-0355 would require the installation of the closure on open iron, which while possible is not a safe working practice.

Option 1: As a proposed solution to the issues indicated above, we propose to increase the beam size at the step from a W12x14 to W12x26 which has a 6-1/2" wide flange. We would also revise the zee shaped closure to a cee shaped closure with the top leg placed underneath the upper deck (see detail A SK-1). Also at locations where a WT will be added, a W12x14 will only be left with about 1-3/4" of exposed beam flange for bearing, instead of the required 3", increasing this to W14x26 will provide the required bearing (see detail B SK-1).

Option 2: As an alternative, at locations where the top deck spans less than 3' the top deck load will be primarily supported by the upper WF beam. As detailed in SK-2 the zee plate will only act as a closure with minimal deck support and can be installed after the deck if allowed to bear on top of the lower deck. Note: this alternative does not provide a solution of the 1-3/4" bearing issue on detail B SK-1.

Please confirm if option 1 or 2 is acceptable.

Option 2 is acceptable. The 3" minimum bearing requirement may be waived and a bearing of 1-3/4" is acceptable at locations where detail B on SK-1 is applicable.

T-1340 **BGP - Mechanical Room B2228 Pier/Wall Location** **Closed** **04/18/2014** **04/28/2014** **04/30/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Please see attached drawing showing the location of the west wall in the IDF Room B2228 located in the Area 3 mechanical rooms. Typical pier width dimensions for the mechanical rooms are 24" and are not typically dimensioned out in the plans. Based on scaling, the pier in the northwest comer of Room B2228 is 16"x28". However, this pier was labeled as a 16"x24" pier in the rebar shop drawings (see Submittal TG0600-301.2) and as a result the dowels for the west wall were placed 4" to the west to align with the pier edge.

Please confirm that this new location is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The west wall of IDF Room B2228 at the B2 level cannot be moved 4" to the west to align with the 16x24 pier due to Building Code Accessibility and Egress requirements for the adjoining room at Phase 2 build-out.

T-1341 **BGP - Plumbing Opening in Mechanical Room B2203** **Closed** **04/18/2014** **04/28/2014** **04/28/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please see attached drawing for clarification regarding dimension of the plumbing opening above the door in Room B2203. In Al-9215, the door opening and distance between piers is scaled to be 3' -5" and was submitted as a 3 '-5" opening per approved submittal TG0600-102. However in A1-9217 a plumbing opening with a dimensioned width of 3' -11" is shown to span the distance between the piers. If the 3 '-11 " opening dimension is correct as shown, the blockout would cut into the piers. Please confirm the dimension of the plumbing opening and whether or not it is intended to cut into the piers. Please note that the pier dowels have already been installed with the 3'-5" span per approved submittal TG0600-102.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The 3'-5" width dimension for the door opening in between piers, described in this RFI, is correct. For updated plumbing opening above the door at Stair 203 (Room B2203), refer to the attached SKA-3142 and SKA-3143.

T-1342 **BGP - Partition Wall Thickness Above Door Openings** **Closed** **04/21/2014** **05/01/2014** **05/01/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Both the Architectural and Structural Drawings of the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For door openings in Reinforced Concrete and CMU

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

partition walls show the plan view at the base of the wall and do not indicate the thickness of the wall above the door openings. Please clarify wall thickness above door openings in partition walls.

partition walls, the wall above the doorway is the same thickness as the adjacent run of wall. To clarify, for example, where the wall is 10" thick CMU and there are 1'-4" thick piers on both sides of the doorway, the wall above the doorway will be 10" thick CMU.

T-1343 **BGP - Lower Concourse Slab Edge and Penetrations** **Closed** **04/22/2014** **05/02/2014** **04/22/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Webcor Construction LP Claude Titche

Co-Author:

REQUEST:

See attached sketches.

Sketches 3132-3137 incorporate changes made to slab edge dimensions and penetrations through the lower concourse as a result of the TG0600-121 submittal review comment and 3.31.2014 IFC drawing set coordination meetings. Please confirm these sheets are to be incorporated into the TG06 scope.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Ethan Heinrich
4/22/2014

This RFI is rejected. Please see specification 01 10 40. RFIs shall not be used for questions relating to coordination between trades, or a division of work among Trade Subcontractors.

T-1343.1 **BGP - Lower Concourse Slab Edge and Penetrations** **Closed** **04/23/2014** **04/23/2014** **04/29/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

See attached sketches.

Architectural sketches SKA 3132-3137 incorporate updates made to slab edge dimensions and penetrations through the lower concourse as a result of the TG0600-121 submittal review comment and 3.31.2014 IFC drawing set coordination meetings held between AAI, WSP, TT, MDS, SCCI, WOJV and TCCO. Please confirm these sheets are to be incorporated into the Transit Center construction scope.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Architectural Sketches SKA 3132-3137 have received updates based on the workshops mentioned in the RFI.

For information to be incorporated into the Transit Center Scope, please refer to the attached updated SKAs listed below:

- SKA-3132_R2
- SKA-3133_R2
- SKA-3134_R2
- SKA-3135_R1
- SKA-3136_R1

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- SKA-3137_R1

Modifications from the original documents have been identified with colored clouds as follows:

Magenta - items previously shown on the SKAs for the workshop sessions Blue - items updated subsequent to the workshop sessions.

T-1345 **SSS - Dimension Confirmation for Locating Bolts at GL 16** **Closed** **04/22/2014** **05/02/2014** **04/28/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 336 SK1 & SK2:
Confirm it is acceptable to increase the 2" dimension to 3" in order to locate the bolts at the locations provided in RFI SK 193C.*

*RFI SK 193C was answered internally by Skanska. The relevant sketch is attached below.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

T-1346 **BGP - Column Jackets at Lower Concourse, Vehicle and Bike Ramp** **Closed** **04/23/2014** **05/03/2014** **05/06/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference AI-2842 rev 5, AI-2847 rev 4, AI-2850 rev 5, AI-2853 rev 6, AI-9213 rev 0 and SI-3503 rev 2.

1. See AI-2842, AI-2847 and AI-2850. Please confirm these are the locations of columns to receive column jackets on the concourse level.

2. See AI-9213 details 5 through 8 and AI-2853. These details show 1/2" thick ring with 8" long welded studs (to be used for the installation of column jackets) at the base of columns on the concourse, bike ramp and vehicle ramp

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

WOJV received revised response 5/8/2014

1. Confirmed. These columns receive column jackets. We do not show detail references for column jackets at Slab Edge Plans - Refer to the following Lower Concourse Level Zone Plans and Enlarged Plans issued with the MEP Add #3/ASI-116 showing detail references for column jacket details: A1-2202, A1-2207, A1-2210, A1-3005, A1-3006, A1-3007.

2. For columns that receive jackets at the ramp area,

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levels. AI-2853 does not depict any column jackets at the bike or vehicle ramp levels. Please provide a detail that depicts which columns are to recieve jackets at the bike and vehicle ramp levels.

refer to SKA-3236 (Updated A1-2250 - Enlarged Ramp Plan). Refer also to A1-9208 (Column Detail Plans, Section References, and Notes) and SKA-3237 for updated A1-9213 (Column Section Details).

T-1347 **BGP - Column Jacket 1/2" thick x 4" wide Base Plate at Concourse** **Closed** **04/23/2014** **05/03/2014** **05/05/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference S 1-3503 rev 2, detail 6, AI-9208 rev 0 and AI-2842 rev 5.

1. Please see clouded areas of AI-2842. Please confirm 1/2" thick x 4" wide ring base plate is to be continuous around the entire column per details on AI-9208. Please confirm the designer does not want 1/2" ring to be coped where it intersects walls.

2. If coping is required, please provide details or direction on coping the 1/2" thick column jacket base plate.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The 1/2" thk x 4" wide ring plate around columns are coped at walls. For updated A1-2842, refer to attached SKA-3140.

For the pilasters (i.e. columns within the ramp walls) we need continuity between the pilaster element and the wall. The ring plate and steel jacket will need to be coped at the walls.

T-1348 **BGP - SFPUC Electric Room Copper Mesh** **Closed** **04/23/2014** **05/03/2014** **04/29/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

The response to RFI 1220.1 included E1-3212 which details the embedded grounding required for the SFPUC Electric Rooms. Note 5 indicates that a #6 copper mesh is to be installed.

Please provide the following information:
1) Type of mesh (Pure Copper or Copper Coated Steel)
2) Required spacing for grid of mesh

In addition, please provide a drawing with the dimensions to the location of the #2/0 copper pigtails which stub up

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

REVISED RESPONSE

1) Mesh shall be copper. Copper coated steel is not acceptable. Erico or equal.

2) Required spacing shall be 8" x 8"

The copper pigtails may be stubbed up anywhere within the switchgear footprint/elevated pad area.

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into the future switchgear enclosures.

T-1348.1 **BGP - SFPUC Electric Room Copper Mesh** **Closed** **05/29/2014** **06/08/2014** **06/04/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference plan sheet El-3212.

1) Note 4 on plan sheet El-3212 states, "Cadweld main #4/0 grid to #6 mesh with #1 stranded Cu conductor (typical). Refer to Detail 1/El-3212." Detail 1/El-3212 does not show a #1 copper conductor connecting the grid to the mesh. Please confirm the 4/0 grounding grid is to be connected directly to the grounding mesh.

2) Please see the attached Detail 5/El-3212. Please identify which part of the grounding grid system the highlighted portion belongs to and provide the proper wire size.

3) Detail 5/El/3212 designates the embedded conductors going to the battery rack as #2. Please confirm this means #2 AWG copper conductors. In addition, no designation is provided on Detail 4/El-3212 at the pigtail which appears to be for the battery rack in B1289. Please confirm this is pigtail is to be #2 A WG conductor as well.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) The #6 mesh is to be interconnected to the grounding grid in several locations. Where the #4/0 grid crosses or contacts the mesh, it could be directly connected. Additional connections to the #4/0 grid are required from remote parts of the mesh. These interconnections shall be made with #1 bare CU connections.

2) The Detail 5/ E1-3212 did not convey a numbered note for this connection. Similar to the response to question 1, this connection refers to additional bond points (using #1 bare CU conductors) between the #4/0 ground grid and the grounding mesh.

3) Yes, the callout refers to using #2 AWG bare CU to the battery racks. The pigtail in Detail 4/E1-3212 is also required to be #2 AWG bare CU to the battery rack.

T-1348.2 **BGP - SFPUC Electric Room Copper Mesh** **Closed** **06/09/2014** **06/09/2014** **06/17/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Turner Construction Comp Judith Long

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

The response to RFI T-1348.1 stated the #6 mesh shown

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger: 6/13/14

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

on El-3212/Detail 1 is to be interconnected to the grounding grid at "several locations" and that the #4/0 grid could be "directly connected" where it crosses or contacts the mesh. This response also stated that all other connections are to be #1bare CU connections.

I) Please provide the exact quantity of connections which are required from the #4/0 grid to the #6 mesh.

2) Please provide the interval distance between required direct connections from the #4/0 grid to the #6 mesh.

3) Plan sheet shows six (6) total #1 "remote connections" in each room. Please confirm this is the proper quantity required.

Per TJPA(Guy HOllins) direction, this RFI shall be redirected to the TJPA to forward to SFPUC for response.

Matt Ho 6/17/14:
1) RESPONSE: Referring to Details 4 and 5 on Sheet E1-3212 for the West and East Switchgear Rooms, we count 16 locations in the West room and 17 locations in the East room that offer an opportunity to connect the #6 mesh to the #4/0 grid. These locations include all interconnections of the #4/0 grid to ground riser conductors, grid cross connections, grid to pigtails (for equipment grounds), and grid to ground test bar connections.

2) RESPONSE: As noted above, the recommended connections to the mesh do not need to be evenly spaced. The connections can be made by including the mesh in the various connections to the #4/0 grid.

3) RESPONSE: The quantity noted should be adequate.

Response by: Matt Ho, SFPUC dated 6/17/14

T-1349 **BGP - Beam B52 Trestle Pile Conflict** **Closed** **04/23/2014** **05/03/2014** **04/23/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

See attached CD S 1-2202 and sketches.

Trestle pile No. 88 at GL F5 encroaches into the B52 beam by approximateley 6". In liue of creating the blockout in this beam SCCI proposes to shift the beam 8" to the North. Whith the approval of the beam moving concept, following items will be taken into consideration:

1. Adjacent beam B51 , to the West, has long bars and short bars. these will be placed in to layers.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

Ethan Heinrich 4/24/14
Response to RFI comes at no cost to TJPA.

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2. Southmost B51 bars (one long and one short) will miss B52, but continue into the slab. These will not be contained in B52 tie set.

3. Add (1) # 10 long bar on the left of B52 with a hook to the far side of the MFB. Place in the corner of the B52 tie set.

Please confirm if this is acceptable.

T-1350 **BGP - Proposed Revised Location of the Reinforcement Lap Splices at the Lower (Open** **04/24/2014** **04/24/2014** **04/28/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Similar to RFI T-1181:

Please confirm that it will be acceptable to move the horizontal reinforcement lap splices of the concourse deck beams to be located anywhere within the middle 1/3rd span between the moment frame beams. The specific locations of the splices will be per submitted reinforcing drawings.

Please confirm that this would be acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is acceptable to locate Lower Concourse Beam's (long) top and side Bar lap splice location within the middle 1/3 span provided adjusted location does not overlap with (short) top bars and create unplanned congestion.

T-1351 **BGP - Room B2230 Plumbing Opening Conflict** **Closed** **04/24/2014** **05/04/2014** **05/02/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

See attached drawings that show a B48 beam in direct conflict wih the plumbing opening on the South wall of room B2230.
Please confirm the location of the plumbing opening.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For the updated plumbing opening at concrete wall elevations D/A1-9217 and E/A1-9217, refer to SKA-3143.

T-1352 **BGP - Manlift 2 Conflict with EJB and Cast in Strut** **Closed** **04/24/2014** **05/04/2014** **05/01/2014** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

See attached sketch

The manlift 2 lower concourse blockout is in conflict with an electrical junction box and cast in strut.

Please confirm it is acceptable to move the electrical junction box 6inches East to clear the blockout and the cast in strut 6inches North to clear the blockout.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed. Moving the embedded electrical junction box 6" to the East and cast in strut 6" to the North to clear the Manlift 2 Lower Concourse blockout is acceptable.

T-1353 **SSS - Specification Clarification - Rejectable Flaws** **Void** **04/30/2014** **05/10/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Section 05 10 00 - Structural Steel -
1.8 Quality Assurance by TJPA's Testing Agency -
Paragraph D. - Sub. Para. 5 Welding:
contains the following provisions:

c. Complete joint penetration welds: Test all complete joi nt penetration welds for soundness by means of either radi ographic or
ultrasonic testing in accordance with AWS D1.1 and AST M E164 procedures. All flaws in plate or flange material re vealed during
such tests shall be repaired by the Contractor at the Contr actor's expense.

d. Partial penetration welds: Test all partial penetration w elds for soundness by means of visual and magnetic parti cle
inspection, unless other methods are specified in the Cont ract Documents. All flaws in plate or flange material revea led during
such tests shall be repaired by the Contractor at the Contr actor's expense.

Please confirm the intent of the specification is to repair "A ll rejectable flaws in plate or flange material revealed durin g such
tests" in accordance with D1.1 & D1.8 acceptance criteria.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

T-1353.1 **SSS - Specification Clarification - Rejectable Flaws** **Closed** **04/30/2014** **05/10/2014** **05/16/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Section 05 10 00 - Structural Steel - 1.8 Quality Assurance by TJPA's Testing Agency - Paragraph D.
Sub. Para. 5 Welding: contains the following provisions:
c. Complete joint penetration welds: Test all complete joint penetration welds for soundness by means of either radiographic or ultrasonic testing in accordance with AWS D1.1 and ASTM E164 procedures. All flaws in plate or flange material revealed during such tests shall be repaired by the Contractor at the Contractor's expense.
d. Partial penetration welds: Test all partial penetration welds for soundness by means of visual and magnetic particle inspection, unless other methods are specified in the Contract Documents. All flaws in plate or flange material revealed during such tests shall be repaired by the Contractor at the Contractor's expense.

Please confirm the intent of the specification is to repair "All rejectable flaws in plate or flange material revealed during such tests" in accordance with D1.1 & D1.8 acceptance criteria.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

T-1354 **SSS - Response to CS5 Connection Clarification at GL 14** **Closed** **04/30/2014** **05/10/2014** **05/09/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 406 SK1 & SK2:

The revised end connection per CS5 Approval Submittal (Package Number: TG0701-77) drawing 5049 (SK1) will interfere with the connection for the W16x26 as shown. Confirm the double angle connection for the W16x26 may

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

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be replaced with a shear plate connection per 1/S1-5011
or supply an alternate solution.

T-1355 **SSS - CS5 Built Up Frame Beam Dimension** **Closed** **04/30/2014** **05/10/2014** **05/01/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 405 SK1 & SK2:

1'-6 1/4 is correct per A1-2884 as shown on SK2. Confirm 1'-6 1/4 remains the current dimension or confirm that the dimension has been revised to 1'-4 1/4.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

AAI noted correction on shop drawing 2616 is current. Please see Architectural Drawing A1-2884 issued March 31,2014 in the IFC package.

T-1356 **SSS - Deck Support at Slab Opening GL 15** **Closed** **04/30/2014** **05/10/2014** **05/12/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 400 SK1 & SK2:
Supply a detail showing how to support the slab on the we st side of the slab opening.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The slab at the transfer girder is to be supported per 8/S1-3705. Slab just west of the opening shall be reinforced by a C-channel per detail 12/S1-5003.

The response (reference to 8/S1-3705) is called out on the plan and 12/S1-5003 is a typical detail in the Contract Documents. We disagree with the claim that this RFI is a "cost increase" since the data is in the Contract Documents.

T-1357 **SSS - Protected Zone Marking** **Closed** **04/30/2014** **05/10/2014** **05/07/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

In reference to detail 10/S1-4202, please note the following:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The protected zone shall be "painted with yellow strips" as noted on 10/S1-4202.

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To mark the plastic hinging zone, it is indicated that yellow striping is to be applied in addition to mounting a warning sign.

Please confirm that it is acceptable to use a Dixon Lumber Crayon to install the yellow striping. If this is not acceptable, please provide an alternate solution. See attached photo & catalog cut for example.

T-1357.1 **SSS - Protected Zone Marking** **Closed** **07/08/2014** **07/18/2014** **07/14/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Structural detail 10/S1-4202 shows a yellow paint marking to be applied to mask the protected zone. The attached products, J.P. Nissan Co & Brite Mark, are representative of what Skanska feels should be applied to satisfy this requirement.

Skanska's experience with these paint coatings or marking systems is such that it retains its color and adherence to the structural steel well beyond the erection activity and is not detrimental to fireproofing systems. Please confirm that the aforementioned products are acceptable to be applied as the yellow paint marking.

*NOTE - the attached photo does not have the signage displayed; final product will include the signage as shown on 10/S1-4202. In addition, Skanska has spoken to technical representatives from both Carboline (Pyrocrete-40) & Isolatek (Cafco M-II) and they do not foresee any compatibility issues (See SK1 & SK2).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

RFI is rejected, WO to submit with information previously submitted in submittal TG0701-37.

T-1358 **SSS - Elevator Brace Cover Plates** **Closed** **04/30/2014** **05/10/2014** **05/12/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

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REQUEST:

Please see attached RFI SK 525B for reference:

For the rounded cover plate as shown in the CD RFI 393 SK 1, please confirm that it is acceptable to use a cut section of Round HSS that fits over the outside of the brace within 3/16¿. The grade of steel for the HSS cover plate would be the same as the HSS brace.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

T-1359 **SSS - Double Angle Connection Interference GL 8G** **Closed** **04/30/2014** **05/10/2014** **05/09/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 403 SK1 & SK2:
The double angle connection per 1/S1-5010 will not work at the noted location as it fouls the stiffener plate as shown. Confirm it is acceptable to use detail 2/S1-5011 with a one-sided 3/8" PJP weld due to the lack of welding access. If not, supply an alternate detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed. Provide 3 equally spaced bottom flange braces per 8/S1-5015 at the W40x183 beam from the south side.

T-1360 **SSS - Shear Plate Connection Interference at GL 9F** **Closed** **04/30/2014** **05/10/2014** **05/09/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

At grid location 9/F at the ground level (S1-2303) the kicker brace per detail 5/S1-5015 shares the full depth shear plate of the W40x211 above. Due to the position of the bolts at the bottom flange the shear plate cannot be increased to 1" thick, as required by 5/S1-5015, without clashing with the bolts. Reference attached sketch CD RFI # 402 SK1 & SK2.
Please provide a connection for this location that meets all requirements.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The shear plate thickness need not be increased from 1/2" to 1" at the highlighted location. Stitch plates with varying thicknesses may be used to accommodate differences in the thicknesses of the shear plate and the upper gusset plate

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T-1361 **SSS - Bearing Pads foul beam flange** **Closed** **04/30/2014** **05/10/2014** **05/12/2014** **Potentially** ☐

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From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 401 SK1 & SK2:

The Scougal Rubber Bearing Pads (Package Number TG0701-95.1) foul the flange of the W40x327 as shown.

Please provide a solution.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The 2 - 3/4" clearance between the W12x65 beam and the W24x68 beam shown on 1A/S1-5021 may be increased and the bearing assembly may be lowered so that the bearing pads clear the W40x327 flange. Adjust the hanger length accordingly. A minimum clear horizontal clearance of 3/4" shall be provided between the pads and adjacent structure.

T-1362 **BGP - Lower Concourse Confirmation** **Closed** **05/02/2014** **05/12/2014** **05/13/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

See attached submittal sheet D2.28 and sheet E1-2204. Response comment to Submittal Package TG0600-121.1 on sheet D2.28 between gridlines 12-13 B-C, calls out "conduits are now embedded in the lower concourse slab". Per the TG0600-121.1 submittal review comment meeting held on 4/30/14, please confirm that embedded conduits FE045,FE051,FE052,FE058 incorporated on sheet E1-2204 dated 03/31/14 will continue to be surface mounted and blockout will be left in place for penetrating the slab.

Please confirm attached sketch SKA-3148 showing the coupler setting out dimensions for the future corridor wall at B1 level, GL 10, B-C as reviewed with AAI in our slab edge workshop held April 30, 2014

Please confirm rebar for Lower Concourse Floor drains marked "Future" are to be trimmed as detailed on 1/S1-3501 but not blocked out.

For door openings not dimensioned on architectural slab, floor or wall plans, please confirm it is acceptable to size door rough openings in the lower concourse partition walls to be 4.5" larger than doors scheduled on sheets A1-9700, A1-9701, A1-9702. If not please provide a door jamb detail for these openings.

Please confirm that Lower Concourse telecom penetrations shown on slab edge plans A1-2841 through A1-2851 to be 4" x 90 GRS elbows with a factory 30"

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Embedded conduits:

WSP Response: WSP does not object to the proposal of surface mounting conduits and retaining the slab blockout in these specific referenced zones. For other areas where embedded conduits are indicated, WSP recommends the embedment in this phase.

2. SKA-3148 showing coupler setting out dimensions for future corridor walls at B1 Level, GL10/B-C:

AAI Response: Confirmed.

3. Future Floor Drains:

WSP/MDS Response: It is confirmed that the lower concourse floor drains marked "Future" will be trimmed as detailed on 1/S1-3501 but not blocked out.

TT Response: The reinforcement for the Lower Concourse slab at Floor Drains marked as "Future" are to follow detail 1/S1-3501. It is acceptable to trim bars.

4. Door Rough Opening:

AAI Response: As stated in workshop meeting April 30th, 2014, AAI cannot provide rough opening dimensions, as the rough openings may vary between

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

radius as shown on 6/TE1-8014.

manufacturers. It was agreed that WO will check on specified door manufacturers for the appropriate door rough opening requirements and provide this information to sub-contractor.

5. B1 Level Telcom Conduit Penetrations on slab edge plans:

SMW response: 4"x 90 GRS Elbow with factory 36" min - 42" desired radius cast into concrete beam as shown on 6/TE1-8014.

RESPONSE
WOJV 5/13/14

4. Door Rough Opening

For door openings not dimensioned on architectural slab, floor, or wall plans, size door rough openings in the lower concourse partition walls to be 4.5" larger than doors scheduled on sheets A1-9700, A1-9701, A1-9702.

T-1362.1 **BGP - Telecom Cast-In Elbow Radius - Lower Concourse** **Closed** **05/14/2014** **05/24/2014** **05/15/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

See attached RFI T-1362 Response.

The response to RFI T-1362 states that 4"x90 elbows with factory 36" min - 42" radius are to be cast into concrete beam as shown on 6/TE1-8014. This contradicts with the 30" radius called out on sheet 6/TE1-8014 and 30" radius confirmed in the comprehensive layout drawings, TG0600-121.1. Please confirm if the 30" radius elbows currently installed per TG0600-121.1 will need to be swapped out for 4"x90 GRS ELBOW with Factory 36" min - 42", as stated in the response to RFI T-1362.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

WOJV received 5/19/14

SM&W Response: NO, 30" bend radius is not confirmed or approved, the minimum bend radius shall be 10 times conduit trade size (internal diameter), this means SM&W will accept commercially available factory bends of minimum 36", with 42" preferred.

See attached updated detail TSK-0040, which supersedes TE1-8014

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1363	BGP - Vehicle Ramp Beam Support Embeds - Threaded Rod, PL Washer and Nut	Closed	05/05/2014	05/15/2014	05/08/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Filip Filipic

REQUEST:

Please reference detail 1 and detail 10 on S1-3411. Please also reference RFI T-1326 and attached sketch BES-001.

RFI T-1326 provides angles at which vehicle support beams intersect the foundation walls. As shown on attached sketch BES-001 the built up 8x8 angle will be adjusted to match the angle at which the applicable beam intersects the wall. S1-3411 detail 1 and 10 call out for a 1-1/4" diameter threaded rod with plate washers and nuts running through slotted holes in the 8x8 angle. These rods, washers, and nuts will not be perpendicular to the 8x8 angle due to the angles at which the beams intersect the walls.

Please confirm no wedge, spacer, or shim will be required between the 8x8 built up angle and the plate washers to evenly distribute the load.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Provide tapered washers or add tapered steel plates that develop full bearing between the nut and the built up angle.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1364	BSE - Geothermal Field 12 Subgrade Acceptance	Closed	05/05/2014	05/15/2014	05/07/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Kelly Phariss

REQUEST:

Please confirm Geothermal Field 12 buttress area subgrade was acppeted based on the methods TCCO, ARUP, WOJV and BBII discussed in the field, as follows:

1. Aerate the area
2. Re-compact with compaction equipment
3. Inspect / Accept

Please see attached email from ARUP (Stephen McLandrich) to TCCO (Jack Adams)

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

ARUP Response:
Confirmed

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1365	SSS - Train Box Column Cap Plate Hole	Closed	05/06/2014	05/16/2014	05/16/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

With reference to the Train Box Column cap plate, our machine shop has drilled (1) non-standard hole in (1) p395 cap plate due to a broken tool. See attached inspection report and photos.
The hole is dimensionally in the correct position but has an internal spiral cut. The minimum diameter is 1-9/16" (1.563) and the max diameter is 1-49/64" (1.770).

Please confirm if one of the following is acceptable:
Option 1 - Proceed with the as-built condition, no further action required.
Option 2 - Reem out the hole to 1-13/16 and use a 1-1/2" bolt. AISC Table J3.3 page 16.1-121 allows oversize hole in slip critical connections, a hardened washer will be installed over the oversized hole. (see attached)
Option 3 - Drill the hole to 1-13/16 and use a 1-3/4" diameter bolt.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Both option 2 and option 3 are acceptable. This approval does not set a precedent, evaluation will be made case by case for similar issues in future.

T-1366 **SSS - Slab Opening Clarifications** **Closed** **05/06/2014** **05/16/2014** **05/27/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Adamson Associates, Inc. Paul MacPhail **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 410 SK1 for items 1 & 2:
1) The Architectural Slab Edge Drawings indicate round sl ab openings greater than 8".
Confirm structural perimeter steel is not required at all rou nd openings or supply a detail.
2) It is not clear what is meant by large openings. Does d etail 12/S1-5003 apply to all rectangular/square slab openings shown on the Architectural Slab Edge Drawings?

Please clarify.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) For openings greater than 8" and up to 2' provide rebar as shown in the attached sketch SKS-0354.

2) The large opening detail applies for openings that are greater than 2' but limited to the dimensions specified on 12/S1-5003.

T-1366.1 **SSS - Slab Opening Clarifications** **Closed** **06/02/2014** **06/12/2014** **06/10/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Refer to attached CD RFI 410.1 SK1:

1) The response in RFI T-1366 (SK 551, CD 410) does not address rectangular slab openings where one side is less than 2'-0 and the other side is over 2'-0. See the example slab openings and clarify the perimeter steel requirement for all rectangular slab openings where one side is over 2'-0 and the other side is less than 2'-0.
2) The noted slab openings along with other slab openings shown on the Architectural Slab Edge Plans are NOT shown on S1-2302 and other structural plans. Confirm the slab openings on the Architectural Slab Edge Plans supersede the structural plans with updated structural drawings to follow.

1) The 2' dimension limit stated in the response to RFI T-1366 is the larger of the dimensions of the rectangular openings. So for a rectangular opening where one side is over 2' and the other side is less than 2', detail 12/S1-5003 shall apply.

2) Confirmed.

T-1366.2 **SSS - Slab Opening Clarifications** **Closed** **07/01/2014** **07/11/2014** **07/14/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer
To: Turner Construction Compan PHIL MILITELLO
Answered By: Adamson Associates, Inc George Metzger
Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Following up on RFIs T-1366 and T-1366.1, please find attached table and exhibits of small slab openings with at least one side that is 2'-0" long.

For each of the minor slab openings included in the following table, please confirm that the direction provided in the aforementioned RFI response is to install framing channels per 12/S1-5003. In some cases, the slab openings are only between 8"-12" wide. Otherwise, please indicate that it is acceptable to provide rebar as shown in SKS-0354 per RFI T1366 instead.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Provide perimeter steel per response to RFI 1366.1 around openings where the side of the opening that is perpendicular to the deck span is greater than 2'.

For openings highlighted in green, the perimeter steel per detail 12/S1-5003 is not shown on floor plans because 12/S1-5003 is a typical detail. We disagree with the claim that the perimeter steel for these openings constitutes a change order.

Some of the openings highlighted in red are shown on both architectural and structural drawings. These openings are noted in the schedule shown on attached sketch SKS-0369. Other openings that are missing from the structural drawings will be added in a future ASI.

T-1367 **SSS - IFRM Prime Coat Requirement** **Closed** **05/06/2014** **05/16/2014** **05/12/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer
To: Turner Construction Compan PHIL MILITELLO
Answered By: Turner Construction Comp Stacy Wilson

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Specification section 07 81 23 (Intumescent Fire Resistive Materials), issued with Field Order 00027, lists three acceptable basis of design manufacturers for IFRM systems. Additionally, specification section 07 81 23, 1.7.C.2 states that the intumescent fire protection system is to be from a single source, indicating that the prime coat Skanska shop applies must be from the same manufacturer as the subsequent coats that are field applied.

Per the monthly schedule delivered to TJPA, the IFRM contractor is not to be selected until 10/16/14.

Skanska requires direction as to which of the three approved basis of design manufacturers will be used on subsequent coats in order to obtain a recommendation from that intumescent coating manufacturer as to the appropriate primer to be utilized.

Alternatively, priming of IFRM steel can be removed from Skanska's scope and added to the scope of the IFRM contractor. This will result in a cost increase.

Please provide direction.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

TJPA has rejected this RFI per 01 10 40 1.6 C 2 c.

T-1368 **BGP - Moment Frame Beam Perimeter Stirrup at Column Supports** **Closed** **05/06/2014** **05/16/2014** **05/07/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Due to the construction sequence, where the moment frame beams intersect a column support, the single-piece moment frame beam perimeter stirrups cannot be installed as shown in 2/S1-3600. Please confirm that it is acceptable to use an alternate 3-piece perimeter stirrup configuration where the moment frame beams intersect a column support. See the attached sketch for details

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed

T-1369 **SSS - Weld Electrode Subcomponents** **Closed** **05/07/2014** **05/17/2014** **05/21/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Turner Construction Comp Jack Adams

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Skanska USA Civil West California DisRyan Clayton

REQUEST:

During a Quality Control review, performed by Thompson Metal Fab for compliance with the "Buy America" clause of the Contract, a question was noted regarding the proposed use of ESAB Spoolarc F9A4-ENi4 Submerged Arc Welding (SAW) Electrode for the welding of the HPS70W steel in the Train Box Columns. The attached letter from ESAB, dated April 22, 2014, describes the process that ESAB employs in the manufacture of the referenced product. It notes the fact that the tensile and yield properties of the specific filler metal alloy required to meet the Contract specifications
of 90XX are not offered or produced by any mills within the United States. The alloy is provided as a "Greenrod" and is acquired outside of the States. The cold drawing, proprietary processing and packaging of the product is done, by ESAB, wholly within the United States and uses, other than the alloy itself, domestically produced and acquired materials. The Certificate of Conformance from ESAB states that the product is manufactured in the United States (attached).

An inquiry was made, by Skanska, to Lincoln Electric regarding a similar product classification that met the Contract requirement (F9A4-ENi5). Lincoln Electric advised Skanska that they also receive "Greenrod" and strip from sources outside of the United States for this product.

A subsequent Quality Control review by The Herrick Corporation revealed a similar condition for the use of the Lincoln Electric product Outershield XLH-70, AWS classification E70T-1C-H8, FCAW process weld electrode. Once again, Lincoln has indicated that "Greenrod" for weld electrode products may not be domestically available and may be sourced from throughout the world. However, the manufacturing process, like ESAB, is done wholly within the United States. The Certificate of Conformance from Lincoln also states that the product is manufactured in the United States (see attached certificate and letter dated 04/28/2014).

The CFR Part 661.5 of the Clause gives the following definitions:
c) The steel and iron requirements apply to all construction materials made primarily of steel or iron and used in

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Contract Documents are clear, and ¿Buy America¿ requirements can reasonably be derived from a review of the Contract Documents. RFI are not an appropriate request to the TJPA for interpretation if products meet ¿Buy America Certification¿

The Contractor shall submit the ¿Buy America Certification¿ and the Prime Contractor is responsible for ensuring that lower tier subcontractors are in compliance.

REF: SECTION 00 08 13 ¿ SPECIFIC PROJECT REQUIREMENTS

SECTION 00 08 13 - USDOT REQUIREMENTS FOR AGREEMENTS WITH THE TJPA

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

infrastructure projects such as transit or maintenance facilities, rail lines and bridges. These items include, but are not limited to, structural steel or iron beams and columns, running rail and contact rail. These requirements do not apply to steel or iron used as components or subcomponents of other manufactured products or rolling stock, or to bimetallic power rail incorporating steel or iron components.
d) For a manufactured product to be considered produced in the United States:
(1) All of the manufacturing process for the product must take place in the United States; and
(2) All of the components of the product must be of U.S. origin. A component is considered of U.S. origin if it is manufactured in the United States, regardless of the origin of its subcomponents.

Skanska has interpreted this clause to indicate that both ESAB and Lincoln supply welding electrodes for this Project that are wholly manufactured within the United States and that they satisfy the requirement of the "Buy America" clause.

Please confirm that the use of manufactured weld electrodes on the Project for which the manufacturer is providing a Certificate of Conformance indicating that the entire manufacturing process is performed in the United States, but may contain alloy material produced elsewhere, meet the intent of the Contract "Buy America" clause.

T-1370 **SSS - Roof Level Stiffener Plate GL 16** **Closed** **05/07/2014** **05/17/2014** **05/13/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 404 SK1 & SK2:
The 3/4" thick stiffener plates per 1/S1-7604 will foul the beam connections above.
Please provide a solution.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Stop the stiffener plates short of the WF beam bottom flanges.

Webcor/Obayashi Joint Venture

PROJECT MANAGEMENT - REQUEST AND ANSWERS LOG

30100 - Transbay Transit Center Project

Number	*Subject*	*Status*	*Date Created*	*Date Required*	*Date Answered*	*Cost Impact*	*Proceed*
T-1371	**SSS - CP1 Connection Support Stiffeners**	**Closed**	**05/07/2014**	**05/17/2014**	**05/21/2014**	**Potentially**	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Following our discussion on the CP01 support stiffener welds at Thursday 05/01/14 structural issues coordination meeting, Skanska proposes to remove the "all-around" designation on the 3/4" PJP weld shown in section C 1/S1-8001 and replace with 'four sides' written in the weld tail. The welds will terminate at the start of the clips at the internal corners. Please confirm this is acceptable. (See sketch below)

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

However we disagree with the "time increase" impact of this RFI. This modification was proposed by the Contractor in a Structural Coordination meeting and we did not take an exception to it. If there is an "impact" to be claimed for this modification, please provide all around welding per contract documents.

T-1372	**BGP - CDSM Soldier Pile Encroachment Area 16**	**Closed**	**05/08/2014**	**05/18/2014**	**05/17/2014**	**Potentially**	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: Exhibits A - G

This RFI addresses the impact of the encroaching CDSM soldier piles (SP) on the north & south wall in mat slab pour Area 16 as well as all levels of the encroachment into the foundation wall between CDSM piles 343 to 440 on the north east and south elevations Plan see exhibit - A.

Exhibit - B & C depict the location and degree in which the SP are encroaching.

WOJV proposal North elevation on gridline A (343 -369): (See Exhibit - B) Between CDSM pile 351 to 353. WOJV is proposing to decrease the specified 36" wall thickness to 34" to clear the encroaching SP 352. Originally these were WR1 reinforcement areas #11@8"oc EF vertically and would change to #11@6"OC, the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on Detail A/Sk.1 (Exhibit - D).

WOJV proposal East elevation on gridline 35 (369 -414): (See Exhibit - B) Between CDSM pile 373 to 375,379 to 381, 387 to 399 & 404 to 406. WOJV is proposing to decrease the specified 36" wall thickness to 34" to clear the encroaching SP 374,380,388,390,391,395,398 & 403. Originally these were WR1 reinforcement areas #11@8"oc

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The contractor proposed revisions to foundation wall reinforcement due to encroaching CDSM Piles in Area 16 are acceptable. Update Area 16 shop drawings affected by the shoring encroachment info presented in this RFI and submit them for record.

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EF vertically and would change to #11@6"OC, the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on Detail A/Sk.1 (Exhibit - D).

WOJV proposal on the South elevation on gridline A (415 - 440): (See Exhibit - B) Between CDSM piles 415 to 417 WOJV is proposing to decrease the specified 36" wall thickness to 34" to clear the encroaching SP 419, This foundation wall area was originally a embedment column (C -023) with reinforcement in this area was a double layer of #11@6"oc EF vertically and would change to double layer of #11@5"OC this reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on Detail B/Sk.4 option 2 (Exhibit -F).

Between CDSM piles 417 to 420 WOJV is proposing to decrease the specified 36" wall thickness to 34" to clear the encroaching SP 416 Originally these were WR1 reinforcement areas #11@8"oc EF vertically and would change to #11@6"OC, the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on Detail A/Sk.1 (Exhibit - D).

Between CDSM piles 423 to 425-426, 428 to 434 & 438 to 441-442 WOJV is proposing to decrease the specified 36" wall thickness to 33" to clear the encroaching SP 424,428 to 432 & 441 Originally these were WR1 reinforcement areas #11@8"oc EF vertically and would change to #11@6"OC, the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on Detail A/Sk.1 (Exhibit - D).

Between CDSM piles 425-426 to 428 WOJV is proposing to decrease the specified 36" wall thickness to 33" to clear the encroaching SP 426 & 427 This foundation wall area was originally a embedment column with reinforcement in this area was a double layer of #11@6"oc EF vertically and would change to double layer of #11@5"OC this reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on Detail A/Sk.4 option 1 (Exhibit -F).

Between CDSM piles 434 to 438 WOJV is proposing to

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

decrease the specified 36" wall thickness to 33" to clear the encroaching SP 436 & 437 Originally this was a WR2 reinforcement areas #11@6"oc EF vertically and would change to #11@5"OC, the reduction in foundation wall thickness would be compensated by reducing the rebar spacing predicated on Detail A/Sk.3 option 2 (Exhibit -E)

In all other areas without CDSM pile encroachment issues the reinforcement will remain unchanged as per the Contract drawings.

See Exhibit - G shows a typical detail of transition between modified reinforcement to contract reinforcement.

These solutions if approved would be incorporated into the TG06 shop drawings. Please confirm if these solutions would be acceptable.

T-1373 **BGP - Modifying Slump Limits for Mix 1557205** **Closed** **05/07/2014** **05/17/2014** **05/13/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference attached letter dated 5/2/2014, authored by Robert Foley, CEMEX QC Manager.

On March 20, 2014 the column mix was modified to increase average compressive strength due to low test results for laboratory cured cylinders. The changes that were made to mix #1557205 to increase strength are having an effect on the slump variability. SCCI and CEMEX propose the design slump range be increased to 6 to 9 inches. Is this proposed change acceptable?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Acceptable for Mix 1557205.

T-1374 **SSS - Stair Post Connection Clarifications** **Closed** **05/08/2014** **05/18/2014** **05/21/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

See attached CD RFI # 413 SK1 to SK3 for items 1 & 2:
1) Confirm the connection is acceptable as shown or supply an alternate detail.
2) Confirm the connection is acceptable as shown or supply an alternate detail.

1) Acceptable, except align the W24x55 beam to the centerline of the posts. Provide offset double angle connection similar to RFI T-1201.
2) Align the W24x55 beam to the centerline of the posts. Provide offset double angle connection similar to RFI T-1201.
Similarly, on the north side of the stair, the W14x43 beam north of GL D.8 shall be moved to aligned with the centerline of the stair posts.

T-1375 **SSS - Connection Clarifications** **Closed** **05/08/2014** **05/18/2014** **05/16/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 416 SK1 for items 1 & 2:
1) Confirm the missing beam size is a W12x14.
2) The connections will foul each other. Confirm it is acceptable to connect the WF beam with a shear plate per 1/S15011.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.

2) Confirmed.

Note that the connection detail at the HSS 10x10x5/8 is called out as 5/S1-5013 on SK1. However, the connection detail at the HSS is per 8/S1-7630 and is called out on C/S1-7130. Slotted holes are not required at the connection.

T-1376 **SSS - Welding Connection Clarification** **Closed** **05/08/2014** **05/18/2014** **05/21/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 417 SK1 & SK2:
Supply welding information for thick flange/plate into thin flange @ moment connection.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For the locations covered by this RFI only, bevel the W40 beam flange to a depth that matches with the thickness of W30x99.

T-1378 **BGP - SFPUC Electrical Room Grounding** **Closed** **05/09/2014** **05/19/2014** **05/09/2014** **Potentially** ☐

From: Shimmick Construction Company, Inc Sylvia Hartanto **To:** Webcor/Obayashi Joint Ventu Spencer Sayles **Answered By:** Webcor/Obayashi Joint Ve Spencer Sayles

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Please reference RFI T-1227.1 - SFPUC Plate Grounding.

Please confirm the SFPUC Transformer mounting plate is to be installed by a future contractor and SCCI is only to stub the grounding conductor into each corner of the Electrical Room(see Note 1 on Plate Sheet EI-2203).

If SCCI is to install this SFPUC Transformer mounting plate, provide the specifications, including but not limited to material type, size and thickness.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is confirmed that SFPUC Transformer mounting plate in transformer vault room elevated slabs will be supplied and installed by future contractors. However, SCCI BGP base bid scope needs to be increased from the corner of the three electrical rooms originally bid in BGP. This increase shall be priced and coordinated as described in RFI 1227.1 sketch in order for grounding conductors to be embedded in the structural Concourse slab. Grounding conductors must be extended from the corner of each Electrical Room to each future pad location and stubbed up so that transformer mounting plates can be connected by future electrical contractor. Please provide a sketch and product detail of how BGP electrical intends to implement this grounding extension so that SFPUC review can proceed as described on new sheets E1-3208, E1-3209 and E1-3210

IFC drawings (dated 3.31.2014) issued in Field Order 27 contain updated electrical drawings. BGP contractor should review these drawings for any modifications to Electrical scope bid during TG06. This is to include Grounding and embedded conduit for F-15 EJB conduit. New electrical scope other than that described above is not currently requested at this time.

T-1378.1 **BGP - SFPUC Electrical Room Grounding** **Closed** **05/30/2014** **06/09/2014** **06/09/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please provide a drawing which shows the dimensioned locations of the SFPUC Transformer plates so the grounding tails can be stubbed out of the slab at the correct locations.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to attached SKA-3477 which shows updated dimensions of SFPUC transformer plate locations at vault rooms# B1323 and B1324.

T-1379 **BGP - Pit and Pile Discrepancy at GL 27/E** **Closed** **05/12/2014** **05/22/2014** **05/14/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference attached contract drawings sheet S1-2026.

The mat slab pit located at Gridline 27 and E has a width of 2'-6". The pile located within this specific pit (see marked up S1-2026 is a 36" pile as detailed. Please provide new dimensions for the pit incorporating the 36" pile.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Accommodation of temporary conditions such as trestle piles and bridge piers is the responsibility of the contractor. For the trestle pile at Grid 26.7, the contractor is free to propose to the Design Team that the pit be temporarily widened to minimize the complexity of a blockout. Contractor shall include means and detailing of restoring the pit to its planned dimension.

T-1379.1 **BGP - Pit and Pile Discrepancy at GL 27-E** **Void** **05/21/2014** **05/31/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

SCCI is in receipt of RFI T-1379. SCCI disagrees with the response provided in the aforementioned RFI.

S1-2026 illustrates a 30" wide pile in a 30" wide pit at gridline 27/E. However, Submittal #TG0300- 284.4, which was reviewed and approved by the design team, shows the previously mentioned trestle pile as a 36" wide pile. It has also been confirmed in the field this pile is 36" wide pile.

Please provide applicable details (similar to D4 on Sl-3009 & D2 on Sl-3007) for permanent elements in the mat slab construction, including but not limited to galvanized sleeves and structural steel reinforcing, for the pit at GL 27/E which contains a 36" wide pile, not 30" as shown on the design drawing S 1-2026.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T-1379.2 **BGP - Pit and Pile Discrepancy at GL 27/E** **Closed** **06/10/2014** **06/20/2014** **06/12/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference attached Sl-2026, Sl-3007, Sl-3009, SCCI Mat Slab Comprehensive Drawing S113.0, Gerdau

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed for dimensions assumed. Notify design team field representative(s) of any changes resulting

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Mat Slab Rebar Shop Drawing, and Sketch 113-001.

For constructability reasons, SCCI proposes to enlarge the pit at GL 27/E in order to facilitate the installation of the trestle pile sleeve and cap. Please see sketch 113-001 for details and dimensions. Rebar would be altered to accommodate enlarged pit dimensions. See sketch 113-001 for rebar details for pour-back portion of pit once pile is removed.

Please confirm this is acceptable.

from as-built pile survey.

T-1380 **SSS - Field Weld Access at Deck Support Angles** **Closed** **05/12/2014** **05/22/2014** **05/27/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Refer to 1/S1-
3701 for deck support angle welded to Transfer Girder we
b detail.
Due to restricted access the decker cannot make the requi
red field welds when the top of deck to underside of
Transfer Girder flange is less than 12". See attached SK1
for clarification.
1)
Confirm a 3/8" bent plate can be welded to the toe of the t
op flange.
2) Confirm the weld indicated on SK1 is acceptable.
3)
Confirm the deformed anchor rods can be welded to the b
ent plate.

Where deck to underside of girder exceeds 12" the deck s
upport angle will be detailed as per 1/S1-3701.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). Welding of the deck to the support angle may be performed from the underside, using 1/8" fillet weld, 3" long at 12" on center

2) See response #1

3) See response #1.

T-1380.1 **SSS - Field Weld Access at Deck Support Angles** **Closed** **06/10/2014** **06/20/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

After reviewing the response to T-
1380 there are several items of concern:
A.
Access from the underside will not always be possible. At certain locations the perimeter wall bracing and rebracing that will remain in place during the deck installati on operation at Ground Level is in close proximity to the transfer girder and will restrict the mobility of a sciss or lift required for a welder to reach the work point from the lower concourse slab, approximately 30' bel ow.
B.
To provide an effective weld from the underside, the deck l ower flute is required to overhang the toe of the angle. In order to achieve this, shifting the deck may result in the loss of bearing at other locations. If the deck can't be shifted a 12ga minimum flashing plate will be requ ired, see details 3 & 4 on SK1.
C.
Effective concrete placement will be an issue if adequate c learance from the top of deck flute to bottom of girder flange is not established.

To move forward we propose the following:
1.
Where d<7" we will use stock angle sizes up to 8x4x1/2" (LLV) welded to the toe of the flange, see detail 1.
2.
Where d>7" but <15" we will use an overhead 1/8" fillet fro m the underside as per the response to T-1380 (where accessible), see detail 2. This will allow a minimum of 4" clearance from top of deck flute to underside of flange for placement of concrete.
Where the bottom flute does not overhang the toe of the a ngle and shifting the deck creates a loss of bearing at another location, a 12ga min flashing will be welded to t he angle and deck bottom flute, see detail 3 & 4.

Please confirm items 1 & 2 are acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Confirmed.

2. Confirmed.

T-1381 **SSS - CVN Testing For Secondary Material** **Closed** **05/12/2014** **05/22/2014** **05/23/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Skanska USA Civil West California DisRyan Clayton

REQUEST:

The response to RFI T-1034 indicates that secondary steel components (stiffeners, connection plates, continuity plates, etc.) are to be CVN tested in accordance with their respective ASTM specification. In the CS05 (TG0701-077) and CS07 (TG0701-079) submittal packages, Skanska¡¦s detailer inadvertently tagged the spandrel shear plates and web reinforcement plates at the Bus Deck level to receive CVN, Frequency P testing. These same components were not tagged for CVN testing in the CS1, CS2, CS3, CS4, and CS6 packages and the drawings were approved with no comment on the CVN requirements.

For the subject material, the governing ASTM 572 specification indicates that supplementary CVN, Frequency P testing is not required unless specifically indicated in the contract documents. In accordance with the response to RFI T-1034, Skanska has proceeded without CVN-P testing for the following secondary components: (Note that the material listed has been ordered without Frequency P testing.)
Bus Deck Spandrel Plates
Bus Deck Web Reinforcement Plates
Bus Deck Drag Connection Plates
Roof Level Fabricated Nodes (as per submittal package TG0701-097.1)
Other secondary materials (stiffeners, connection plates, continuity plates, etc.)

In preparation for the resubmittal of CS05 and CS07 drawing packages, Skanska will remove the CVN remarks for these components to conform to the RFI T-1034 response, the ASTM specifications, and the previously approved packages.

Please confirm concurrence.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

T-1382 **BGP - Spandrel Beam Modifications in Area 12** **Closed** **05/14/2014** **05/24/2014** **05/22/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: Exhibits A - B

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Modifications for the spandrel beam at locations

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Further to response to RFI T-637 please find attached proposed changes to the spandrel beams in pour Area 12 for location plan see exhibit - A

Exhibit - B shows the plan view of the modification necessary to the spandrel beam on the north and south elevations due to the revised reinforcement width of the foundation wall due to encroachment of the CDSM beams as well as typical cross sections of the revised spandrel beams.

RFI T - 0784.1 shows the extent of the modification to the foundation wall on the north and south elevations of Area 12.

Please confirm that these modifications as outlined at these locations are acceptable.

outlined are acceptable.

T-1383 **BGP - Spandrel Beam Modifications in Area 13** **Closed** **05/14/2014** **05/24/2014** **05/22/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: Exhibits A - B

Further to response to RFI T-637 please find attached proposed changes to the spandrel beams in pour Area 13 for location plan see exhibit - A

Exhibit - B shows the plan view of the modification necessary to the spandrel beam on the north and south elevations due to the revised reinforcement width of the foundation wall due to encroachment of the CDSM beams as well as typical cross sections of the revised spandrel beams.

RFI T - 1216.1 shows the extent of the modification to the foundation wall on the north and south elevations of Area 13.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Modifications for the spandrel beam at locations outlined are acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please confirm that these modifications as outlined at these locations are acceptable.

T-1384 **BGP - Spandrel Beam Modifications in Area 14** **Closed** **05/14/2014** **05/24/2014** **05/22/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: Exhibits A - B

Further to response to RFI T-637 please find attached proposed changes to the spandrel beams in pour Area 14 for location plan see exhibit - A

Exhibit - B shows the plan view of the modification necessary to the spandrel beam on the north and south elevations due to the revised reinforcement width of the foundation wall due to encroachment of the CDSM beams as well as typical cross sections of the revised spandrel beams.

RFI T - 1384 shows the extent of the modification to the foundation wall on the north and south elevations of Area 14.

Please confirm that these modifications as outlined at these locations are acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Modifications for the spandrel beam at locations outlined are acceptable. We assume that the RFI incorrectly refers to RFI T-1384 for the extent of modifications to foundation wall in Area 14. We assume intended reference was RFI T-1287.

WOJV Response:
RFI T-1287 is confirmed.

T-1385 **BGP - Spandrel Beam Modifications in Area 15** **Closed** **05/14/2014** **05/24/2014** **05/22/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: Exhibits A - B

Further to response to RFI T-637 please find attached proposed changes to the spandrel beams in pour Area 15

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Modifications for the spandrel beam at locations outlined are acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

for location plan see exhibit - A

Exhibit - B shows the plan view of the modification necessary to the spandrel beam on the north and south elevations due to the revised reinforcement width of the foundation wall due to encroachment of the CDSM beams as well as typical cross sections of the revised spandrel beams.

RFI T - 1218.1 shows the extent of the modification to the foundation wall on the north and south elevations of Area 15.

Please confirm that these modifications as outlined at these locations are acceptable.

T-1386 **BGP - Spandrel Beam Modifications in Area 16** **Closed** **05/16/2014** **05/26/2014** **05/22/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Documents: Exhibits A - B

Further to response to RFI T-637 please find attached proposed changes to the spandrel beam on the north and south elevations as well as modifications to the Corbel detail on east wall within mat foundation wall Area 16 for location plan see exhibit - A

Exhibit - B shows the plan view of the modification necessary to the spandrel beam on the north and south elevations and the modifications to the Corbel detail at mat foundation, lower concourse and ground level on the east elevation GL -35. These modifications are necessary due to the revised reinforcement width of the foundation wall due to encroachment of the CDSM beams.

RFI T-1372 shows the extent of the modification to the foundation wall on the north, east and south elevations of Area 16.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Modifications for the spandrel beam at locations outlined are acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please confirm that these modifications as outlined at these locations are acceptable.

T-1387 **SSS - Erection Plan Temporary Lugs** **Closed** **05/12/2014** **05/22/2014** **05/23/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

During a recent structural issues coordination meeting, Skanska raised a concern regarding a submittal response received with package TG0701-29. Specifically, Skanska flagged a comment that indicated our temporary erection aids at the exterior moment frame columns needed to be located 36" below the moment frame beam to column connection at the bus deck level and also 36" away from the weld joint between the column and cast node/transfer girder at ground level. See attached drawings for ease of reference.

As discussed during the meeting, please confirm that this is not mandatory; and, if Skanska opts to leave the lugs as shown on the attached documents, it is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

T-1388 **SSS - Framing Connection Interference at GL7G** **Closed** **05/13/2014** **05/23/2014** **05/27/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 414 SK1 & SK2:
The connections for the W16x26 beams foul the connectio n for the W40x149 per 1/S1-5019.
Confirm it is acceptable to reduce the 1'-
11 dimension to 1'-
6 and supply shear plate connections for the W16x26 beams per 1/S1-5011 as shown.
If not, supply a new detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1389	SSS - Stud Comment Clarification on Decking Drawings	Closed	05/13/2014	05/23/2014	05/27/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

With reference to the Linden Steel decking drawings the reviewer's comment references general note DK-5 - Distribute steel studs uniformly over beam span unless otherwise noted on drawings. Maximum spacing of ¾ inch headed studs shall not exceed 24" on center (one stud every 2 feet) unless otherwise noted.

As per note 1 on 1/S1-5000 - "See general notes for headed stud size and maximum spacing. Number of studs is indicated on the framing plan." Linden has modeled their drawings as per note 1, referring to the general notes for size and spacing requirements and the framing plans for stud quantities indicated on each member as per the Steel Beam Legend on S1-2302.

If a stud quantity is not indicated on a beam member, no studs are provided. Please confirm this interpretation is correct. If additional studs are required on members that are not currently identified please provide revised drawings identifying beams and quantities required.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

While the maximum stud spacing requirement of 24" noted in General Note DK-5 is the design intent, we understand that the Note 1 on 1/S1-5000 is somewhat conflicting. We agree to handle the 24' spacing requirement on a case by case basis, by marking on the shop drawings where this requirement is to be enforced to minimize the impact. We will re-submit the metal deck shop drawings for clarification.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1389.1	SSS - Stud Comment Clarification on Decking Drawings	Closed	06/10/2014	06/20/2014	06/26/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

According to Note 1 on 1/S1-5000, the number of headed studs is indicated on the framing plans. As per the steel beam legend on the framing plans, the number of studs is indicated in (*) following the beam designation (see SK1). It has come to our attention that the design team requires studs on certain members that currently do not show a stud quantity.

Please provide a document that shows which members, not identified as requiring studs on the framing plans, shall have studs installed so that we may incorporate into our decking shop drawing submittal packages.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to attached sketches SKS-0361 through SKS-0367 that show updated plans with additional shear studs (clouded) on beams.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1390	SSS - Stiffener Details at Roof Spandrel GL 1.4-B	Closed	05/13/2014	05/23/2014	05/27/2014	Potentially	☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Detail 4 on S1-8002 indicates the stiffener requirements at grid line 1.4/B at the perimeter roof girder. Please confirm the following (reference CD RFI 407 SK1 through SK3):

1. Confirm the stiffener plates and welding are per detail 2/S1-4205.
2. Detail 4E/S1-4205 graphically indicates a beam framing into the perimeter roof girder, however there is no beam on Grid 1.4 at Grid B per S1-2602. Please confirm it is acceptable to provide a stiffener per 2/S1-4205 on each side.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.

2) Confirmed.

T-1391 **SSS - Approval Comment Clarifications, Beams at Stiffener Locations (GL 15-16)** **Closed** **05/13/2014** **05/23/2014** **05/27/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 418 SK1 & SK2 for items 1 & 2:

1) Please confirm the welding as shown is correct.

2) The added stiffeners per 11/S1-7630 at (8) locations will result in the (4) beams connecting at these locations not being erectable. Confirm the connection may be changed to a shear plate per 1/S1-5011 except with the bolts pulled

outside the profile of the beams to allow access to the bolts. If not, supply an alternate solution.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.

2) The 5/8" stiffeners are not required. Provide full depth shear plate connections per 1/S1-5013 at beams that are perpendicular to the beams supporting the posts.

T-1392 **SSS - Missing Brace Locations (GL 3)** **Closed** **05/13/2014** **05/23/2014** **05/27/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 419 SK1:

It is not clear what is meant by the information inside the box, please clarify. If the information is meant to locate the braces per 1/S1-7661, it seems they will not work as

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Braces per 1/S1-7661 are not required at the highlighted location.

they will foul the beams. Please provide the locations on plan for the braces per 1/S1-7661.

T-1393 **SSS - Missing Beam Location (GL 15)** **Closed** **05/13/2014** **05/23/2014** **05/27/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 420 SK1 & SK2 for items 1 to 3:

1) Supply the missing dimensions to locate the beam.

2) Confirm the short W16x26 is located 1'-1 1/4 south of Grid D as shown.

3) If the response to item 2 above is yes, confirm the east end of the short W16x26 may be connected with a shear plate to avoid fouling the double angle connection for the supporting W16x26.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Refer to attached sketch SKA-3346 for missing dimensions.

2) Confirmed.

3) Confirmed.

T-1394 **BGP - Stem-Walls With Elevated Slab - Mat Slab Level** **Closed** **05/15/2014** **05/25/2014** **05/23/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

See attached Contract Documents.

Sheets A1-2124 through A1-2127 show 20 stem-wall cells with elevated slabs @ -32'-1" and -30'-0" TOC added in ASI 107 (clouded). Note 1 on mentioned sheets calls out "reinforced concrete wall refer to structural drawings", the S1-9000 series does not provide rebar schedules or details for stem-walls in question. Please confirm if typical wall rebar should be used where wall thickness is covered by the typical details. Or provide rebar schedules for vertical/horizontal rebar in stem-walls and the elevated slab. Also provide corner, intersection, and stem-wall to elevated slab connection details.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

TT Response: Please see attached SSK-0353 for clarification of the Train Platform Room walls at the Mat Level. For corner and intersection detailing, please refer to typical detail 3/S1-3001.

AAI Response: SKA-3362 and SKA-3363 reflect updated elevated slabs datum at MEPT rooms. Refer to SKA-3364 for updated stem wall geometry of MEPT rooms.

Webcor/Obayashi Joint Venture

PROJECT MANAGEMENT - REQUEST AND ANSWERS LOG

30100 - Transbay Transit Center Project

Number	*Subject*	*Status*	*Date Created*	*Date Required*	*Date Answered*	*Cost Impact*	*Proceed*
T-1395	**BGP - Lower Concourse Beams Intersecting Columns**	**Closed**	**05/15/2014**	**05/25/2014**	**05/19/2014**	**Potentially**	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please confirm for east-west single-span beams and end-span beams of the Lower Concourse East of Grid 5 it is acceptable to provide a full tension embedment length within the MF beam exterior hoops for beam bottom long bars in lieu of end hooks where beams intersect concrete columns within the MF beams.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

T-1396	**SSS - Connection/Erection Clarifications at W-13 System**	**Closed**	**05/15/2014**	**05/25/2014**	**06/02/2014**	**Potentially**	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 422 SK1 & SK2 for items 1 & 8:
1) Supply missing dimensions.
2) Supply hole size for the W-13 bolts.
3) The beam will not be erectable with a shear plate on each side of the web and the bottom flange CJP welded. Please supply an alternate detail.
4) Supply missing dimensions.
5) Supply the dimensions to locate the holes for the W-13 bolts.
6) Confirm the 2" vertical stiffeners may be located radially to avoid bevel cutting the edges.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Refer to attached sketch sbp-SKS-200 for distance between the bolts.

2) Bolt holes shall be 1 9/16" in diameter.

3) Provide a single 2" thick shear plate on one side of the beam web for the beam to be erectable. Provide double sided 1/2" fillet welds similar to the other 2" stiffener plates.

4) Refer to attached sketch sbp-SKS-200 for missing dimensions. Note that the frame is symmetric about the center leg meaning the two highlighted dimensions are equal.

5) Bolts shall have a horizontal spacing of 4"and shall be placed symmetrically about the beam web .

6) Confirmed.

7) Confirmed.

8) Confirmed.

T-1396.1	**SSS - ConnectionErection Clarifications at W-13 System**	**Open**	**09/10/2014**	**09/20/2014**		**Potentially**	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

See attached CD RFI # 422.2 SK1 & SK2 for items 1 to 3:
1) Detail 3/S1-5028 shows 8 pairs of bolts and RFI T-1396 shows 6 pairs. Confirm 6 pairs is correct.
2) RFI T-1396 gave the 4" horizontal spacing without being specific on the bolt locations. As shown, the 4" spacing will not work because the 2" shear plate with 1/2" fillet welds will foul the 1 1/2" bolts. Please clarify the bolt spacing.
3) The connections foul each other with the revised beam spacing as shown on SK1. Confirm it is acceptable to connect the beams parallel to Grid E.2 with a single shear plate per 1/S1-5011 or supply an alternate solution.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T-1397 **SSS - Missing information at PE301 & PE302 System** **Closed** **05/15/2014** **05/25/2014** **05/30/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 423 SK1 to SK3 for items 1 to 8:
1) Confirm the HSS6x6x5/8 posts are aligned with the HSS12x6x5/8 posts in the north-south direction as supplied in
RFI T-1090.
2) Supply the dimension to the center of the (2) HSS6x6x5/8 posts.
3) Confirm the correct reference is 1/S1-7600.
4) Supply a connection detail for the bottom of these posts at the corner of the slab opening.
5) It appears here and in detail B/S1-7132 (SK3) that the east-west HSS12x6 beam connects to the concrete wall but
the north-south HSS12x6 beams are continuous. Please clarify the steel framing.
6) Supply missing dimensions.
7) Supply missing elevations.
8) Supply a connection detail for HSS beams to concrete wall.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) The two HSS 6x6x5/8 posts are not required and may be removed.
2) See response to 1).
3) Confirmed.
4) See response to 1).
5) The HSS 12x6 beams are not required and shall be removed.
6) See response to 1).
7) The HSS 6x6 beams shall be equally spaced between elevation 103' - 5" and centerline of the HSS12x6 beam that is just below the roof park level.
8) Provide connection per 4/S1-7602 at ends of the HSS 6x6x5/8 beams.

T-1398 **SSS - W40X264 Connection clarifications (GL 32)** **Closed** **05/15/2014** **05/25/2014** **05/28/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:
See attached CD RFI # 424 SK1 & SK2:

Confirm it is acceptable to cope the top flange of the W40x264 as shown to clear the TPG1

SUGGESTION:

ANSWER:
Confirmed.

Accept Suggestion: ☐

T-1399 **SSS - W40X249 Schedule (GL 20-21)** **Closed** **05/15/2014** **05/25/2014** **06/03/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:
See attached CD RFI # 425 SK1:

The W40x249 is not listed in the schedule. Confirm it is acceptable to insert it in the 2nd row from the top.

SUGGESTION:

ANSWER:
Confirmed

Accept Suggestion: ☐

T-1400 **SSS - W40X149 Connection Clarification (GL 24)** **Closed** **05/15/2014** **05/25/2014** **05/27/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:
See attached CD RFI # 426 SK1 & SK2:

As shown on attached SK2 & SK2, it is not possible to connect the skewed W40x149 using 'W' when 'b' = 2". Confirm
the connection as shown on SK2 is acceptable or supply an alternate solution.

SUGGESTION:

ANSWER:
Confirmed.

Accept Suggestion: ☐

T-1401 **SSS - Access Hole at CJP Termination on TG** **Closed** **05/15/2014** **05/25/2014** **05/28/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:
Please confirm it is acceptable to incorporate two weld access holes (as per AWS D1.1, section 5.17.1) as indicated on the attached SK2 to allow TMF to properly

SUGGESTION:

ANSWER:
Confirmed.

Accept Suggestion: ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

terminate the CJP welds after the slotted intermediate flange (p774) is welded to the web.

See attached SK1 & SK2 for clarification.

T-1402 **SSS - Bolt Accessibility GL 14 and 15** **Closed** **05/15/2014** **05/25/2014** **05/30/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 415 SK1 to SK3 for item 2.

2) The noted bolts for the W27x84 beams are not accessible from the back side as shown in SK3. Please supply an alternate detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) If the bolts are not accessible from the back side, it is acceptable for this location to use a shear plate connections per 1/S1-5011 that does not require access of the bolt in the 4' gap.

2) It is Skanska's responsibility to figure out the erection means and methods. For this condition, the flange of the beam in question might be coped to allow the beam to drop down between the double angles that are shop bolted to the column web plate. The bolts to the beam web will then be accessible because the coped flange.

T-1403 **BGP - Partition Wall Construction Joints** **Closed** **05/15/2014** **05/25/2014** **05/23/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please confirm the following items are acceptable regarding partition wall construction joints.

1. To provide the 3/8" gap for the vertical CJ's, SCCI intends to place felt board in the joint with a 3/4" chamfer (see attached drawing). Once the walls on either side of the CJ have been poured, the felt board will be trimmed down to the end of the chamfer and the edges of the joint will be caulked. Please confirm this is acceptable.

2. With the exception of the tank walls, SCCI intends to

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

AAI Response:

1. 3/4" chamfer for min 3/8" partition wall vertical CJ is confirmed. For joint filler and caulking of fire rated walls: refer to Spec Sec 07 84 13.

TT Response:

2. Confirmed. Additionally contractor to confirm construction joint is clean of foreign materials.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

pour the Train Level Partition Walls that go all the way to the Lower Concourse (~28'-11" tall) in two lifts with one horizontal CJ. SCCI proposes prepping the joint by roughening it with 1/4" amplitude. Please confirm this is acceptable.

T-1404 **SCS - Transfer Girder Clarification** **Closed** **05/15/2014** **05/25/2014** **05/29/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please clarify the designer's intent:

Sheet Sl-2303 indicates that the south end of Transfer Girder TR9 extends beyond the B87 and B88 beams southern edge and partially into the intersecting MFBl beam which is angular to the B87 beam. Section 8/S1-3701 indicates that there are welded rebar couplers at the top flange of the TR9 girder to match the B78 beam reinforcing, but the B78 beam ends at the B87/B88 intersection prior to the southern end of the TR9 girder.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The note" BARS TO MATCH BM78 BARS WITH LENTON COUPLER" has a typo. It should read as " BARS TO MATCH MB1 BARS WITH LENTON COUPLER". The bottom bars for BM78 shall go through the holes in the web of TR9 as shown in Detail 8/S1-3701.

WOJV Received: 6/2/14

T-1405 **SCS - TR7 Transfer Girder** **Closed** **05/16/2014** **05/16/2014** **05/29/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please clarify the designer's intent.

Sheet S1-2303 indicated that the south end of Transfer Girder TR7 extends into the B106 beam (60"w X 72"h). Section 8/S1-3702 and 11/S1-3703 indicate a substantially shallower beam section.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The beam depth shown on 8/S1-3702 and 11/S1-3703 was not shown to scale. Since there is no dimension given on these 2 details, the beam depth (72") specified in the beam schedule govern. There is no changes needed for these 2 details. The 2 1/2" x 14" x 2'-6" steel plates are to be center to the B106 bottom bars.

WOJV Received: 6/2/14

☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1406	SSS - Edge Plate Clarification at W-13 Opening	Closed	05/16/2014	05/26/2014	05/30/2014	Potentially	

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 421 SK1 & SK2 for items 1 & 2:

1) Please supply a detail showing how the segmented edge plate is to be fabricated.

2) Please supply a detail showing how the segmented edge plate is to be fabricated.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

AAI's response:

Edge plates to follow geometry shown in Architectural Slab Edge Plans.

TT's response:

Edge weld detail per SK 2111.1 attached to this RFI is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1407	SSS - Stud Quantity on W16x26 at Ground Level	Closed	05/16/2014	05/26/2014	06/03/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please reference S1-2305 grid 23/H.7 (Sk1 attached). Two W16x26 beams are indicated with 16 shear studs each. We believe the 16 studs to be a typo and should be 6 studs. Note the mirror image location at grid 23/C.3 indicates 6 studs. All 4 of these beams only have 3 low flutes crossing over the beam. 6 studs would allow 2 studs per flute but 16 studs would require 5/6 studs per flute which is not feasible.

Please confirm it is acceptable to provide 6 studs on the 2 W16x26 beams at grid 23/H.7.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1408	SCS - TR19.9, 20.1 Transfer Girder	Closed	05/16/2014	05/26/2014	05/29/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please clarify the designer's intent:

Sheet S1-2305 indicates the upper Slab elevation as 17.71' and the top of the Lower Slab as 16.07' in elevation at Girders TR19.9 and TR20.1. The connecting MFB1 30"(W) X 48" (W) X 48"(H) beam top is indicated at the 16.07' elevation per details on Sheet S1-3600. The

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Elevation 19.07 is the elevation below the concrete pad. The concrete pad is at El.17.71. See the attached response to RFI SSS-T-1097.1 for additional information.

WOJV Received: 6/2/14

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

referenced Section 9/S1-3702 at the south ends of TR19.9 and TR20.1 doesn't correlate with the slab elevation in relation to the top of structural steel.

Please clarify the detail for the welded couplers at the south end of TR19.9 and TR20.1.

T-1409 **TR1.4 Transfer Girder 72" X 40" CBM Welded Couplers/Bars** **Closed** **05/19/2014** **05/29/2014** **05/19/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please clarify the designer's intent:

Sheet S1-2302 indicates that the 2 northerm 72"x40" CBM beams east of Grid 1.4 are sloping and references Section 1/S1-3700 which indicates that the CBM beams are level. The 2 southern 72 "x40" CBM beams east of Grid 1.4 are not indicated as sloping and reference Section 1 /S1- 5023 that indicates that the beams are sloping. Please clarify the details for the welded couplers and #11 bars for the 72"x40" CBM beams at east side of TR1 .4. Section 2/S1-7605 indicates 17-#11 bars top and bottom, one added set of 17-#11 bars 3" below the top bars, and 4-#11 side bars.The details shown in Sections 1/SI-5023 and 9/SI-3700 indicate that the top and bottom 17-# 11 bars are connected to the transfer girder by welded couplers or bars. Please verify that only the top and bottom #11 bars connect to the transfer girder by welded couplers or bars.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

As noted on the plan, the slab west of Grid 1.4 has a step at Grid E.
As noted on the plan, along Grid 1.4 , top of slab is at 20.23 north of Grid E and at 21.21 south of Grid E.
As noted on the plan, along Grid 1 (top of concrete wall), top of slab is at 20.03 north of Grid E and 21.00 south of Grid E.
The 72x40 concrete beams are to have a slope per elevation noted on plan.

T-1410 **BGP - Updated Concrete Wall Elevation and Lower Concourse SKA's** **Closed** **05/22/2014** **06/01/2014** **06/05/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

On May 20, 2014 WOJV received an email from Adamson-Associates containing 28 SKA's with the request that WOJV incorporate the SKA's into the TCB

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The following SKAs, included with this RFI response, are current and shall be incorporated in the construction documents.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

construction documents via the RFI Process.

Reference attached sketches:
- SKA-3322 TO SKA-3325 (CONC WALL ELEVATIONS)
- SKA-3326 TO SKA-3329 (CONC WALL ELEVATIONS)
- ZONE 2- SKA-3330, SKA-3334, SKA-3338, SKA-3357
- ZONE 3 - SKA-3331, SKA-3335, SKA-3339
- ZONE 4 - SKA-3359, SKA-3360, SKA-3361
- ZONE 5 - SKA-3322, SKA-3336, SKA-3340
- ZONE 10 - SKA-3333, SKA-3337, SKA-3341

Please confirm the attached architectural SKA's shall be incorporated in the TCB construction documents. Please note these unissued SKA's have been referred to in submittal package "TG0600-341 - REBAR - Shop Drawings - Partition Walls" returned to WOJV 5/21/2014.

Also, in the attached, there are two versions of the SKA's. Please clarify which shall be deemed "current" for use in the project.

B2 and B1 Level Concrete Wall Elevations: SKA-3322 TO SKA-3329 Zone 2: SKA-3330, SKA-3334, SKA-3338, SKA-3357_R1 Zone 3: SKA-3331_R1, SKA-3335_R1, SKA-3339_R1 Zone 4: SKA-3359_R1, SKA-3360_R1, SKA-3361_R1 Zone 5: SKA-3332, SKA-3336, SKA-3340 Zone 10: SKA-3333, SKA-3337, SKA-3341

For updated enlarged plans and details as discussed during the June 4, 2014 coordination workshop - Refer to the following SKAs

SKA-3416 (A1-3007)

SKA-3417 (A1-7426)

For Future Washroom plumbing layouts, refer to the following sketches: PSK2-3001, PSK2-3002

Note that the Design Team did not receive RFI T-1410 until yesterday, June 4, 2014, even though Shimmick indicated it had been submitted at least a week ago. The RFI was issued with a large volume of attachments and consequently did not reach the design team from Constructware. In future, please limit Constructware email attachments to less than 5 megabytes.

WOJV:
WOJV submitted RFI 5/23/14

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1411	**SSS - Missing dimensions PE403 and PE404**	**Closed**	**05/23/2014**	**06/02/2014**	**05/30/2014**	**Potentially**	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 427 SK1:
Confirm the noted dimensions are correct for PE403 & PE404 at 2nd level and Bus deck level.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Dimension noting the location of Beam in detail 3/CD RFI 427 SK1 is correct.

Dimension for the location of Beam in detail 4/CD RFI

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

427, shall be 11'-6 1/2".

T-1412 **SSS - Pipe Wall Thickness Tolerance** **Closed** **05/23/2014** **06/02/2014** **05/28/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Per conversation during "Transbay structural issues review" meeting on 5-20-2014, the wall thickness tolerance of spec 05 15 22 was discussed. Per design team, this tolerance is intended to apply to the ends where the pipe would be welded, and a less restrictive tolerance would be acceptable throughout the length of the pipe, provided that the wall thickness is greater than nominal, not less.

The manufacturer of the spun-cast pipe has produced all product to date with dimensions that meet the 05 15 22 spec for 12" at each end. Throughout the remainder of the pipe, the wall thickness is greater than nominal (typically by about 0.090"), and in all cases falling within the tolerance of API-5L.

See attached depiction ofthe pipe tolerances.

Please confirm that wall thickness tolerance noted in spec 05 15 22 is intended to apply to the ends only, and that the wall thickness throughout the remainder of the pipe may be greater by as much as is allowed by API5L, but shall be no less than the nominal wall thickness.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

T-1413 **SSS - Second Level Popout Verifications** **Closed** **05/23/2014** **06/02/2014** **05/30/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please verify the two clouded dimensions at the Second L evel popouts as indicated on SK1 & 2.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See the revised dimensions noted by Adamson on the attached SK-RFI-583-SK1 & SK-RFI-583-SK2 submitted with RFI.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1414	SSS - Step in Slab at GL21 C&G	Closed	05/23/2014	06/02/2014	06/04/2014	Potentially	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

At GL 21 Ground Level where the slab makes a 25" step, detail 11/S1-5004 is cut along the step at the knock-out slab locations and a WT and support beam are indicated.
Between the perimeter beam and the W24x55 framing beams at C & G there are no support beams or WTs indicated to support the step in slab. See SK 1 & 2 for clarification.

Please provide a detail section through this step indicating how the slab is supported.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Detail 11/S1-5004 applies only at the knock-out slabs as noted on the drawings. Typical detail 10/S1-5002 shall apply at the locations highlighted on SK1 in the RFI. Additional deck support steel is not required.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1415	SSS - Exposed Flange at Step in Slab GL5-6	Closed	05/23/2014	06/02/2014	07/01/2014	Potentially	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 429 SK1 & SK2:
The flange of the W33x118 will extend outside the concrete as shown.
Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Move the W33x118 beam 2 -7/8" to the south from its current location. For the offset double angle connections at the ends of the W33x118, provide L5x5x1/2 and L8x6x1/2 angles similar to the sketch on SK1 that was provided with RFI T-1201.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1416	SSS - Seal Weld at Edge of Backing Bar	Closed	05/23/2014	06/02/2014	05/28/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please see OIW shop drawing 2771-RN151. The termination of backing plate d151 and the finished ends of the CJP welds produces an inconsistent looking finish.

It is OIW's intent to provide a continuous 5/16 seal weld at the end of the backing plate and the node web plates(see attached photo). We believe this closure weld is within the allowances of AWS D1.1, and will improve the overall finish of this AESS area.

Please confirm that the noted seal weld is acceptable for all welded roof nodes on OIW detail drawings RN151

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

through RN164.

T-1417 **SSS - Missing OCS Switch Information** **Closed** **05/23/2014** **06/02/2014** **06/11/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

This is a follow-up RFI to RFI SK 399 (CD 296)
See attached CD RFI # 296.1 SK1 to SK7 for items 1 to 1 8:
1) 2/S1-9101 shows the framing at 14'-
2 C/C UON but no start location for the steel is supplied. Please supply location dimensions for the vertical HSS4x4 hangers per 2/S1-9101.
2) Supply missing clouded dimensions (10) locations.
3) Supply elevation to top of 3/8" galvanized.
4) Supply missing clouded dimensions (12) locations.
5) Supply elevation to top of 3/8" galvanized plate.
6) Clarify how detail 2/S1-
9101 applies at the noted location. Should the reference b e to detail 3/S1-9101?
7) Supply (5) clouded dimensions.
8) Supply a connection detail.
9) Confirm the brace connection is as shown in detail 3/S1 -9101 (SK5).
10) Supply a detail for the bottom of the HSS4x4 posts.
11) Supply a connection detail for the HSS4x4 posts to hor izontal HSS4x4.
12) Supply elevation to underside of posts.
13) Supply the weld for PL3/8" to HSS4x4.
14) Supply this dimension for each HSS4x4 post.
15) This detail will not work as it is not known at the detaili ng stage where the deck flutes will be. The detail also doe s not work when the deck spans parallel with the brace. Pl ease confirm it is acceptable to proceed per the informatio n in RFI T-1067.2 (SK 230.2, CD 181.2).
16) Supply the thickness and welding for the stiffeners.
17) Supply elevation to establish stiffener locations.
18) Supply a connection for the HSS4x4 to the PL3/8".

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). See the response noted on the attached sketch RFI 296.1 SK1

2). See the response noted on the attached sketch RFI 296.1 SK2

3). See the response noted on the attached sketch RFI 296.1 SK2

4). See the response noted on the attached sketch RFI 296.1 SK3

5). See the response noted on the attached sketch RFI 296.1 SK3

6). Yes, the reference shall be to Detail 3/S1-9101. (TT)

7). See the response noted on the attached sketch RFI 296.1 SK4

8). See A/SKS-356 attached (TT)

9). Confirmed, also see the comment on RFI 296.1 SK5

10). See detail 3 on A1-8551 (AAI)

11). See B/SKS-356 attached (TT)

12). See the response noted on the attached RFI296.1 SK4

13). ¼¿ fillet weld both sides (TT)

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

14). See the response noted on the attached sketch RFI 296.1 SK5

15). The detail works as shown. It is a means and methods issue, it just means that the connection cannot be shop fabricated as the work require contractor¿s coordinate during construction. If the deck span parallel to the brace angle, field weld the brace angle to the L4x4. (TT)

16). Stiffener plates are to be 3/8¿ thick with ¼¿ double fillet weld to column. (TT)

17). See the response noted on the attached sketch RFI 296.1 SK6

18). See the response noted on the attached RFI 296.1 SK7 (TT)

T-1417.1 **SSS - Missing OCS Switch Information** **Closed** **06/27/2014** **07/07/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

The responses to the following items were not sufficient for Candraft to proceed.
7) The response notes one of the requested dimensions as "VARIES". Please provide criteria for this varying dimension.
12) Detail 3/A1-8551 does not provide the bottom of the HSS post elevations. Please supply the elevation at each post.
13) Per the structural details only the 1/2" plate is to be galvanized. Confirm this is correct and supply weld required for PL3/8" to HSS4x4.
14) Supply the requested missing dimension as shown at each post.
17) Please supply the elevations for the stiffeners in the columns.
18b) Please provide the size, radius, hole location and dimension on the 1/2" x 8" plate. Note: See response sketches SK1 through SK7

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please see OCS configuration in 1/A1-8550. Notice the OCS path relative to the beam (16'-4 1/2" from GL C.3 in CD RFI 296.1 SK4) is not a constant offset in plan and changes locations traveling east to west. From this, the HSS structure supporting the OCS assembly from above will also have an offset dimension from the beam that is not constant and will vary.

12) The bottom of HSS post elevation will vary because the bottom elevation is dependent upon the elevation of the OCS Universal Spacer Bar which is dependent upon the ultimate constructed sloping grade below (concrete). The OCS Universal Spacer Bar shall be 18'-0" above the built finish grade and the dimension between the bottom elevation of the supporting post and the Universal Spacer Bar is given on detail 3/A1-8151.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

13) All should be hot dip galvanized as noted in the CDs. The weld shall be 1/4" double sided fillet weld. Please note that the connection plate shall be centered to the work point of the diagonal angles.

14) Same response as in item #12.

17) CL of plate is determined by SFMTA OVS. See response to item #14 on attached CD RFI 296.1 SK5.

18b) Plate size, thickness and hole location are provided in 6/S1-9101. SFMTA must provide size of plate hole, as the cable tensioner components are provided by SFMTA. TJPA shall assist with the SFMTA contact if required.

The Design Team suggests that the OCS connectors be field installed to accommodate the final coordination with the SFMTA

T-1417.2 **SSS - Missing OCS Switch Information** **Closed** **07/15/2014** **07/25/2014** **07/28/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 296.4 SK1 to SK3 for items 1 to 4: Skanska plans the following erection aids for the OCS. Please review and confirm there are no adverse structural implications.
1) Confirm the concept of the erection aid detail as shown is acceptable to accommodate the field welding required.
2) Confirm welding for cap plate as shown is acceptable.
3) Confirm the concept of the erection aid detail as shown is acceptable to accommodate the field welding required.
4) Confirm it is acceptable to supply (4) 15/16 diameter hol es per plate for erection lifting holes as shown.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.

2) Confirmed, but use all around weld.

3) Confirmed, but finger tighten A325 through bolt.

4) Holes are acceptable. However, contractor is to plug holes completely with full grommet of the shield plastic fiber insulating material specified in Section 05 50 00 .

T-1417.3 **SSS - Missing OCS Switch Information** **Closed** **07/25/2014** **08/04/2014** **07/28/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Webcor Construction LP Gregory Kemerer

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

This is a follow-up to RFI T-1417.1 (SK 399.3A, CD 296.3)

Skanska: The responses to items 7, 12, 14 & 17 require further clarification. Please review the items below.
Item 7 ~ the response and reference to A1-8550 does not provide the requested dimensions. Please provide the dimensions to locate the posts.
Item 12 ~ the response tells us that the Universal Spacer Bar is to be 18'-0 above the ultimate constructed sloping grade with the bottom of the post being +/- 4" above that per 3/A1-8151. Several unknowns remain:
a) What does "ultimate constructed sloping grade" mean?
b) The top of slab information on drawings S1-2306, A1-2306 & A1-2866 is not clear
c) What does the +/- 4" in detail 3/A1-8151 mean?
Item 14 ~ same as item 12
Item 17 ~ same as item 12

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Item 7 - information has been provided. Skanska should review with WOJV and TJPA.

Item 12 -

a) It means field dimension must be determined from the constructed grading by the CM/GC and coordinated between trade subcontractors and the SFMTA (the transportation agency). The design team cannot provide the as-built field dimensions that are required for this item.

b) The reviewer should be using civil (grading) information - not structural information. Refer to sheets L1-3306, L1-3307, C1-4007 and C1-4009.

c) This dimension is incorrect - It is 1'-0" +/-4". This will be corrected in VE Round #4 submission.

Item 14 - This question is the same as in Item 12, so the response is the same.

Item 17 - This question is the same as in Item 12, so the response is the same.

AAI recommends that WOJV schedule a coordination meeting with SKANSKA, TJPA, SFMTA the Design Team to review This RFI and the previous sub-

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Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1417.4	SSS - Missing OCS Switch Information	Closed	09/02/2014	09/12/2014	09/15/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Following the OCS RFI coordination meeting held 8/28/2014, please provide the following information as discussed:

Item 7 - the response and reference to A1-8550 does not provide the requested dimensions. Please see SK1 and provide the dimensions to locate each post.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Item #7. For dimensions of vertical OCS supports see attached sketches SKA-4084 and SKA-4085.

Item #12. For elevations (heights) of vertical supports see attached sketches SKA-4082 and SKA-4083.

Item #17. The elevation of the center line of the lower

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Item 12 - the response tells us that the Universal Spacer Bar is to be 18'-0 above the ultimate constructed sloping grade with the bottom of the post being +/- 4" above that per 3/A1-8151. Please provide the elevations for the bottom of each support post.
Item 17 - please supply the elevations for the stiffeners in the columns.
Item 18b - please provide the size, radius, hole diameter and hole location on the ½" x8" plate.

plate is 31'-4", the elevation of top of the upper stiffener plate is 36'-7".

Item #18b. Per Chris David's (SFMTA) sketch SK7, the hole size is 0.69".

T-1418 **SSS - PE403 & PE404 Missing Connection Detail** **Closed** **05/23/2014** **06/02/2014** **06/04/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 428 SK1:

Supply a connection detail for the flat MC10 to HSS posts.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Provide welds at the MC10x8.4 to HSS column connection as shown in the attached sketch SKS-0355.

T-1419 **SSS - Bus Deck Cast Node Dimension Confirmation** **Closed** **05/23/2014** **06/02/2014** **06/04/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Turner Construction Comp Jack Adams

Co-Author: Webcor Construction LP Jeff Galoyan

REQUEST:

The structural issues meeting on 5/15/2014 reviewed potential changes to the cast node machine shop drawings. Due to the sand inclusions in the 35A and 35B cast nodes, further machining of the pad surfaces is required. This will result in a dimension of 16" from the W0 work point in lieu of the initial dimension of 17" (see attached sketch). Cast Connex has proceeded to make the 16" revision to the cast node machine shop drawings.

Please confirm this is acceptable, and update the structural drawings to match.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Acceptable to TT.

Machining of these cast node pads was not indicated on the design drawings (nor Skanska or Bradken shop drawings). Design Team has no issues with the resulting dimension of 16" from the W0 work point in lieu of the initial dimension of 17" .

The machining of these pads < 1¿ deep to remove sand inclusions found in as cast surface is a Contractor means and methods.

Webcor to communicate/coordinate with Shimmick as the TG18.1 Bus Ramp Contractor to coordinate if shop machining versus field grinding is preferred for weld

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

prep. This weld prep work is at no cost to the TJPA.

T-1420 **SSS - Missing Connection Detail BU-60 GL 4-5** **Closed** **05/27/2014** **06/06/2014** **06/10/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:
See attached CD RFI # 430 SK1 :
Please supply a connection detail for the BU-60 to the BU-60's.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
Provide a double angle connection per 9/S1-5032 at the ends of the BU-60 beam.

T-1421 **SSS - ST401 Slab Opening Dimension Discrepancies** **Closed** **05/27/2014** **06/06/2014** **05/30/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:
See attached CD RFI # 431 SK1 & SK2 :
The black dimensions hi-lited in purple on SK2 are per 1/S1-7009 and the red dimensions are per A1-2864. The current model and drawings match 1/S1-7009. Please advise which dimensions are correct.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
Red dimensions noted on attached SK2 submitted with RFI per A1-2864 are the correct dimensions.

T-1422 **SSS - Bolt to Edge Dimension Clarification GL 16** **Closed** **05/27/2014** **06/06/2014** **06/10/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:
See attached CD RFI # 432 SK1:
Confirm the 1 7/16" edge distance for the 1 1/2" dia. bolts per 1/S1-8000 is acceptable or supply a solution.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐
It appears from the sketch SK1 provided in the RFI that the detailer spaced the middle two bolts at (tw + 3 3/4") per detail 1/S1-8000. At this location with tight edge clearance, revise the spacing between the middle two bolts to 4". The resulting bolt edge distance is acceptable.

T-1423 **SSS - Girder Flashing Max Gap Dimension** **Closed** **05/27/2014** **06/06/2014** **06/04/2014** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

With reference to details 6, 7 & 9/S1-5000, a 9" max dimension is shown from the edge of the girder flashing to the edge of the deck with a 1-1/2" minimum bearing onto the girder, indicating the flashing gauge is to match the gauge of the deck. Based on the preceding, most locations would require 18 gauge flashing with the max gap between beam and deck being 7-1/2".

Please confirm it is acceptable to increase the max gap to 9" as the deck flutes are at 12" centers and at some locations this gap will exceed 7-1/2". To accommodate the increased gap, the decker is proposing to use 16 gauge flashing at all locations, connecting the flashing to the beam with ¾" diameter puddle welds at 12" OC and connecting the side lap with button punches at 12" OC or top seam welds at 24" OC.

See attached SK1 for clarifications.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed that the gap may be increased from 7 1/2" to 9" where 16 gauge closure sheet is used.

T-1425 **SSS - Edge of Slab Angle at Seismic Joint GL10 & 20** **Closed** **05/29/2014** **06/08/2014** **06/10/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Section 3/S1-3282 details the typical concrete wall at expansion joint on the Roof Deck Level. Please confirm an edge of slab bent plate and deck support as per 9/S1-5000 is not required. See SK1 & SK2 for reference.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The Typical Detail 9/S1-5000 is applicable at the expansion joint, as the slab edge overhung is within the range (2' - 4') noted for this detail.

T-1425.1 **SSS - Edge of Slab Angle at Seismic Joint GL10 & 20** **Closed** **06/30/2014** **07/10/2014** **07/09/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 433.1 SK1 & SK2 for items 1 & 2:
1) Confirm the outline of top of slab/edge plate at grids B & H at the expansion joints.
2) Confirm the edge plate support detail at the 1/1/4" connection plate is acceptable as shown or supply an

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). Confirmed. However, the requirement for the closure plate and other misc. steel per Detail 9/S1-5000 noted in TT's previous responses to RFI 1425.0 may be waived to negate SKANSKA's claim of added scope. If the closure plate is not provided by

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

alternate detail.
3) The 10" on SK2 indicates top of roof floor slab. Confirm the bent plate will stop at top of slab OR is an additional 8" required to the concrete key location.
4) For detail 9/S1-5000 now required at the Seismic joints, verify the 8'-0 Max spacing for the angles can be increased to 8'-6 in order to line up with the back span beam spacing per design.

SKANSKA, the concrete contractor shall provide proper forming/shoring for supporting wet weight of the concrete while pouring slab concrete. How to support the wet weight of the concrete when placing the slab is the contractor's means and methods.

2). Confirmed, also see the response to comment #1.

3). It is W/O's option to stop the vertical leg of the closure plate at the top of slab (additional forming is required to retain the concrete while placing the slab), or stop the vertical leg of the closure plate at the concrete key location (additional forming not required).

4). Confirmed that the outrigger spacing may be increased to 8'-6" to be in line with the back span beam spacing.

T-1425.2 **SSS - Edge of Slab Angle at Seismic Joint GL10 & 20** **Closed** **07/01/2014** **07/11/2014** **07/09/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Webcor Construction LP Gregory Kemerer

Co-Author: Webcor Construction LP Jeff Galoyan

REQUEST:

The response to RFI T-1425 indicates that detail 9/S1-5000 is to be used at the roof deck level expansion joint. The rebar in that detail is incompatible with the rebar layout shown in detail 3/S1-3282. Please clarify the rebar requirements and layout.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). As noted in the response to RFI 1425.1, the requirement for the closure plate and other misc. steel per Detail 9/S1-5000 noted in TT's previous responses to RFI 1425.0 may be waived to negate SKANSKA's claim of added scope. If the closure plate is not provided by SKANSKA, the concrete contractor shall provide proper forming/shoring for supporting wet weight of the concrete while pouring slab concrete. How to support the wet weight of the concrete when placing the slab is the contractor's means and methods.

2). The rebars per 3/S1-3282 shall be used.

T-1426 **SSS - TR5 End Details at GL5G** **Closed** **05/29/2014** **05/29/2014** **06/10/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 446 SK1 & SK2 for items 1 to 4:
1) Confirm the locations for 3/4" dia. headed studs per 3/S 1-5023.
2) Confirm the locations for 2" diameter holes per 3/S1-5023.
3) Confirm the locations for 3" diameter holes per 3/S1-5023 to clear girder splice.
4) Supply missing dimension.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). Confirmed

2). 2" holes are to be 2" above bottom of the concrete beam.

3). Holes for B57 bottom rebars are to be located 2 3/4" above the bottom of the beam. Adjust bottom bars slightly to avoid TG slice as shown is acceptable.

4). The beams are to be equally spaced between the first beam south of Grid G (5'-6" south of G) and Grid K. The spacing should be 9'-7 11/16".

T-1427 **SSS - Slab Support at 2nd Level GL1.4-D.4** **Closed** **05/29/2014** **06/08/2014** **06/10/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 443 SK1 for items 1 & 2:
1) Confirm BU-WT deck supports per 6/S1-5002 are required at all locations indicated with red lines.
2) Supply detail showing how to support the high slab in th e noted area indicated with a blue line.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Yes, for the N/S direction beams, add BU-WT per 6/S1-5002. No for E/W beams, where Typical Detail 11/S1-5002 shall be used for deck support.

2) Add a short W12x14 placed at -1'-0"below typical T/Steel EL. Refer to Typical Detail 11/S1-5002 for deck support.

T-1428 **SSS - High Slab Support at Ground Level GL4F** **Closed** **05/29/2014** **06/08/2014** **06/09/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 442 SK1 for items 1 & 2:
1) Confirm the BU-WT's at these locations should be extended as shown.
2) Confirm BU-WT's are required at the noted locations to support the hig h slab.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.

2) Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1429	SSS - Framing Interference at GL 5D Ground Level	Closed	05/29/2014	06/08/2014	06/10/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 441 SK1:
1) The double angle connection is not possible as it will fo ul the stiffener plate. Confirm it is acceptable to connect the W16 beam with a full depth shear plate with b olts, plate thickness and welding per 1/S1-5011.
2) Confirm the connection above may be applied at other s imilar locations.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.

2) Changes to shear plate connections at similar locations will be considered on a case by case basis. Submit an RFI highlighting all similar locations or mark such instances on the shop drawings for approval.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1430	BGP - Lower Concourse E/W Bottom Deck Bar at GL 9 MFB	Closed	05/30/2014	06/09/2014	06/04/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please confirm per field conversation between structural EOR and Gerdau that it is acceptable to install the concourse slab bottom East-West reinforcing at GL 9 per the attached sketch.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Proposal is acceptable provided:

1. Tail of slab bottom bar is fully developed within the confined joint

2. Tail of slab bottom bar runs over the top of the lowest MFB longitudinal bar and is no longer located below it

3. Field bends conform to ACI minimum radii limitations

4. Within the joint, bottom MFB bars are brought to their lowest possible position above (and in contact with) the MFB exterior hoop bottom legs

5. All hooks of MFB vertical ties shall be made to fully engage the MFB longitudinal reinforcing outside the joint and at the sides of the joint

6. Proposal is implemented at all Grid 9 columns where the overpour results in slab bottom reinforcing being out of tolerance (3/4 clear plus 1/2" tolerance)

It is also acceptable to cut the bottom slab bars at the face of the MFB-column joint and splice in an equivalent z-bar.

Webcor/Obayashi Joint Venture

PROJECT MANAGEMENT - REQUEST AND ANSWERS LOG

30100 - Transbay Transit Center Project

Number	*Subject*	*Status*	*Date Created*	*Date Required*	*Date Answered*	*Cost Impact*	*Proceed*
T-1431	**SSS - PE403 & PE404 Missing Connection Detail at Posts**	**Closed**	**05/30/2014**	**06/09/2014**	**06/12/2014**	**Potentially**	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 434 SK1 & SK2:
The connection per RFI T-1105 shown above will not work at the noted locations as the base plate for the HSS10x10 is in the way. Please supply an alternate connection for the HSS12x6.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The T/steel of the horizontal HSS12x6 shall be raised by a few inches so that the HSS 12x6 clears the bolts at the base plate and frames into the vertical HSS 10x10. Provide an all-around fillet weld similar to 3/S1-7600 at the HSS to HSS connection.

T-1432	**SSS - PE403 & PE404 Fouling Connection Detail**	**Closed**	**05/30/2014**	**06/09/2014**	**06/11/2014**	**Potentially**	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 435 SK1 & SK2:
The upper angle per 5/S1-7600 will foul the gusset plate for the brace.
Please supply an alternate detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Move the upper angle to the side of the horizontal HSS 12x6. Provide vertical fillet welds to connect the angle to the post and the horizontal HSS . Angle and weld sizes shall remain the same as specified in detail 5/S1-7600.

T-1433	**SSS - Conflicting ST401 Dimensions**	**Closed**	**05/30/2014**	**06/09/2014**	**06/10/2014**	**Potentially**	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 437 SK1 to SK3:
The approval instructions on drawing 3265 in the CS6 approval submittal (Package Number TG0701-78) require a clarification. S1-7011 and A1-7011 show conflicting dimensions to locate the posts as shown on SK2 & SK3. Currently the model reflects S1-7011. Please confirm that S1-7011 is correct or supply clarifying direction on which ST403 post locations are correct.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to attached sketch SKA-3379 for Stair HSS locations. Structural drawings will be updated in a future ASI.

T-1433.1	**SSS - Conflicting ST401 Dimensions**	**Closed**	**07/01/2014**	**07/11/2014**	**07/18/2014**	**Potentially**	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

See attached CD RFI # 437.1 SK1 & SK2:
The result of the varying dimensions on S1-7011 and SKA-3379 (A1-7011) is that we do not know where to locate the posts on the north side of stair ST403.
Please clarify the discrepancies.

HSS posts shall be located per SKA-3379-R1 issued with RFI T-1433.1. Structural drawings (S1-7011) will be updated in a future ASI

T-1434 **SSS - Conflicting ST401 Dimensions at Post Connections** **Closed** **05/30/2014** **06/09/2014** **06/12/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 438 SK1 & SK2:
This approval instruction on drawing 3264AB in the CS6 approval submittal (Package Number TG0701-78) requires a clarification. As shown on SK2, 4/A1-7011 shows conflicting dimensions to locate the posts for Stair ST401. Currently the model reflects S1-7009 & RFI T-1189 (SK 419, CD 413). Please confirm that S1-7009 and RFI T-1189 are correct or supply clarifying direction on which ST401 post locations are correct.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Dimensions highlighted on SK2, 4/A1-7011 are correct for Stair HSS locations. Structural drawings will be updated in a future ASI.

T-1435 **SSS - ST401 Stiffener Plate Connection Clarifications** **Closed** **05/30/2014** **06/09/2014** **06/11/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 445 SK1 to SK3 for items 1 to 5:
1) It is not possible to supply a stiffener plate per 11/S1-7630 as requested in the CS6 approval submittal because it will foul the sloping beam connection. Confirm that is acceptable.
2) It is not possible to supply a stiffener plate per 11/S1-7630 as requested in the CS6 approval submittal because it will foul the sloping beam connection. Confirm that is acceptable.
3) It is not possible to supply a full depth stiffener plate per 1/S1-7600. Confirm that it is acceptable to terminate the stiffener 1" below the beam.
4) It is not possible to supply a stiffener plate at this

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Acceptable. Provide a single stiffener centered on the HSS post.

2) Acceptable. Provide a single stiffener centered on the HSS post.

3) Confirmed.

4) Confirmed.

5) Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

location per 11/S1-7630 as requested in the CS6 approval submittal because the beam will not be erectable with the stiffener below the beam.
Confirm that is acceptable.
5) It is not possible to supply a 12" high stiffener plate at this location per 11/S1-7630 because it will foul the bolts for the beam connection on the far side as shown.
Confirm it is acceptable to terminate the stiffener as shown.

T-1436 **SSS - Metal Decking at Popout Framing** **Closed** **06/02/2014** **06/12/2014** **06/03/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

The reviewer's comment on Linden Shop drawing D3 detail 49, requests the contractor to coordinate the change of steel deck height with RFI T-0803.1 and with W2 roof assembly components (see SK1).

After further review of the available information, detail 1/A1-8171 provides conflicting information to what is indicated on 1/S1-5032, the W-2 retail façade roofing assembly build-up indicates a 1-1/2" metal deck (see SK1).

Please confirm the steel framing and 1-1/2" metal deck as currently detailed is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This item was already confirmed by RFI T-1413.

T-1437 **BGP - Shear Wall Column Vertical Splice at 3rd Lift** **Open** **06/03/2014** **06/13/2014** **06/06/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Reference: RFI T-0620
For constructability purposes, the shearwalls require horizontal construction joints at the same elevations as the foundation wall construction joints. All vertical reinforcing has been detailed with HRC mechanical couplers with the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Acceptable provided that the coupler is a Type II coupler, such as Dayton Superior Barlock L-Series. The coupler proposed in the RFI does not qualify. The contractor shall plan for the installation of the coupler by taking into account the length of the coupler, the

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

exception of the 3rd lift of the shear wall column located adjacent to the knockout wall. Please confirm that it is acceptable to splice the verticals in the shear wall column with a Dayton Superior Barlock D250SCA coupler

length of the reinforcing stub to be spliced, and the available clearance. The coupler may need to be preinstalled with the stub or a blockout created depending on the proximity of the obstruction to the planned construction joint. The detailer shall account for the increase in effective bar diameter at the mechanical coupler with respect to ties and clear cover.

T-1438 **SSS - Kicker Brace at Slab Opening** **Closed** **06/04/2014** **06/14/2014** **06/11/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 449 SK1 & SK2:
Please confirm the location of the slab opening on SK1 as it is currently located over a kicker brace and not indicated on the structural drawings.
Please provide revised structural drawings indicating all sl ab openings required.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Slab opening locations per A1-2862 govern. Move the kicker brace so that it is in between the two openings. Structural drawings will be updated in a future ASI to show the two openings.

Note: Small openings in slabs are to be coordinated between sub-contractors by GC and included in the contract as defined in Contract Documents.

T-1439 **SSS - Oversized Holes in Cruciform Column Base Plate** **Closed** **06/04/2014** **06/14/2014** **06/12/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Due to the thickness of the cruciform column base plate and the transfer girder top flange connection (7-1/2" to 9-1/2" thick). Please confirm it is acceptable to provide oversized holes in the base plate only at the slip critical connection as per AISC (see SK1). This will allow additional tolerance for threading the 2-1/2" diameter post tensioned rods varying from 14' to 38' long through the 7-1/2" to 9-1/2" thick steel.
Note: The transfer girder top flange will remain a standard

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Using oversized holes in the SFRS bolted connection indicated in the RFI is not acceptable. It is acceptable to achieve additional tolerance for the post-tensioned rods by using oversized holes for these rods within the base plate.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

size hole (d+1/16").

T-1440 **SSS - Moment Frame Column Protected Zone** **Closed** **06/04/2014** **06/14/2014** **06/10/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

After reviewing the contract documents for the moment frame protected zones, please reference attached SK1/SK2
and note the following:
For the built-up moment frame beams, details 1, 3/S1-4201 have a note that directs Skanska to detail 10/S1-4202, which depicts the yellow striping and warning signage to be installed. However, the protected zone detail for the moment frame columns, 2/S1-4201, does not have any such requirement noted. Please confirm that detail 10/S14202 does not apply to the moment frame column protected zone shown on detail 2/S1-4201.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Detail 10/S1-4202 is a typical detail that applies for all moment frame protected zones (beams & columns).

T-1441 **SSS - Discrepancy for Slab Opening Location at ST301** **Closed** **06/04/2014** **06/14/2014** **06/12/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 447 SK1:
Based on the beam locations from grid D on S1-2403 and the slab opening location on A1-2883 the noted dimension should read 9 1/8". Please confirm or clarify the discrepancy.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

T-1442 **SSS - Discrepancies for Elevator Slab Opening Location PE202** **Closed** **06/05/2014** **06/15/2014** **06/12/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

See attached CD RFI # 448 SK1 & SK2 for items 1 & 2:

1) The location dimensions for the elevator pit shown in 2/S1-7101 and A1-2862 do not match as indicated by dimensions hi-lited in red. Please clarify which dimensions are correct.

2) The location dimensions for the elevator opening shown in 4/S1-7101 and A1-2882 do not match as indicated by dimensions hi-lited in red. Please clarify which dimensions are correct.

Dimensions noted on Architectural edge of slab drawing A1-2862 govern. Structural drawings will be updated in a future ASI.
Dimensions noted on Architectural edge of slab drawing A1-2882 govern. Structural drawings will be updated in a future ASI.

T-1443 **Re-Install Dewatering Well Pump #34 per Field Coordination** **Closed** **06/06/2014** **06/16/2014** **06/12/2014** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

On Thursday, May 22, 2014, there was slurry intrusion through dewatering well #34, from the Transbay Tower Project. After the Transbay Tower Project placed a lean mix to plug the slurry intrusion, only water has come out of the well at a pressurized rate, not yet experienced on this project prior to the event.

The water in this well has been confirmed acceptable by the SFPUC to discharge into the City's combined sewer system, on 6/5/14. A plug has been placed in this well in order to keep the jobsite from flooding due to the volume of water pushing through the well. We want to replace the dewatering pump in this well, but are concerned that we may end up dewatering the Transbay Tower Project and possibly draw the water table on their project outside of the requirements of our specification.

1) Please confirm that it is acceptable to re-install the dewatering pump in well #34.
2) Please let us know if there are certain steps or durations that you want us to pump in an effort for ARUP to monitor the water table on Transbay Tower's Project and/or other adjacent properties.
3) Please confirm that in performing this activity, we are not held to the requirement of Spec Section 31 56 13-

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. It is acceptable to reinstall the dewatering pump in well #34.
2. Access has been provided to the global analyzer. Please watch carefully the affects from dewatering in wells P-03DS and P-6MS. These have currently not shown any change in the piezometric elevation since May 22.
3. The specification will not be relaxed at this time.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

13.F.1. in regards to "The performance of the shoring wall shall be such that the groundwater levels around the excavation are maintained within 3 feet from the pre-excavation levels" since there is the potential of us drawing their groundwater through our well.

T-1444 **SSS - Location of Grout & Vent Holes** **Closed** **06/09/2014** **06/19/2014** **06/17/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

As a follow-up to the review comment on drawing 1202 within Submittal Package TG0701-73.1, the elevation of the grout/vent holes on the pipe basket columns is called out to be 6'-0" above finished floor per S1-4003 (SK1). Skanska's modeler has taken the finished floor to be the top of steel dimension provided in the structural drawings (EL 56'-4") plus the slab thickness provided on S1-5000 (SK2). Based on this, the model currently reflects the grout/vent holes at EL 63'-6", 6'-0" above the structural slab high point. (TOS EL 56'-4" + 1'-2" [S8 slab] + 6'-0" = EL 63'-6") (SK3).

Please confirm a grout/vent hole elevation of 63'-6" at the Bust Deck Level is acceptable. Note that shop drawings packages CS1 through CS7 have been released for fabrication based on the current model.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

We confirm the grout/vent hole elevation of 63'-6" at the Bus Deck Level is acceptable for shop drawing packages CS1 through CS7.

The elevation of the finish floor at Bus Deck Level is 57'-11 1/4", thus for all the remaining CS- shop drawing packages, the grout/vent hole elevation shall be 57'-11 1/4" + 6'-0" = 63'-11 1/4".

T-1445 **BGP - Foundation Wall Mix Placed in Partition Walls** **Closed** **06/10/2014** **06/20/2014** **06/12/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference RFI T-1093 and cast-in-place mix designs TG0600-203.1 (#1557216 Foundation Walls) and TG0600-204.2 (#1558218 Slabs, Beams, and Shear Walls).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

The Foundation Wall cast-in-place mix design satisfies all requirements prescribed in Table 2-1 "Concrete Properties" (03 30 20.2.1) for the "Slabs, Beams, and Shear Walls" cast-in-place mix design. Please confirm both concrete mix designs (#1557216 and #1558218) can be used for Partition Walls.

T-1446 **SSS - PE 202 Dimension Discrepancies** **Closed** **06/10/2014** **06/20/2014** **06/18/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 454 SK1 for items 1 & 2:

1) The dimensions locating the edge of slab shown in 4/S1-7101 & A1-2892 do not match as noted by the hi-lited dimensions. The model currently matches the dimensions in detail 4/S1-7101. Please confirm that 4/S1-7101 shows the correct dimensions.

2) The noted dimensions do not match the dimensions in detail 2/S1-7101. It appears the dimensions should match with elevator posts extending from the Ground Level to the Bus Deck Level.
Please work with CD RFI 448 and clarify.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Dimensions per A1-2892 shall govern. Dimensions to locate the edge of slab will be removed from 4/S1-7101 in a future ASI.

2) The elevator shaft size at the bus deck is larger than that at the ground level. Dimensions per A1-2892 shall govern. The RFI refers to CD RFI 448.

Note: In future RFIs, provide reference to general contractor RFI number and not subcontractor RFI number. Turner shall return RFIs using subcontractor RFI numbers and have WOJV revise the RFI prior to submitting the RFI to the PCPA team.

T-1447 **SSS - Column Connection by Bi-Fold Door Support** **Closed** **06/10/2014** **06/20/2014** **06/26/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please refer to the response to T-1402 (SK RFI 558B) and see attached SK 1:

The W27x84 beams have a depth of 26.7 inches. In order to access the bolts as suggested in the response, both the top and bottom flanges will need to be coped. The bottom flange supports the Bi-Fold Door Supports at these locations. Please provide the minimum distance between

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Provide a minimum distance of 1" between the cap plate and cope of the bottom flange of the W27x84 beams.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

the ¾" cap plate and the cope for the bottom flange of the W27x84 beams.

T-1448 **SSS - Shear Stud Layout at Column Base Plate** **Closed** **06/10/2014** **06/20/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Reference drawing S1-2304 at grid line 16G, section detail 9/S1-3702 indicates 7 rows of 6 studs on the top flange of the transfer girder. At this location and at 5 other typical locations along grid line G the transfer girder top flange is covered by the column base plate. See SK1 for clarification.

Please provide a layout detail for the 42 shear studs if they are to be welded to the column base plate.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The 42 (3/4" headed) studs shown on the top of beam flange may be deleted.

T-1449 **SSS - North Exit Mezzanine Hanger Detail** **Closed** **06/10/2014** **06/20/2014** **06/25/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached sketches CD RFI # 456 SK1 to SK3 which re ference the hanger and brace location that clashes with th e lower concourse column at grid C/21.
The hanger and brace per 1/S1-
2252 are directly in line with the cap plate bolts at grid C/2 1.
Please provide an alternative connection detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The hanger shall be connected to the cap plate similar to the detail at the bottom of the hanger as shown in detail 9/S1-5028. The 2" distance between the ends of the gusset plate and angle may be increased to clear the bolts at the cap plate. The V-shaped angle braces at the location highlighted in the RFI may be deleted.

T-1449.1 **SSS - North Exit Mezzanine Hanger Detail** **Closed** **08/14/2014** **08/24/2014** **08/27/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

See attached CD RFI # 456.1 SK1:
The response to T-
1449 does not work. The hanger connection per 9/S1-5028 fouls the column cap plate connection.
Please supply a solution.

Change the orientation of the hangers and the gusset plates at the top and bottom so that the gusset plates are parallel to the transfer girder. Provide 3/8" thick full depth stiffeners at the W12x40 beam on each side of the beam web and aligned to the bottom gusset plate. Stiffeners shall have double-sided 1/4" fillet welds on 3 sides.

T-1450 **SSS - HSS Brace Gusset Plate Connection** **Closed** **06/11/2014** **06/21/2014** **06/26/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 455 SK1:

Details 4, 5 & 7/S1-7632 (7/S1-7632 shown) show the 1/2" x 3" stiffener PL above the beam to be parallel with the offset line opposed to the brace connections below the beam where the stiffener PL is not parallel to the offset line. Please confirm it is acceptable to locate the 1/2" x 3" stiffener PL based on the horizontal and vertical weld length for the gusset plate to the beam/column as shown in the example from the model.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Acceptable. As shown for the bottom connections, the details do not require the offset lines and the stiffeners to be parallel.

T-1451 **SSS - SE401 Missing Post Locations** **Closed** **06/11/2014** **06/21/2014** **06/25/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 459 SK1:

The elevator post locations are not shown on the structural drawings. They are currently located in the model per the dimensions shown. Confirm the dimensions are acceptable or supply alternate dimensions.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Final elevator guiderail support post location shall be provided by the elevator manufacturer/contractor.

T-1452 **SSS - Beam Location Verification at Roof Level GL 12** **Closed** **06/11/2014** **06/21/2014** **09/04/2014** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

On attached sketch CD RFI # 458 SK1 on S1-2603 near grids 12/F verify the W12x14 beam is located 12'-0 5/16 from grid line 12 taken from the Revit model. Note per the architectural drawings there is no wall or curb etc to locate this beam.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

T-1453 **SSS - ASI 108 - Limits of Light Column Grout Port** **Closed** **06/12/2014** **06/22/2014** **06/17/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

ASI 108 S1-6005 / Detail A specifies grout port holes drilled at one of four light column pipes at train platform level and grout port holes drilled at one of eight light column pipes above lower concourse level. Please confirm design intent is to drill holes in light column pipes at all four pipes at train box (2Ea x 4 pipes) and all eight pipes above concourse level (2Ea x 8 pipes).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

We confirm that the grout port holes need to be drilled at all four pipes at train box and all eight pipes at concourse level.

T-1454 **BGP - Lower Concourse Temporary Manlift** **Closed** **06/13/2014** **06/23/2014** **06/20/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

In order to provide access to the first area of steel which is going to be erected on GL 10.1. it is necessary to install a temporary manlift on the concourse moment frame beam at GL-9.9 & D for approximately 2 months, please find attached a layout plan, section and some typical manlift manufactures information.
If it is acceptable to have the manlift footprint on the moment frame beam at Gl 9.9 -10.1, Webcor will prepare a formal submittal for the design team to review.

Please confirm if this location would be acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The location is acceptable provided the proposed submittal, and methods contained therein, comply with the General Conditions and Structural Notes GR-4,5,and 18.

☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1455	BGP - Top of Shear Wall Lift 2, Beam Block-Out Pour Back	Closed	06/16/2014	06/26/2014	06/18/2014	Potentially	

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference attached comprehensive lift drawing for walls Area 1 to 7 2nd lift (Drawings: W290A.1, W290A.2, W290B.1, W290B.2 W290C.1, W290C.2, W290D.1, W290D.2, W290E.1, W290E.2), and Gerdau wall rebar shop drawings SW-1, SW-2, and SW-3.

Please reference clouded section on all drawings above. Due to constructability of formwork to build this portion of the block-out clouded on the attached comprehensive drawings, SCCI propose to pour this section back with the concourse. The difficulty arises due to forming through the embedded column steel at these locations in the shear walls.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is acceptable to extend the blockout from the bottom face of MFB horizontally east to the edge of the shear wall as proposed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1456	BSE - Concourse Deck Loading	Closed	06/16/2014	06/26/2014	06/17/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Balfour Beatty Infrastructure, Inc. Kelly Phariss

REQUEST:

See attached axle loadings for Hyundai forklift model 70DS-7E. The forklift is intended to be used on the concourse deck for removal of bracing and installation of rebracing.

Please confirm if it is acceptable to use the noted forklift on top of the concourse slab.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Verifying the adequacy of the structure for construction loads as well as the design of any required shoring is the responsibility of the contractor. See also General Requirement note GR-18 on S-0005.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1457	SSS - PE403 & PE404 Framing Clarifications	Closed	06/16/2014	06/26/2014	06/30/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 457 SK1 & SK2 for items 1 to 7:
1) Confirm edge plate per 8/S1-5000 is required at 4 sides of the S7 slab shown in yellow.
2) Supply dimension.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.

2) Noted dimension is 3'-3". See attached sketch SKA-3673.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

3) T/Wall (shown in green) is at EL 86'-9 per A,B/S1-7134 & A/S1-7135. Please confirm.
4) Confirm the top of S7 slab shown in yellow is at EL 86'-10 3/4 based on the T/STEEL 86'-6 + 4 3/4" slab thickness.
5) Supply dimension.
6) Supply dimension.
7) Confirm edge plate per 8/S1-5000 is required at 4 sides for the 4 3/4" S7 slab and the curbs per A1-2965 will be a separate pour.

3) T/Wall elevation is 87'-5" per A1-2904. Structural drawings will be updated in a future ASI to match architectural drawings.

4) T/steel and T/slab elevations are 85' -10 ½" and 86'- 3 ¼", respectively. Structural drawings will be updated in a future ASI.

5) Noted dimension is 3'-1" per 2/A1-2965.

6) Noted dimension is equal to 0". The W12 beams are to be centered on the HSS columns.

7) Confirmed.

T-1458 **SSS - Work Points (WP) Drilled at Webs** **Closed** **06/16/2014** **06/26/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please see OIW shop drawing 2771-SK115. Following previous discussions between OIW and Skanska, it is apparent that survey Work Points accessible from both sides of a Roof Beam are required. It is our intent to provide a 1/2" dia. through hole at the web directly above the roof pins.

Please confirm that the drilled holes as shown on the attached sketch are acceptable for all roof beams.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed, but the Contractor shall coordinate the drilled hole with CP2 connection for W1 system shown on 4/S1-8001.

T-1459 **SSS - Paint Limits on Machined Cap Plate** **Closed** **06/16/2014** **06/26/2014** **06/25/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please confirm the paint limits indicated on SK1 are accep table for the coating required on the machined surface of t he cap plates as per RFI T-1230.1.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Proposed paint limits shown on the bearing surfaces of the base / cap plates are acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1460	BGP - Telecom Sweep Conflict	Closed	06/16/2014	06/26/2014	06/19/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

At Gridline 8.9/A one of the 4" 90 degree telecom sweeps conflicts with an existing internal bracing strut (See attached photo). This sweep was changed from an original 30" radius sweep to a 36" radius sweep.

Please confirm which option SCCI is to proceed with:
I)The first telecom sweep could be installed 7'-1" West of GL 9 (instead of 5'-7" shown in comprehensive layout drawing) and the remaining 2 installed with the specified I' -6" offset.

2)The 36" radius telecom sweep could be replaced with the original 30" radius telecom sweep at this location only.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please proceed with option 1: The first telecom sweep could be installed 7'-1" West of GL-9 (instead of 5'-7" shown in comprehensive drawing) and the remaining two installed with the specified 1'-6" offset.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1461	BGP - CMU Pier Sizing	Closed	06/17/2014	06/27/2014	06/25/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Detail 9 on plan sheet S1-9000 shows the CMU pier sizing based on wall height and door opening width. The height of the CMU wall significantly affects the CMU pier sizing. The AI-9240 drawings which were provided in the response to RFI T-1410 are the only drawings which show possible CMU wall heights, however those heights are only based on scale dimensions. Please provide the heights of the CMU walls or confirm SCCI is to assume the maximum CMU wall height of 26'-8" for all CMU walls.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

CMU wall limiting height varies according to the Masonry Partition Schedule shown on A-0022 issued with the Main Package IFC dated March 31, 2014. CMU wall heights can be established using information provided on Structural and Architectural drawings (slab thickness, beam depths, TOC floor elevations).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1462	SSS - TR5 Vertical Shear Studs at GL5C	Closed	06/17/2014	06/27/2014	06/24/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please reference S1-2302, grid 5/C. At this location and similar conditions, section 2/S1-3707 is shown. Through this detail section 6/S1-3702 is cut. This detail calls for 6 rows of 6 studs @ 6" placed on the top flange of the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

transfer girder. At conditions where the end of the transfer girder is 4'-8" from the grid line there is not enough room to install the studs as indicated. See attached SK-1.

Note: This condition also occurred at GL9/C and detail 5/S1-3707 was provided with field order 027 to show 4 rows of 4 studs. Confirm this detail is also acceptable at 2/S1-3707.

T-1463 **SSS - Shear Studs and Rebar Holes at TR4 GL4G** **Closed** **06/17/2014** **06/27/2014** **06/24/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 460 SK1 & SK2 for items 1 & 2:
1) It is not clear how many studs are required. See SK2 a nd confirm the location and number of studs.
2) It is not clear how many 2" diameter holes are required. See SK2 and confirm the location and number of holes.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). Confirmed the studs shown on SK2 are acceptable.

2). Confirmed the holes shown on SK2 are acceptable

T-1464 **BRP - Copper Drain Pipe Details** **Closed** **06/18/2014** **06/28/2014** **07/08/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference the attached drawings, A1-2817 and A1-8881. Please provide further details regarding the added 2" diameter copper overflow drain pipe clouded in the attached drawings. ·

1. Please specify the type of valve needed for the copper drain pipe.
2. Is the copper pipe insulated? If so, please provide specific details on insulation.
3. What type of install method should be used such as, is the connection brazed, soldered, butt welded, mechanical, etc?
4. Please provide further details on how the pipe terminates at the SJ joint.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Valve needed for the Copper Drain Pipe: Soldered Ball Valve

2. Insulation for Copper Pipe: No Insulation, however pipe wrap required, refer to Spec 22 11 11 for underground pipe wrap.

3. Type of installation method: Soldered Joints

4. Details on how the copper drain pipes terminate at the SJ joint. For lower and upper copper drain pipes, provide with PVC flange secured to cast in galvanized steel frame and stud assembly, refer to attached SKA-3737.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

5. Please clarify how the 2" diameter hose adapters connect to the 2" diameter copper drain pipes and how they are sealed to flex flashing and SJ assembly.

5. 2" dia hose adapters connect to 2" dia copper drain pipe - Copper fitting (2") soldered end to threaded end cap.

6. For sealing of copper pipe to flexible flashing: For lower copper drain pipe, provide prefabricated boot flashing c/w SS draw band, refer to attached SKA-3737.

T-1465 **SSS - Seal Weld at Edge of Backing Bar** **Closed** **06/18/2014** **06/28/2014** **06/25/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Reference attached RFI OIW 033. The same configuration of weld joint and backing bar used on the fabricated roof nodes is also used on the bus-deck nodes for each pair of shear plates. It is our intent to provide a continuous seal weld at the end of the backing plate and the shear plates.

Please confirm that the noted seal weld is acceptable for all shear plate connections to bus-deck nodes.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The RFI question and information are not complete.

- It refers to RFI OIW 033. We can't find RFIs through sub-contractor numbers. W/O should refer to W/O RFI numbers.

- On page 7, the question in RFI OIW 033 was included. However, it is referring to a shop drawing which is not included in the RFI. It is also referring to a photograph that was not attached.

- There are drawings attached with no markups (pages 4 and 5), so it is not entirely clear what they are for.

T-1465.1 **SSS - Seal Weld at Edge of Backing Bar** **Closed** **07/01/2014** **07/11/2014** **07/15/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Reference attached RFI OIW 033. The same configuration of weld joint and backing bar used on the fabricated roof
nodes is also used on the bus-deck nodes for each pair of

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed that the noted seal weld as shown on the attached shop drawing RN151is acceptable for the shear plate connections to Bus Deck nodes

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

shear plates. It is our intent to provide a continuous seal weld at the end of the backing plate and the shear plates.

Please confirm that the noted seal weld is acceptable for all shear plate connections to bus-deck nodes.

T-1466 **SSS - Exposed Flange at Step in Slab** **Closed** **06/18/2014** **06/28/2014** **06/30/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

1) Please reference sheet S1-2302, grid E.2. 5-6. At this location detail 10/S1-5002 is cut. The W33x118 beam is located 1' 1-7/8" from line E.2 as per S1-2303. Per A1-2862 the face of the slab is 1' 6-3/4" from line E.2. The face of the step to the center of the beam is 4-7/8" and the width of the flange is 11-1/2" resulting in the beam flange projecting 7/8" beyond the face of the step. Please advise if the structural steel or decking is to be modified to avoid this occurrence.

2) Please reference sheet S1-2303, grid E.2, 6-7. If item #1 requires changes, confirm if changes are requires at this location also.

Note: the face of the step does not meet the minimum 2" from the beam flange required as per detail 10/S1-5002. See attached sketch 20 for clarification.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) See response to RFI T-1415.

2) No changes are required at the location noted in item 2. The 2" min requirement per 10/S1-5002 can be waived at the location posed in the question 2 of this RFI

T-1467 **SCS - Foundation Wall Lift #4 Construction Joint** **Closed** **06/23/2014** **07/03/2014** **06/26/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Based on the construction joints shown on Sheet Sl-3201, the fourth lift and the ground level slab is to be poured monolithically. Pouring the fourth lift monolithically with the ground slab causes problems with access, staging space and formwork. SCCI proposes to add a construction joint

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is construction means and methods issue. We do not take an exception to the new construction joint proposed by the contractor at the location indicated in the RFI.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

on the fourth lift as shown in the attached marked up reference drawings to remediate these issues.

Please confirm this is acceptable.

T-1468 **SCS - WPS Qualification - Lenton Weldable Couplers** **Closed** **06/23/2014** **07/03/2014** **07/03/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

The Lenton welding information provides guidance for qualification of processes; however there are inconsistencies when trying to fulfill AWS D1.1 (2010) requirements. The materials used for manufacturing weldable couplers size #9-11 are Grade 1030/1035. These grades of material are not listed in AWS D1.1 (2010) Table 3. 1, although Grade 1030 is listed in AWS B 2.1 Table D.1 as a Group 2 material (table attached). In order to move forward with welding the Lenton weldable couplers to the Transfer Girders, TMF proposes that FCA W Grade 70 filler material to be used manufacturer ESAB 7100 Ultra, Classification E71 T-9, AWS Specification AWS 5.20"D". One mockup of the actual coupler welded to a Group 2 plate and macro etched would be provided as a supplement.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1469	BGP - Seismic Joint Rebar and Continuous Plate Conflict	Closed	06/23/2014	07/03/2014	06/26/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference the attached drawings, S1-3010 and S1-3206. The continuous plate and rebar clouded in the attached drawings is conflicting. Please provide a minimum clearance between the rebar and continuous plate.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

To clear the reinforcement, reduce the steel plate width from 3 inches to 2 inches at the highlighted location. For the similar plate on the opposite side of the joint, reduce 3 inch width to 2 inches for symmetry.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1470	BGP - Steel Jacket at Column GL1.4/D.4	Closed	06/24/2014	07/04/2014	06/25/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference attached drawings.
The column at Gridlines 1.4/D.4 requires steel jacketing as called out in AAI comment in Submittal Package TG0600-141 sheet G101.0. During the TG0600-141 coordination meeting held on 6/18/14 it was confirmed that the typical sleeve detail as shown on 3/A1-9208 will apply. Sheet A1-2102 implies a one-sided sleeve on the south face of column, sheet A1-9214 implies a two piece sleeve, and sheet 3/A1-9208 shows the typical detail with no modifications. Please confirm a detail specific to this location showing how the jacket is to be wrapped and interfaced with adjacent partition walls.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The column at gridlines 1.4/D.4 requires 6'-0" high steel jacket all around the column with ring plate base, post-installed studs at the Mat Slab. The concrete wall located at 2 sides of column terminates 3/8" before the steel jacket face, 3/8" before and above the ring plate base, and 3/8" before the concrete column face (above steel jacket). Please refer to dwg sheets 3/A1-9208 for detail plan and 2/A1-9213 for section.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1471	BGP - Seismic Joint Bottom Embed Plate at Pits	Closed	06/24/2014	07/04/2014	07/07/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference attached Contract Drawings and photos.

The east face of the north pit along GL 35 is scaled at 6'-8" from face of CDSM wall (S1-2027 attached). The as-built dimension ranges from 5'-0" to 5'-11" (S1-2027). Also, the center pit is scaled at 5'-8" to face of CDSM wall while the as-built is 5'-3" (S1-2027).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The embed plate for the center pit at GL 35/E: It is acceptable to reduce the plate to 5'-7" minimum length to accommodate the edge of pit and clamping detail. Provide grout for vertical transition of WPM.

The embed plate for the north pit at GL 35/B-C.3: The vertical surface of the mud slab should be adjusted to reflect what is depicted on engineering drawings

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Detail 4 on S1-3010 includes a scaled dimension of 5'-0" from face of CDSM wall to the inside face of the west half of the seismic embed (See S1-3010 attached). Therefore, the bottom embed plate will need to extend 2'-6" beyond the 5' dimension per Detail 7 of Al -8881 (attached).

Since the as-built dimensions of the edge of pits range from 5'-0" to 5'-11" from face of CDSM wall, the bottom embed plate will overhang the pit depression 2'-6" to 1'-7". The plate could be reduced up to 1-11" (2'-6" minus the 8" for clamping detail) to accommodate the edge of pits and allow for waterproofing clamping detail. Is this acceptable?

Please provide further details at locations where encroaching pits do not allow for sufficient room for bottom embed plate and clamping assembly.

(7/S1-3010) and read in combination with architectural drawings (A1-8881). The contractor may reinforce and anchor additional concrete to the side of the pit. Alternatively, they may opt to remove the existing mud slab concrete locally leaving exposed reinforcing to lap splice or mechanically splice to and pour concrete on area removed. The plate at this location shall be reduced to 5'-7" minimum horizontal length to accommodate the clamping detail.

T-1471.1 **BGP - Seismic Joint Bottom Embed Plate at Pits** **Closed** **07/28/2014** **08/07/2014** **08/06/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Further to the response to 1471 please find attached embed plate layout with cross-sections at the pit locations. It will be necessary at the pit locations to also infill and adjust the mud slab vertical/sloped face in order to accommodate the embed plate and clamping detail of the SJ embed.

Please confirm if this is acceptable.

Note: all infill material used is to be approved by the WPM manufacturer

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

AAI Response:
The dimensions provided in SK-1, SK-2, and SK-3 for the SJ bottom embed plate are confirmed. The high strength grout or concrete infill should be compatible with the WPM and should be approved by the WPM manufacturer.

TT Response:
The proposed dowels are sufficient to keep in place the 2" minimum high strength grout or concrete infill during construction.

WOJV 8/1/14: Confirmed, proceed with work.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1472	BGP - Pier and Opening Sizes on Deck D207-D209	Closed	06/24/2014	07/04/2014	07/30/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Because the specific sizes are not noted on the Contract Drawings provided, and wall heights are not shown on the Contract Drawing (Refer to RFI T-1472), please confirm Pier and Opening Sizes for Deck D207 to D209 are per the attached drawings.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Pier and opening sizes without mark ups for Deck D207 to D209 are confirmed. Refer to attached PDF (AAI Response) for AAI notes and mark ups.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1473	BGP - Lower Concourse Service Corridor Dimensions on West Wall	Closed	06/25/2014	07/05/2014	07/02/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference RFI T-0576 regarding the offset of the West Foundation Walls to account for the CDSM Encroachment. The west wall (GL 1) was offset 3 1/8" to the east while the southwest wall (GL Xl-1) was offset 1 7/8" to the northeast. Currently there are no dimensions explicitly shown in the contract drawings for the width of the service corridor that runs along the very western edge of the Lower Concourse in Area 1 and 3. However there is a dimension shown on A1-3006 & A1-7004 that shows the eastern face of the service corridor at 5' to the west of GL 1.4 which translates into a service corridor width of 9' -8 7 /8". Is it the designers intent to offset the service corridor walls similar to the foundation walls to maintain the 10' corridor width, or is it the designers intent to shrink the width of the service corridor and keep the interior walls in place? Please provide dimensions for the service corridor width.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The location of interior walls of rooms along the west and southwest service corridors shall be maintained. The service corridor widths shall be reduced by 3 1/8" on the west and 1 7/8" on the southwest.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1473.1	BGP - Lower Concourse Service Corridor Dimensions on West Wall	Closed	07/07/2014	07/17/2014	07/15/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

With the response from RFI T-1473 and the contract drawings, SCCI has enough dimensions to model the service corridor running north-south in Area 3. However

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For the alignment of the service corridor that runs along the west side of the Lower Concourse, as requested in this RFI, please refer to the work points

there is not enough information to model the alignment of the service corridor running northwest-southeast. Please provide a work point with dimensions somewhere along the east face of the service corridor (preferably at the southernmost point of the service corridor at Shear Wall 390A) or provide an angle at which the service corridor changes direction above Gridline K.

and dimensions in the attached SKA-3865.

T-1474 **BGP - Seismic Joint Fire and Smoke Barrier** **Closed** **06/26/2014** **07/06/2014** **06/26/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Webcor/Obayashi Joint Ve Spencer Sayles

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference the attached drawing, AI-8881. Per ASI-107, a fire and smoke barrier is added at the top of Gridline 35 on 3/AI-8881. Please confirm: -

1. The fire and smoke barrier is not to be incorporated in TG06 Contract.

2. There will be no embeds associated with the fire and smoke barrier that will need to be installed in TG06 Contract.

3. Please verify who will be supplying the flexible drain to be installed in the top wall poured in TG06 Contract.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Fire smoke barrier and seismic cover to be supplied and installed by others.

2. No specification exists for the referenced seismic joint. Currently there are no known embeds. TG06 scope delineation on this sheet remains. SCCI to incorporate any ASI modifications to its originally contracted work.

3. The drain pipe design through the wall appears to be not fully developed at this point in time. WOJV is requesting structural sleeving details via RFI.

T-1475 **BGP - Plumbing Penetration Sizes in Concourse Area 8** **Void** **06/27/2014** **07/07/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

SCCI is in receipt of response to Submittal TG0600-122 for Comprehensive Layout Drawings at the Lower Concourse A8-9 on 6/20/2014. On this submittal response, it was noted on pg D2.33: "For future washroom wall layout and plumbing penetrations- Refer to

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

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forthcoming Confirming RFI."

RFI T-1410 revised the plumbing penetrations in this area. Please provide concourse blackout sizes for these penetrations (including "future plbg").

Sketch is based on A1-2844

T-1476 **SCS - Concrete Form Support Using CDSM Piles** **Closed** **06/30/2014** **07/10/2014** **07/09/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Shimmick is planning to use a similar form system for the fourth lift of the foundation wall to that used on the second wall lift. However, the second wall lift form system is a cantilever system and is supported by 1 row of anchors, excerpting significant force on the wall lift below. Shimmick proposes to add a tie to the top of the forms and connect to the CDSM soldier piles in addition to using the third lift anchor to provide better support. The soldier piles extend above the ground level and this added tie would not affect the waterproofing (installed by others). See the attached marked up drawings for reference

Please confirm it is acceptable for the fourth lift form system to tie to the CDSM soldier piles.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is acceptable. We recommend that the shoring designer be notified and given a chance to comment on this approach.

T-1477 **SSS - Comment on TR19.1 Package CS09** **Closed** **06/30/2014** **07/10/2014** **07/03/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 465 SK1:
The 1/2" fillet welds are per details C/S1-4304 to 1/S1-4354 to 7/S14354 to 2/S1-4350.
Note 5 on 1/S1-5052 does not apply as detail 1/S1-5052

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

does not apply at the column connections to Transfer Girder connections on Grid 19.1.
Please confirm no further action is required.

T-1478 **SSS - Paint Boundaries at Roof Level Beams** **Closed** **06/30/2014** **07/10/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

1. At the Roof Level EBF Link beams, the AESS fabricated roof nodes weld to the underside of the built-up beam protected zone as indicated in the sketch attached. Based the thickness of the SFRM coating and the profile of the node-to-flange weld, the coating boundary line between the protected zone paint and AESS primer is proposed at an elevation 3" below the bottom flange. This will allow for a clear delineation between the two coatings by avoiding the weld area, as well as allow for compatibility between the SFRM coating and prime coat. Please confirm this is acceptable.

2. The same elevation for the AESS to SFRM boundary is proposed at the Roof Level Brace beams; however, rather than the protected zone paint, the area above the AESS primer will be bare steel to receive SFRM by others. Please confirm it is acceptable to terminate the AESS paint 3" below the bottom flange of the Roof Level Brace beams.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. This question is a means and methods coordination between trades which the CM/GC shall coordinate. We take no exception to the suggested method. However the ultimate approach selected shall meet the approval by the AHJ.

2. Same response as above.

T-1479 **SSS - Cylindrical Plate Requirements** **Closed** **06/30/2014** **07/10/2014** **07/18/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

1) It appears the structural drawings and the architectural drawings do not supply consistent information for the location of the AESS enclosures.
Please clarify where the AESS enclosures are required.
2) The AESS enclosure plate on A1-8692 is weldable only

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Statement is too general and not quite correct, information required for AESS elements is consistent between Architectural & Structural drawings.

2) It is correct that only one side of AESS cylindrical

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

on one vertical side where it contacts the node. Confirm that is the intent.
3) The AESS enclosure plate on A1-8693 is weldable only on one vertical sides and the bottom side where it contacts the node. Confirm that is the intent.
4) Confirm all AESS enclosure plates are A572 GR50 material.

plate is welded to cast node and it is to extend below the concrete topping slab. All exposed edges of the plate shall be finished per AESS requirements, as documented on drawings and Spec Section 05 12 13 2.3; welding shall meet QA in Spec Section 05 10 00, 1.8 D.5.d. Contractor is to submit detailed shop drawings of this AESS work describing the AESS closure fabrication, prep and welding procedures, so that basket column nodes may be reviewed as complete elements to confirm all conditions documented in Sheet A1-8690.

3) It is correct that AESS cylindrical plate is welded to one side and the bottom side onto the cast node. Additionally, plate is to extend below the concrete topping slab. All exposed edges of the plate shall be finished per AESS requirements, as documented on drawings and Spec Section 05 12 13 2.3; welding shall meet QA in Spec Section 05 10 00, 1.8 D.5.d. Contractor is to submit detailed shop drawings of this AESS work describing the AESS closure fabrication, prep and welding procedures, so that basket column nodes may be reviewed as complete elements to confirm all conditions documented in Sheet A1-8690.

4) Confirmed.

T-1480 **SSS - ST301 Shear Plate to HSS Connection** **Closed** **06/30/2014** **07/10/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 471 SK1:
The shear plate for the W10x54 only partially attaches to the HSS12x6. Confirm that is acceptable or supply an alternate detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Acceptable, except provide 5/16" fillet welds in lieu of the 1/4" fillet welds per schedule at the shear plate connection.

T-1481 **Pier and Opening Sizes on Deck D214-D215** **Closed** **06/30/2014** **07/10/2014** **07/08/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Because the specific sizes are not noted on the Contract Drawings provided, and wall heights are not shown on the Contract Drawing (Refer to RFI T-1461), please confirm Pier and Opening Sizes for Deck D214 to D215 are per the attached drawings.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Pier sizes are confirmed. Size provided for CMU pier between GL 14 and 15 (refer to attached PDF-AAI Response). Door openings are confirmed based on RFI T-1362.

T-1482 **SSS - Slab Opening Location at Roof Park GL5D** **Closed** **06/30/2014** **07/10/2014** **07/15/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 472 SK1:
Please supply the size and location for the noted slab opening.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The opening noted in this RFI is no longer there. Refer to the A-2902 issued as part of Roof Park Restaurant IFC.

T-1483 **BGP - Dimension to Door on North Vehicle Ramp Wall** **Closed** **07/01/2014** **07/11/2014** **07/07/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

The door in question is at the east end of the north Vehicle Ramp Wall. There is a dimension on AI-2853, dimensioned at 7'-5 7/4" from GL 6 to the end of the wall and it is shown without a door attached. On all other drawings a door is shown at the east end of the wall, but there are no other dimensions indicating the east-west location of the door. Please confirm if it is the designer's intent to have the door placed on the end of the wall shown in AI-2853 so the east face of the door is 6'-5 1/4" off of GL 6 or if the door is to be placed per scale at 6'-3" off of GL 6.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For door location with updated dimension at the east end of the north and south Vehicle Ramp walls, refer to SKA-3747 & SKA 3748.

T-1484 **SSS - Missing Slab Opening Locations GL16D** **Closed** **07/01/2014** **07/11/2014** **07/14/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 478 SK1:
Please supply the missing slab opening locations.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For missing slab opening dimensions refer to SKA-3674 attached. Drawing A1-2864 will be issued as part of an upcoming ASI.

T-1485 **SSS - East and West End Hole Dimension Clarification** **Closed** **07/01/2014** **07/11/2014** **07/14/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please confirm that grout hole "5" as shown on the attached sketch, SK1, is required on the west side only on grid 1 and on the east side only on grid 33.5. If not please clarify locations.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Hole "5" (3 in dia port in steel pipe) is used not only at East and West ends of the buildings as indicated in Sheet S1-4018 and at other locations as indicated in Sheet S1-4003.

At East and West ends of the Buildings:

In detail B/S1-4018 at GL H, a 3" hole (indicated as hole 5 in the RFI) is to be provided above the Bus Deck Level. On detail B/S1-4018 at GLs F.7 and E.6, a 3" grout hole above the Bus Deck Level is not needed since Bus Deck castings (casting 37 per S1-5120) include 3" holes to allow concrete flow through. Per symmetry and as called out, all pipe columns at D4., C.3 and B require the same hole configuration as those of H, F.7 and E.6.

Hole requirements for pipe columns between the ground level and the roof level in detail A/S1-4018 are identical to those of Detail B/S1-4018.

T-1485.1 **SSS - East and West End Hole Dimension Clarification** **Closed** **07/25/2014** **08/04/2014** **08/05/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 463.1 SK1 for items 1 to 3:
1) Confirm Hole 5 is on the west side of the columns on Grid 33.5 and on the east side of the columns on Grid 1.
2) Supply elevation for Hole 1.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1-) Confirmed for columns on Gridlines 1 and 33.5, except corner columns. At column 1-B, locate hole 5 at plan-45 degrees facing South-West; At column 1-H, locate hole 5 at plan-45 degrees facing North-West; At

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

3) Supply elevation for Hole 1.

column 33.5-B, locate hole 5 at plan-45 degrees facing South-East; At column 33.5-H, locate hole 5 at plan-45 degrees facing North-East. Note that there is 5/8¿ vent hole (hole type 1) on the opposite side from hole 5.

2-) 12 feet above the Bus Deck FF.

3-) 3 feet above the cast node seam.

T-1486 **SSS - Missing Hole Locations for CP3, CP4 & CP8 Connections** **Closed** **07/01/2014** **07/11/2014** **07/14/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please supply the size and location for the bolt holes at the CP3, CP4, and CP8 connections as indicated on the attached SK1, SK2, SK3, and SK4 drawings.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SKS 1 - See sheet S1-6093, included in the superstructure package for information only, for stiffener plate location.

SKS 2, 3, 4 - Preliminary bolt sizes given on sheets S1-6092, 6093, 6094, included in superstructure package for information only. Final bolt sizes and location of bolt holes can only be determined by the W-1 design-build contractor after analysis of value engineered W-1 geometry.

T-1486.1 **SSS - Missing Hole Locations for CP3, CP4 & CP8 Connections** **Closed** **07/25/2014** **08/04/2014** **07/30/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 476.1 SK1 for item 1:

1) 5" diameter access holes are provided for the outer bolts but no access holes are shown to get access to the inner bolts. Please review and advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Access holes as shown in Sections L and P in Sheet S1-8001 provide access to the "inner bolts".

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1486.2	SSS - Missing Hole Locations for CP3, CP4 & CP8 Connections	Closed	08/15/2014	08/25/2014	09/09/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please supply the size and location for the bolt holes at the CP3, CP4, and CP8 connections as indicated on the attached SK1, SK2, SK3, and SK4 drawings.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SK1 - response has been issued by TT as RFI T-1486.1
SK2 - please see attached
SK3 - please see attached
SK4 - please see attached

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1486.3	SSS - Missing Hole Locations for CP3, CP4 & CP8 Connections	Open	09/15/2014	09/25/2014		Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 476.2 SK1 to SK3 for items 1, 2 & 3:
1) The green lines are not extended thru the holes and it is not conclusive where they are located. Confirm the bolts are centered on the red lines as shown.
2) The sum of these dimensions = 35" but the d-2tf of the BU-40x22x1x2 on Grids 1 & 33.5 = 36". Please update the dimensions to suit the BU-40.
3) The sum of the green dimensions = 2'-7 1/2" but the PL 1/2" is 2'-6" long. Please clarify which dimensions are correct.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1487	SSS - Shear Plate Weld Connection Clarification	Closed	07/02/2014	07/12/2014	07/14/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

For roof level shear plate connection details at GL11D & GL11F, S1-2603 refers to 3/S1-5013. This detail calls for a 3sided PJP weld at the shear plates, with a t-1/8 bevel (t=shear plate thickness). The shear plate located at the center of the web has a thickness of 2 ½", which results in a 2 3/8" bevel. The column web at this location has a thickness of 1 ¼"; the stiffener plates top and bottom have a thickness of ½". A 2 3/8" PJP weld will greatly distort the ½" stiffener plates. The weld size should not exceed the thickness of the thinnest member. Also, Detail 3/S1-5013 refers to Connection Detail 4/S1-5013 which in turn

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Double sided 1/2" fillet welds are acceptable at the top and bottom stiffener plates as indicated in the RFI. Also, reduce the weld size at the column web from 2-3/8" PJP welding to double sided 1/2" fillet welds.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

refers to Shear Connection Detail 3/S1-5013. Since both sides of the shear plate are accessible (note 1), is a ½" fillet both sides as shown in 3/S1-5011 acceptable for this location?

T-1488 **SSS - NDT of Centrifugally Cast Pipes** **Closed** **07/02/2014** **07/12/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Specification 05 15 22, section 2.1.A.3 indicates magnetic particle testing (MT) shall be performed according to the criteria of ASTM A903, which in turn indicates that liquid dye penetrant testing (PT) may be performed, not in lieue of but in addition to MT, to give further information in cases where the MT results may be unclear.

Please confirm if PT is an acceptable NDT method per ASTM A903, in addition to the MT already prescribed. For clarification, no reduction in the amount of MT is requested.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Acceptable at Contractor's option. When available, include dye penetrant test (PT) data as part of NDT submittals.

T-1489 **SSS - Pin Coating Clarification** **Closed** **07/02/2014** **07/12/2014** **07/14/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Structural Steel Specification - 05 10 00, states that the pins for the basket columns, a Type 2(M) drag connection, are to be galvanized to class A or Class B-1 per ASTM A153. After reading this note, and looking through all of the applicable details, Skanska interpreted all of the remaining drag connection pins to be provided as bare steel. In the response to the submittal package TG0701-60.1 SSS - PIN Drawings (Central Zone), drawing A9312, a Type 2 (N2) drag connection at GL 11, was marked to receive a galvanized coating. Similar pin connections occur at GL 21 & GL 22 (Type 2-P) and GL 28 (Type 2-N2). Does the design team want these pins galvanized

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractor's interpretation of the corrosion protection/finish of remaining pins (other than the Basket column pins) is not correct. AESS elements documented to receive IFRM should receive IFRM in all instances (pins are included), both as fire protection method and as a corrosion prevention measure.

The Design Team as the TJPA Representative will offer this as Contractor's Option; to hot dip galvanize ALL the remaining pins (other than the Basket column pins), or apply the intumescent coating system over non-galvanized steel, in either option, the tolerances

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

too? If so, please provide the standard required.

required for installation of pins is a means and methods solution the responsibility of the contractor

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T-1490 **BGP - IDF Room B1545 on Concourse Level** **Closed** **07/03/2014** **07/13/2014** **07/08/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

On concourse wall and floor plans (SKA-3332 and SKA-3336) the southern wall of IDF room B1545 is shown as RCW. However, on detail 3 of sheet A1-3009 it is shown as 0.10CMU. Please clarify the type of wall.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The southern wall of IDF room B1545 is RCW; refer to A1-3009 issued with ASI 119.

T-1491 **BGP - Extent of Ramp Wall Reinforcement Embedded in Lower Concourse** **Closed** **07/03/2014** **07/13/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please confirm the western extent of the north vehicle ramp wall that is to embed into the Lower Concourse. The five main contract drawings pertaining to this issue show five different layouts for the end of the wall embedded into the Lower Concourse. Please provide details or confirm which drawing shows the correct layout for the extent of the north Vehicle Ramp Wall that is to have reinforcement embedded into the Lower Concourse.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please refer to the attached SKA-3751, SKA-3771, SKA-3772, SKA-3773 and SKA-3774 for updated plans and section showing updated extent of concrete wall and CMU wall infill below the ramp.

T-1492 **BGP - Gridline W Ramp Wall Pier Dimensions** **Closed** **07/03/2014** **07/13/2014** **07/18/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please provide dimensions for 3 of the piers located along the wall south of Gridline L and west of Gridline W. A1-2230 refers to A1-2850 for wall dimensions, but none are shown for the piers.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to the attached SKA-3878, for location of piers at ramp wall, requested in this RFI.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1493	BGP - Two Future Plumbing Penetrations West of GL15	Closed	07/03/2014	07/13/2014	07/10/2014	Potentially	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

On Plan Sheet SKA-3361_R1, two(2) future plumbing penetrations are shown 2'-5 1/2" West of Gridline 15. The Moment Frame Beam at this location is 6' wide. This places both plumbing penetrations in the MFB.

Please provide details on how SCCI is to provide plumbing penetrations through MFB on GL 15 or provide new offsets for these plumbing penetrations which are outside the MFB.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For the updated locations of 2 future plumbing penetration west of GL 15 referred to in the RFI, please see the attached SKA-3740 and SKA-3741.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1494	BGP - Minna St. West Transformer Vault Pier Dimensions	Closed	07/03/2014	07/13/2014	07/16/2014	Potentially	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please provide dimensions to the center piers in the Minna St. West Transformer Vault. Refer to the attached drawings.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

AAI Response:

For Transformer Vault Door B1223A dimensions refer to door schedule A1-9701. Please refer to attached SKA-3863 and SKA-3864 for clarification.

TT Response:

Confirmed. See schedule on 9/S1-9050 for pier sizes.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1495	BGP - CMU Wall and B9/B11 Beam Dimensions D204 at GL4-J	Closed	07/03/2014	07/13/2014	07/08/2014	Potentially	☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please provide dimension or confirmation for the CMU wall as well as the B9 and B 11 beam just north of GL Jin between GL X and 5. Al-2202 gives a dimension to the east-west alignment of the wall, but no north-south dimension. The wall is not in any of the Al-3000 detail drawings and no dimension is shown on Al-2222. In Sl-2202 the wall appears to be centered on a B9 beam, which appears to be aligned with the Bl 1 beam to the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

AAI Response: The location of the CMU wall is centered on B9 beam.

TT Response: Centerline of B9 and B11 is 1'-5 4/8" north from GL J as shown on S1-2202. This is also the centerline of the column C37.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

east. There is a 1 ' -5 3/8" dimension that appears to be for the location of the C37 beam, but the beam is also adjacent to the circular opening. Please confirm whether the B11 (and therefore the B9 beam) are to be dimensioned off of the circular opening, the dimension near the C37 column, or another dimension not provided. Also please confirm whether the CMU wall above the B9 column is to be dimensioned off of the location of the B9 beam, or another dimension not provided.

T-1496 **SSS - Exposed Flange at Second Level Slab GL 15** **Closed** **07/07/2014** **07/17/2014** **07/14/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 477 SK1:
The noted dimension is shown as 15'-5 1/2 on A1-2864 but the flange of the W16x26 will extend 1/2" inside the slab opening. Confirm the slab opening may be located 15'-6 east of grid 15 as shown.
If not, supply an alternate solution.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The slab opening shall be located 15'-8" east of GL 15 as shown on the attached sketch SKA-3862. The opening will clear the steel flange by min 2". Drawing A1-2864 will be issued as part of an upcoming ASI.

T-1497 **SSS - Brace Connection Clarification at W1 - Facade System** **Closed** **07/07/2014** **07/17/2014** **07/18/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI #464. Please confirm the connection as submitted and shown on the attached sketch, SK3 as approved in RFI T-0923.2 is typically acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

T-1498 **SSS - Continuity Plate Thickness at Moment Beam Flange GL 20.1** **Closed** **07/07/2014** **07/17/2014** **07/14/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

SUGGESTION:

ANSWER:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Accept Suggestion: ☐

See attached CD RFI # 480 SK1 & SK2:

At the Bus deck level at grids 20.1/C & 20.1/G (Sim.) shown on SK1 & SK2 the bottom continuity plate is currently shown as 4 3/8" thick to accommodate the moment beam flange thickness and elevations. Please confirm it is acceptable to use 4" thick plates by tapering the bottom flanges, similar to the response to Webcor RFI # T-1234 (SK RFI # 427).

Confirmed. We assume that the SFRS moment frame beam bottom flange continuity plate is not shown on sketch SK2 of the RFI for clarity.

T-1499 **SSS - W-1 Brace Details at Bus Level** **Pending** **07/07/2014** **07/17/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 470 SK1 to SK3:
CD RFI # 257 was issued to confirm that detail 8/S1-5015 would be referenced for all information not shown in detail 4/S1-8003 and the response in RFI SK 330 referred us to revised ASI 109 drawing S1-8003. The revised detail added (1) bolt at the bottom end of the brace connection but did not give any additional information for the connection at
the top end of the brace to the beam. The connections for the braces per detail 4/S1-8003 were therefore applied per the information in detail 8/S1-5015 and RFI's T-0919, T-0919.1 & T-0919.2 (SK 173, 173.1 & 173.2, CD 127, 127.1 & 127.2).
Please confirm the connection as submitted and shown on SK3 is typically acceptable.

Note: no approval comment was made for the same connection on drawings 4207 & 4208 in sequence CS8.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T-1500 **BGP - CMU Wall Dimension D206 at GL5.5-K** **Closed** **07/07/2014** **07/17/2014** **07/11/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

A group of Future CMU Walls are shown on the Zone Wall Plans (AI-2222, AI-2230) with lateral dimensions given to Gridline X, but no dimensions are given to the walls running east-west. The group of walls also do not show up on any other architectural or structural drawings. Please provide dimensions to the east-west future CMU walls coming off the south radius wall on D206 near Gridline 5.5-K as marked in the drawings attached.

Please refer to the attached SKA-3671 for dimensions to future east-west CMU walls referenced in this RFI.

T-1501 **SSS - Edge of Slab Plate Termination Clarification at GL 7** **Closed** **07/08/2014** **07/18/2014** **07/18/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 466 SK1 & SK2:
With the sloping slab per A/A1-7106 (SK2), it is not clear where to terminate the edge plates per 8/S1-5000. Please clarify and supply the missing dimension.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached 'CD_RFI_466_SK1_SK2' submitted with the original question for requested dimension.

T-1502 **SSS - Decking Around Bus Deck Level Crash Rails** **Open** **07/09/2014** **07/19/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

With reference to the Bus Deck Level crash rail post detail 1/S1-8000, the post base plate is 18"x30" and spans or overhangs the width of the supporting beam allowing no bearing for the deck. As a result along grid lines B & H where the deck runs parallel to the support beam, our decker is required to provide a gauge support angle and flashing where required around the base plate, see details 1 & 2 on SK1. At grid lines 1.1 & 33.5 where the deck runs perpendicular to the support beam, a beam flange extension is required to achieve the 3" end bearing requirements for the S8 slab, see detail 3 on SK1.

Please confirm these details are acceptable or provide an alternative detail for the deck support around the crash rail

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

base plate.

T-1503 **BGP - Lower Concourse Grounding Grid Alternate Detail - Room B1441 GL15/G.5** **Closed** **07/09/2014** **07/19/2014** **07/10/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Per the breakout meeting held after the TTC progress meeting on 7/9 @10:30, and email correspondence between Adib Sassine and Walter Melville (Attached). Please confirm the following items regarding the grounding mesh in electrical room B1441 at Grid Lines 15/G.5.

- Due to constructability issues please confirm that the attached PUC approved alternate detail is acceptable and will be incorporated into lower concourse electrical room B1441 at GL15/G.5

- The attached alternate detail incorporates a 4/0 field fabricated grid in lieu of the original #6 mesh and 4/0 ground ring. Please confirm that the alternate detail 4/0 grid will suffice to also act as the ground ring, and all pigtails can be attached to the grid.

- Please confirm the grounding grid spacing is 4' on center with connections to mat rebar at 8' on center.

- Please confirm that cadweld or use listed irreversible compression connections to cross-grid and ground mat at 8' on center minimum is acceptable.

- Please confirm ground potential rise study at each switch gear room is not required.

- Please confirm which specification governs, IEEE142 per Transbay Transit Center contract documents or per PUC referenced specification IEEE80, which will require "Ground Grid Test". (See attached email).

- Please confirm the layout of grid does not extend past the walls in South Electrical room B1441.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) WSP has no exceptions to this proposal, subject to SFPUC acceptance.

2) WSP has no exceptions to this proposal, subject to SFPUC acceptance.

3) WSP has no exceptions to this proposal, subject to SFPUC acceptance.

4) WSP has no exceptions to this proposal, subject to SFPUC acceptance.

5) WSP has no exceptions to this proposal, subject to SFPUC acceptance.

6) Refer to SFPUC response.

7) WSP has no exceptions to this proposal, subject to SFPUC acceptance.

8) WSP has no exceptions to this proposal, subject to SFPUC acceptance.

9) WSP has no exceptions to this proposal, subject to SFPUC acceptance. SFPUC to confirm if inspection by other parties is required.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

- Please confirm that exothermic or irreversible compression connections listed for concrete encasement are required for all pigtails main grid connections, (outside edge to cross members, corners, and main cross connectors), and connections to building ground wires (shown with "G" on plan).

- Please confirm that SFPUC and DBI will be the only entities inspecting the grounding grid.

T-1504 **BGP - Lower Concourse Future Wall FS Conflicts** **Closed** **07/09/2014** **07/19/2014** **07/09/2014** **Potentially** ☐

From: Shimmick Construction Company, Inc Sylvia Hartanto **To:** Webcor/Obayashi Joint Ventu Spencer Sayles **Answered By:** Webcor Construction LP Claude Titche

Co-Author:

REQUEST:

Per attached correspondence, WOJV has directed SCCI to install future wall formsavers according to the details attached that clarify the Contract Drawings. However, due to congestion created by the increased amount of reinforcing within the beam components, ample space to install the future wall formsaver bars at the design spacing does not always exist. See attached pictures.

Because the CMU contract has not been solicited or awarded, please confirm that it is acceptable to offset the bars out of alignment+/- 4" in attempts to maintain proper spacing, and/or increase or decrease the specified spacing +/- 6" such that the future wall formsaver bars can be installed and the correct number of dowels is maintained. The same flexibility is also requested for the "ends, intersection and corner" detail per the attached document.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

T-1505 **SSS - Stiffener Plate Location at TR13** **Closed** **07/09/2014** **07/09/2014** **07/18/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

See attached CD RFI # 473 SK1:
The 2 1/2" plate has been located 1 1/8" above the 2" diameter rebar holes to allow room for the 1" fillet welds. If the plate is located per the response to RFI T-0889 (SK 145, CD 107) item 1, it will cover the 2" diameter rebar holes. Confirm the plate location as shown is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

T-1506 **BGP - Room B1441 Grounding Grid Approval and Inspection Jurisdiction** **Closed** **07/11/2014** **07/21/2014** **07/29/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Turner Construction Comp Judith Long

Co-Author:

REQUEST:

Per breakout meeting held after the TTC progress meeting on 7/9 @10:30am, please confirm that PG&E will have no jurisdiction over approval and inspection of the grounding grid in electrical room B1441 GL 15/G.5.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

As SFPUC is the utility, SFPUC shall have jurisdiction over the approval and inspection of the grounding grid in electrical room B1441 GL 15/G.5. PG&E, as the WDT provider, may have jurisdiction only over the metering section of the WDT switchgear. For reference, please find attached an email from SFPUC on 7/25/2014 and PG&E on 7/14/2014 confirming PG&E does not have jurisdiction over the grounding grid in the electrical room. Please note, SFPUC, through Walter Melville, had inspected and approved the ground grid for the North electrical room on 7/16/2014

Answered By: Sam Larano, Manager SFPUC
Answered On: 7/29/2014

T-1507 **BGP - Seismic Joint Removable Corbel Connection Variance** **Closed** **07/11/2014** **07/21/2014** **07/23/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Per contract drawing S1-3205, the removable W14x61 steel corbel and WT8X28.5 angles it connects with are to be fabricated with a 2" vertical slotted hole.

In order to eliminate the lead time of field measured

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1.) Not acceptable.

2.) The beam portion of the corbel may be coated for corrosion protection rather than galvanized. Refer to specification section 09 97 13, part 3.6, item E for

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

fabrication of the corbels after concrete formwork removal from the SJ assembly, the contractor is proposing either or preferably both of the following modifications:

1. Change the slotted hole from vertical to horizontal (east to west) direction on the angles and or the steel corbels
2. Change the finish of the removable W14X61 steel corbel only from galvanized to primed steel (all other embedded metals would remain galvanized per the contract drawing).

Please confirm if either of these proposals would be acceptable?

acceptable coating types.

T-1508 **SSS - Additional Stud Requirements on ASI 112** **Closed** **07/14/2014** **07/24/2014** **07/24/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

ASI 112 added "UON, see general note DK-5 for added studs on beams" on partial stair plan drawings S1-7002 & S1-7003. It is unclear what beams require studs on these plans. Please provide stud quantities for each beam as per the steel beam legend on S1-2302 so Skanska can provide accurate pricing for this ASI.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to attached sketches SKS-0371 through SKS-0373 that show updated plans with additional shear studs (clouded) on beams.

T-1509 **SCS - Lower Concourse Partition Walls Drawing Conflicts** **Closed** **07/14/2014** **07/24/2014** **07/18/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

1. There is a conflicting detail on Sheet No A1-2202 and S1-2202. A1-2202 shows the wall on grid line B.8-1.4 as a concrete wall but on S1-2202, the same wall is shown as a concrete masonry wall. Please verify

2. There is a conflicting detail on Sheet No A1-2202 and S1-2202 and corresponding details on A1-3008 and B/A1-

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. The wall along GL B.8 was updated with the Addendum #3 drawings (issued 04/24/2014) as a concrete partition wall.

2. Follow architectural drawings for layout and dimensioning of concrete partition wall door openings along GL F.3.

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9241. The dimensions of the concrete walls on grid line F-3 are different. Doors have different locations. Please verify

3. There is a conflicting detail on Sheet No A1-2202 (and corresponding details on A1-3001 and B/A1-9235) and S1-2202. The architectural drawings show a concrete wall along grid line 3, there is no wall in S1-2202. Please verify

4. There is a conflicting detail on Sheet No A1-2203 (and corresponding detail on A1-2250) and S1-2203. The scaled dimensions of the concrete wall on grid line K.1-7.5 are different. Please verify. Please also provide Sheet A1-7405 with actual dimensions.

5. There is a conflicting detail on Sheet No A1-2203 (and corresponding details on A1-3002 and E/A1-9236) and S1-2203. In S1-2203, grid line B.6-11 there are two gaps in the concrete wall, there is only one gap in the same wall in A1-2203. Please verify

6. There is a conflicting detail on Sheet No A1-2204 (and corresponding details 2/A1-3008 and A1-9240) and S1-2204. The door locations for the EAST FSR on grid line C.3-15 and B.1-15 are in different positions. Please verify

7. There is a conflicting detail on Sheet No A1-2205 (and corresponding details 1/A1-3003 and E/A1-9237) and S1-2205. The door locations on the concrete wall on grid line G.5-21 is in a different position. Please verify

3. Follow architectural drawings for layout of concrete partition wall along GL 3 between GL A-B.

4. Follow architectural drawings for layout and dimensioning of concrete partition wall along GL K.1 near GL 7.5.

5. Follow architectural drawings for layout of concrete partition wall and openings along GL 11 near GL B.6.

6. Follow architectural drawings for layout and dimensioning of concrete partition wall and door opening near GL C.3/15 and GL B.1/15.

7. Follow architectural drawings for layout and dimensioning of concrete partition wall door opening along GL 21 near GL G.5.

T-1510 **SSS - W-1 Brace Details at Bus Level** **Closed** **07/14/2014** **07/24/2014** **07/24/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 470 SK1 to SK3:

Revised detail 4/S1-8003 from ASI 109 added (1) bolt at each end of the brace. The connections for the braces per detail 4/S1-8003 were therefore applied per the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed

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information in detail 8/S1-5015 and RFI's T-0919, T-0919.1 & T-0919.2 (SK 173, 173.1 & 173.2, CD 127, 127.1 & 127.2). Please confirm the connection as submitted and shown on SK3 is typically acceptable.

Note: no comment was made for the same connection on drawings 4207 & 4208 in sequence CS8.

T-1511 **BGP - Unistrut at Lower Concourse E-W Spandrel Beams** **Closed** **07/15/2014** **07/25/2014** **07/15/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please confirm it is acceptable to install unistrut at the E-W and Spandrel Beam Bottom and Sides at the Lower Concourse construction joints (Reference attached sketch). This unistrut would serve as the bottom edge form, be left in place and cast in the Lower Concourse with the subsequent deck pour.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The proposal is not acceptable.

T-1512 **BGP - Mechanical Pump Room B2761 Electrical Sump Feeds** **Closed** **07/15/2014** **07/25/2014** **07/28/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Plan Sheet El-2027 shows two(2) sump controllers in Mechanical Pump Room B2761, one for SE-B2- D-1,2 and the other for SPG-B2-D-l,2. There will be 2" conduits from these controllers to two of the three sump pits in the mechanical room for the pump leads. Plan Sheet El-2027 indicates the two(2) eastern-most pits get the pump lead conduits(see attached), however Detail 4 on Plan Sheet Pl-3006 identifies the western-most pit as "SPG" and the middle pit as "SE"(see attached).

Please confirm:
1) Detail 4 on plan sheet P1-3006 is correct.
2) The pump lead conduits from SE-B2-D-1,2 will lead to

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Detail 4 on plan sheet P1-3006 is correct.
2. This is correct.
3. This is correct.

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the pit identified as "SE" on plan sheet P1-3006.
3) The pump lead conduits from SPG-B2-D-1,2 will lead to the pit identified as "SPG" on plan sheet P1-3006.

T-1513 **SSS - Corner Drag Beam Framing at Bus Deck Level** **Closed** **07/15/2014** **07/25/2014** **07/28/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Webcor Construction LP Gregory Kemerer

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 383.2 SK1 & SK2:
The revised framing shown on attached SK1 & SK2 is per discussions in a conference call following the response to RFI T-1322.1.
Please review and confirm all boxed notes on SK1 & SK2.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The proposed details noted in the boxes are acceptable.

T-1514 **SSS - Bus Deck Level Stiffener Conflict at CP8 Near GL 1.4** **Closed** **07/15/2014** **07/25/2014** **07/28/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 484 SK1. The 1 1/2" stiffener on the far side will cover the hole in the bottom flange for CP8. Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The 1-1/2" stiffener requirement per 4/S1-8003 may be waived at the location highlighted in the RFI. Provide two 2L3x3x3/8 braces per 4/S1-8003, one each at the 1"x 9" stiffener plates adjacent to the CP6 connection work point. Note that stiffener plates per 6/S1-8003 are 1" thick and not 1/2" thick as called out in the RFI.

T-1514.1 **SSS - Bus Deck Level Stiffener Conflict at CP8 Near GL 1.4** **Closed** **07/31/2014** **08/10/2014** **08/13/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 484.1 SK1:
Providing two 2-L3x3x3/8 braces per T-1514 does not

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Not acceptable. The brace in conflict with the W36x231 beam may be moved to the adjacent 1"x9"

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work as the brace close to the W36x231 will foul the beam.
Confirm it is acceptable to supply one 2-L3x3x3/8 as shown.

stiffener.

T-1515 **SSS - Connection Clarifications for Stiffeners and Plate at BU Beam at GL 1.4-2 &** **Closed** **07/15/2014** **07/25/2014** **07/24/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Webcor Construction LP Gregory Kemerer

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 485 SK1 & SK2 for items 1 to 3:
1) The 1/2" x 9" stiffeners foul the built-up beam as shown. Please provide a solution.
2) The 1/2" x 9" stiffeners foul the connection per detail 2/S1804 as shown. Please provide a solution.
3) The hole locations in detail 6E/S1-8003 are not known and have been requested in RFI CD 476 but it appears the

PL 2" will obstruct the flange holes. Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Provide stiffeners as shown in attached sketch SKS-0374 at the location highlighted in the RFI. Note that stiffeners per 6/S1-8003 are 1" thick, not 1/2" as noted in the RFI.

2) See response to 1).

3) Bolt holes may be shifted towards the edge of the flange edge to avoid interference with the 2" plate. Refer to response for RFI CD 476 for additional information on bolt hole locations.

T-1516 **SSS - Bolt Requirement for BU Beam at Roof Perimeter Corner** **Closed** **07/15/2014** **07/25/2014** **07/24/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 488 SK1 & SK2:
11 bolts are required per 1/S1-5010 for W40 beams. However, due to the weld access holes in the BU-40x22, we can only fit in 9 bolts in the one row as shown. The other row will have 11 bolts. Confirm that this detail is acceptable or please supply an alternate detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed, this is acceptable.

T-1517 **SSS - Weld Detail for Architectural Plate** **Closed** **07/15/2014** **07/25/2014** **07/24/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please confirm the attached weld detail is acceptable for fi eld welding the 3/8" architectural cylindrical plate.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

T-1518 **BGP - Partition Wall Pilaster Ties** **Closed** **07/15/2014** **07/25/2014** **07/21/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

As discussed onsite with the SEOR, please confirm the following for partition walls:

1. All isolated pilasters have ties over their entire height

2. All pilasters thicker than the adjacent integral wall have ties over their entire height- Please note that this is added scope to TG06 Contract

3. Pilaster that are the same thickness as the adjacent integral wall require ties only for the lengths defined in Note 3 of Detail 9/SI-9050

4. Where ties are present at a pilaster base, the ties are not required to penetrate the supporting slab or foundation.

5. Ties may be built up from stirrups and hairpins containing 135 hooks.

Please reference the attached drawings, S1-9050.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed, noting disagreement that ties are added scope.

T-1519 **BGP - Formsavers for Ramp Walls Embedded in Lower Concourse** **Closed** **07/17/2014** **07/27/2014** **07/21/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please confirm that it is acceptable to use formsavers for the Ramp Walls that are to be embedded in the Lower Concourse in lieu of dowels shown in A/S1-3203 or 3/S1-

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Use of formsavers is acceptable, provided the following:

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3502. This is done to improve construction access.

Locations for the proposed formsavers are per attached documents- highlighted in red.

- please adjust placement of dowel to accommodate formsaver cap and provide vertical wall clear cover per drawings.

- formsaver dowels to be straight bars where dowel full embedment length into beam at lower concourse is provided. Otherwise formasvers to be provided with standard hook at end.

- please provide proposed formsaver for use of dowels with terminator. Formsaver must have equal or greater capacity of dowel with terminator to be acceptable.

T-1520 **SSS - Moment Weld at Bottom Flange of W30X90** **Closed** **07/18/2014** **07/28/2014** **07/29/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please supply a detail showing how to make the moment weld for the bottom flange of the W30x90.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Provide moment connection detail at bottom of the W30x90 beams at CP4 connections along GL 1 per attached sketch SKS-0376.

T-1521 **SSS - Beam Location Clarification** **Closed** **07/18/2014** **07/28/2014** **07/24/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

The noted weld is shown for a beam that is not shown on plans S1-2602 & S1-2607. Confirm it is shown in error on this detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

onfirmed that the beam highlighted on CD RFI 486 SK1 is not there, hence, the full penetration welds in question are not required.

T-1522 **SSS - PE201 Connection Clarification at HSS Post** **Closed** **07/18/2014** **07/28/2014** **07/29/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

See attached CD RFI # 496 SK1 & SK2:
Detail 6/S1-7604 fouls the connection per 8/S1-7604 when they occur at the same location as the horizontal PL 3/4" per 6/S1-7604 is to extend 1/2" past the profile of the HSS post. Confirm it is acceptable to keep the PL 3/4" flush with the HSS post and HSS horizontal beam as shown to be able to attach the L6x6x5/8 per 8/S1-7604 to the post.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

T-1523 **SSS - Welding Clarifications at Bus Ramp Support GL1.4-3** **Closed** **07/18/2014** **07/28/2014** **07/24/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 497 SK1:
Confirm the welding for thick flange to thin flange is acceptable as shown or supply details.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

T-1524 **SSS - ST201 Missing Dimensions and Slab Location** **Closed** **07/18/2014** **07/28/2014** **07/28/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Webcor Construction LP Gregory Kemerer

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 501 SK1 for items 1 to 3:

1) Supply missing dimension.

2) Confirm EQ/EQ spacing or supply the dimensions.

3) Supply the edge of slab location on the north, west and south sides at T/SLAB 85'-0" as A1-2902 seems to show different information than 2/S1-7003. (The east side is shown in detail 6/S1-7602).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to attached sketch SKA-3906 for requested dimension.

Confirmed.

Refer to attached sketch SKA-3906 for slab edge locations as requested.

T-1524.1 **SSS - ST201 Missing Dimensions and Slab Location** **Closed** **08/07/2014** **08/17/2014** **08/22/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

See attached CD RFI # 501.1 SK1 for items 1 to 3:
1) The response RFI T-1524 (SK 691, CD 501) did not supply a response to item 1. 2/S1-7003 clearly shows the steel framing as shown on SK1 but does not supply this dimension to locate the beam. Please supply this missing dimension.
2) Edge plate per 8/S1-5000. Confirm.
3) Supply a detail for the edge of slab plate if required.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) The W16 beam shall be aligned to the HSS8x8 column as shown in the attached sketch SKS-0397.

2) Confirmed.

3) Distance between GL E.6 and the slab edge noted as 11 1/2" on SK1 in the RFI is incorrect. Refer to SKA-3906 submitted with RFI T-1524 and detail F/A1-2952 for the edge of slab condition at the north edge of the elevator landing. Provide slab edge plate per typical detail 8/S1-5000 at this slab edge.

T-1525 **SSS - Plate Extending Past End of Girder at Roof Level** **Closed** **07/18/2014** **07/28/2014** **07/29/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 513 SK1 & SK2:
The 3" plate per Type 61 on S1-5132 extends 3" past the end of the Girder. Please confirm that is the intent or supply a solution.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Provide 25" long cap plate (in lieu of 28") to prevent the 3" extension past the end of the Girder.

T-1526 **SSS - Dimensional Adjustment to Avoid Fouling BU-Box Beam at Bus Ramp Suppo Closed** **07/18/2014** **07/28/2014** **07/29/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 515 SK1 & SK2 for items 1 & 2:
1) The web reinforcing plate will foul the BU-Box Beam 'B' if extended past the flange cope 1'-0 per S1-5017. Confirm the 1'-0 dimension may be reduced to 9 3/4" as shown or supply an alternate solution.

2) The web reinforcing plate will foul the end plate for the WF beam if extended past the flange cope 1'-0 per S1-5017. Confirm the 1'-0 dimension may be reduced to 6 1/4" on both sides or supply an alternate solution.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.

2) Confirmed.

Webcor/Obayashi Joint Venture

PROJECT MANAGEMENT - REQUEST AND ANSWERS LOG

30100 - Transbay Transit Center Project

Number	*Subject*	*Status*	*Date Created*	*Date Required*	*Date Answered*	*Cost Impact*	*Proceed*
T-1527	**SSS - PE201 & ST201A Welding Clarifications at WF**	**Closed**	**07/18/2014**	**07/28/2014**	**07/30/2014**	**Potentially**	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 494 SK1 for items 1 to 3:

1) Confirm weld prep.

2) The noted fillet weld cannot be made with the 3/8" gap per item 1. Confirm this weld will also be a CJP weld to match the T & B weld.

3) This weld cannot be made with the 3/8" gap. Supply an alternate weld.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Provide a root opening of 1/4" and a groove angle of 45 degrees for the CJP weld.

2) Confirmed.

3) The 5/16 fillet weld can be made by providing a backing bar as shown in attached sketch SKS-0377.

T-1528	**SSS - ST201A Missing Moment Connection Details at HSS Posts**	**Closed**	**07/18/2014**	**07/28/2014**	**07/30/2014**	**Potentially**	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 498 SK1:
Clarify how the top and bottom flange of the W12x19 are to be moment welded as they do not align with the top and bottom plates for the HSS10x8 per 6/S1-7604 as shown.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached sketch SKS-0379 for moment connections details at W12 beam to HSS post connections. The top 3/4" thick plate per 10/S1-7604 shall be extended and welded to the top flange of the W12 beam as shown in the sketch. Increase the thickness of the bottom plate from 3/4" to 2 1/4" and provide a CJP weld to the W12 bottom flange. Note that the W12x19 beams connect to the W14x311 columns near GL 1/D.4 and GL 1/E.2, not to HSS columns as indicated on SK1 in the RFI. The W14x311 columns extend up to the bottom of the S7 slab (T/slab EL = 86'-9").

T-1529	**SSS - ST201 W16 to HSS Post Connection Clarification**	**Closed**	**07/18/2014**	**07/28/2014**	**07/30/2014**	**Potentially**	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 503 SK1:
Confirm it is acceptable to connect the W16's to the HSS posts per 1/S1-5011.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Provide connections at W16 beams as noted in attached sketch SKS-0378. Note that the W14x311 columns at ST201 extend up to the bottom of the S7 slab (T/slab EL. = 86' - 9").

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1530	SSS - ST201 Edge of Slab Locations at Landings	Closed	07/19/2014	07/29/2014	07/29/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

The edge of slab locations for the ST201A landings are missing. Please refer to the list below and supply the edge of slab locations for items 1, 3, 5, 6 & 8:
1) 2/S1-7001 ~ supply edge of slab information
2) 3/S1-7001 ~ edge of slab information is shown on A1-2882
3) 1/S1-7002 ~ supply edge of slab information
4) 2/S1-7002 ~ edge of slab information is shown on A1-2892
5) 3/S1-7002 ~ supply edge of slab information
6) 1/S1-7003 ~ supply edge of slab information
7) 2/S1-7003 ~ edge of slab information is shown on A1-2902
8) 3/S1-7003 ~ supply edge of slab information

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

As requested, only responses to items 1, 3, 5, 6 & 8 are being provided.

Item 1 & 3: Intermediate Landing levels at 32'-1", 41'-9" and 50'-9" are all identical, for edge of slab locations refer to A1-2882.

Item 5 & 6: Intermediate Landing levels at 59'-9", 68'-9" and 77'-9" are all identical, for edge of slab locations refer to A1-2892.

Item 8: Refer to 1/A1-2964 for corresponding slab edge plan.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1531	SSS - ST201 Bolt and Cap Plate Connection Clarification	Closed	07/19/2014	07/29/2014	07/31/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 504 SK1 & SK2 for items 1 & 2:

1) The bolts will not be erectable if left inside the profile of the column as shown in detail 4/S1-5033. Confirm it is acceptable to locate the bolts as shown.

2) Confirm it is acceptable to locate the cap plate per 11/S1-7605 as shown and weld the L4x4x1/4 per 4/S1-5033 as shown.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.

2) The W14 column extends up to the bottom of the S7 slab (T/slab elevation = 86' -9"). So the T/cap plate elevation is 86' - 4 1/4". The L4x4x1/4 per 4/S1-5033 can be welded to the W14 column web without any interference with the cap plate.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1532	SSS - Deck Support Angle at Column Base Plate	Closed	07/19/2014	07/29/2014	07/24/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Per detail 1/S1-5052 when the column base plate and the transfer girder flange is the same width, there is no deck support for the length of the column base plate when the deck sits at the same level as the girder.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Using gage angle for connection to the metal deck around the base plate is acceptable, however, the gage angle is to be welded to the transfer girder flange, not the base plate. Extend the vertical leg of

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please confirm it is acceptable to provide a gage angle to support the deck around the column base plate. The gauge angle will be welded after the column to girder connection is made to avoid the angle and weld interfering with the connection. See attached SK1 & 2 for clarification.

the gage angle down as needed.

T-1532.1 **SSS - Deck Support Angle at Column Base Plate** **Closed** **07/31/2014** **08/10/2014** **08/18/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Webcor Construction LP Gregory Kemerer

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

This is a follow-up to the response of RFI T-1532.

As per the response, restricting welding to only the girder flange creates several issues:
1. See detail 17 on SK1 - an additional 4" would be required on the vertical leg of the angle to allow welding to the girder flange. This creates a 12" vertical leg, welded at the bottom toe to the girder and supporting a 13" concrete slab. Our decker does not believe this is adequate support. This occurs at 9 locations.

2. See detail 5 & 17 on SK1 - overhead welding will be required from the underside to weld to the girder flange. Detail 5 occurs at 67 locations and 17 occurs at 9 locations. Our decker will incur additional labor and equipment costs for this work.

If welding to the base plate is prohibited, an alternative solution which will have lower additional cost impact is to use Hilti pins to attach the gauge angle to base plate or girder flange. See attached product data and application details. See attached SK2 for clarification.

Please confirm if welding to the column base plate is prohibited, Skanska can use Hilti pins as per SK2.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Welding the deck support angle to the base plate is acceptable if the welding is made only in the zones marked on attached sketch SKS-0396. The gage angle welded to the base plate will provide adequate deck support. Using Hilti pins to attach the angle to the base plate is not acceptable. We disagree with the claim that overhead welding at the deck support angle constitutes a "cost increase". Detail 8/S1-3705 which shows deck support angle detail at the transfer girder flanges was part of bid documents. The only exception to this detail at the column base plates is that the angle is being welded to the base plate and not the transfer girder flange. Also, refer to details on A1-9317 for slab edge detail at the column base plates.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1532.2	SSS - Deck Support Angle at Column Base Plate	Closed	08/25/2014	09/04/2014	09/15/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

This is a follow-up to the response of RFI T-1532.1

As per the response to the above RFI, direction to drawing A1-
9317 (which was provided as part of FO 27) indicates a deck closure/support angle separated 1" from the column base plate, with no structural information provided. As a d etail for deck support around the column base plate is not provided in the structural drawings and Skanska's proposa ls have been rejected in previous RFI responses, this rem ains an open issue. We require a detail in order to proceed with the detailing of shop drawings. Please note this condi tion occurs at CS1 and throughout the central zone and is currently holding up the resubmittal of the metal deck shop drawings for the central zone.

Additionally, the RFI response identified a "no weld zone" t hat was not shown on the design documents. As this was not called out on the contract drawings, this zone is not bei ng identified with paint strips as per the protected zone req uirements. This may lead to trade workers accidently weldi ng in the field. Please provide direction for the identificatio n requirements for the base plate "no weld zone".

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1.) We believe that deck support during construction is a means and methods issue, however in our opinion, the simplest solution is running angles parallel to the transfer girder, from one perpendicular beam to another, around the column base plates. This will also help to provide the 1" separation needed from the column base plate in detail A1-9317.

2.) As indicated in the design drawings there are no elements around the base plate that require welding to the base plate. Any accidental welding in the field to the base plate will likely require proper corrective actions to be submitted to the SER for review.

T-1533	BGP - Additional Reinforcing at MS 113	Closed	07/21/2014	07/31/2014	07/23/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Due to sagging of the top mat reinforcing at Mat Slab MS 113, there would be excessive concrete cover.

Per field conversation with SEOR, please confirm it is acceptable to install #5 reinforcing at 8" OC(either on dobies or other reinforcing) at locations where this sagging occurs to decrease the upper cover to within the allowable limits.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Acceptable at MS 113 for the pit below the trestle.

T-1534	SCS - Transfer Girder Elevation & Detail - G Line - TR19.9, 20.1, 22, 24	Closed	07/22/2014	08/01/2014	08/06/2014	Potentially	☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Find attached Harris RFI dated July 17, 2014 and SK2 and SK3 from response to RFI #T-1408 with added blue markups/comments.

SK3 with the response to RFI #T-1408 shows the elevation of the top of steel to be above the elevation of the top of concrete.

1. Please confirm the top of steel is intended to come out of the top of concrete and provide a revised 9/SI-3702 detail.

a. Please clarify the detail for the welded couplers at the top flange.

For TR19.9 and 20.1, a plate for the bottom welded couplers are not shown on SI-4304.

2. Please clarify the location of the lower set of couplers. Does the lower set of couplers weld to the bottom flange?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. The top of steel shown is correct.

2. Please see the attached sketch SSK-0384

For TR19.9 and 201.1

2. See response to item 2 above.

T-1535 **SSS - PE201 Connection Clarifications at Roof Level** **Closed** **07/24/2014** **08/03/2014** **08/11/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 505 SK1 for items 1 to 6:
1) Supply the elevation of the (4) HSS12x6x1/4.
2a) Supply a connection detail.
3) Supply a connection detail.
4) Supply missing dimension.
6) The noted slab edge detail is referenced but no slab information is shown. Please clarify.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) T/steel of the four HSS12x6 beams is 101'-5".

2a) HSS8x6x1/4 beams noted in SK1 in the RFI are not required and shall be removed. See attached sketch SKS-0387 for updated framing layout. Note that HSS outriggers have been moved from detail 3/S1-7003 to 4/S1-7003 as shown in the attached sketch. A HSS 8x6x1/4 beam has also been added at the west edge of PE201 in detail 4/S1-7003.

3) See response to 2a).

4) Refer to details 4/A1-7861, 2/7862 and 4/A1-7864 to determine the extents of the HSS8x6 outrigger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

beam.

6) The slab edge detail is incorrectly called out. Detail 9/S1-5000 does not apply at the highlighted location.

T-1536 **SCS - Concrete Cover & Tolerance on Foundation Wall Terminator Rebar** **Closed** **07/24/2014** **08/03/2014** **08/04/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Drawing Sl-3201 and other similar foundation wall sections call out a 2" concrete cover on the terminators of the foundation wall vertical rebar. These vertical bars have no adjustability because one end is a terminator and the other end is a male coupler end. The elevation of the top of terminator will be dependent on the coupler elevation above the Lift 3 Foundation Wall. The ground floor slab is 10" thick and sloped along the top of foundation wall.

To allow for maximum deviation to accommodate for the slope of the slab, tolerances in rebar fabrication and location from the previous wall lifts and the final wall lift:
1. Shimmick proposes to change the concrete cover from 2" to 5" and increase the tolerance to 2.5". Please confirm this is acceptable.
2. If the proposal is not acceptable, please provide a concrete cover and tolerance that is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Standard ACI tolerance shall apply on concrete cover, increasing the cover and deviation of the tolerance is not acceptable. These proposed modifications to the cover and tolerances would be acceptable only if contractor provides additional U bars over the moment frame beam top rebar with size and spacing matching the size and spacing of stirrups in Zone 1 of Detail 6/S1-3600 at no cost to the owner. The U bars would span between the top corner bars of the moment frame beam have vertical legs that are equal to embedment length per 1/S1-3001. No additional U bars is required between the beams.

T-1537 **SSS - ST202 Connection Clarification at HSS Posts** **Closed** **07/24/2014** **08/03/2014** **08/07/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 508 SK1:
Confirm the connection as shown is acceptable or supply a new detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Extend the WF beam stiffener at the far side (shown in gray color in SK1 of the RFI) full depth. Provide the same fillet weld per 10/S1-7600, except 3 sides instead of 2.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1538	SSS - ST202 & PE203 Connection Clarification and Missing Connection	Closed	07/24/2014	08/03/2014	08/06/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 509 SK1 & SK2 for items 1 to 3:

1) Please confirm the noted dimension.

2) Please supply a connection detail for the HSS post to the underside of slab beside B71.

3) Please confirm detail 9/S1-7600 applies at the noted location.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) The noted dimension shall be 1'- 6".

2) The HSS post connection to underside of concrete slab shall be similar to 9/S1-7600 to an embedded plate.

3) Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1539	SSS - SE201 & SE202 Framing Clarification	Closed	07/24/2014	08/03/2014	08/06/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 514 SK1:
Confirm the intent is to have the noted beam as a W40x431. If yes, supply a connection detail for the W40 to the W16x26.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

We confirm that the noted beam is a W40x431 beam. The W16x26 beam is supported by the W40 beam and the W40 beam is supported by the R-W24x68 beam. End connections at these beams shall be per 1/S1-5010. Note that the framing plan shown on SK1 in the RFI is not current. See sketch SKS-0383 submitted with response to RFI T-1544 for current framing layout.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1540	SSS - Stiffener Connection Clarification at Bus Deck Support Beam	Closed	07/24/2014	08/03/2014	08/06/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 521 SK1:
This PL1/2x6 stiffener per 2/S1-8014 cannot be welded to the top flange of the W30x391 because the flange has been coped for the skewed W40x277 and it blocks the field moment welding at the bottom flange of the W30x391. Confirm the stiffener may be omitted or supply an alternate solution.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Also, shear plate connections per 1/S1-5011 or 8/S1-5011 may be provided in lieu of moment connections at the north ends of the W30x391 back span beams in the bus ramp area.

☐

Webcor/Obayashi Joint Venture

PROJECT MANAGEMENT - REQUEST AND ANSWERS LOG

30100 - Transbay Transit Center Project

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1541	SSS - ST202 & PE203 Framing Clarifications at Lower Level Concourse	Closed	07/24/2014	08/03/2014	09/10/2014	Potentially	

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 511 SK1 & SK2:
2/S1-7004 or any other details on S1-7004 do not appear to show the framing at the Lower Concourse Level as shown on A/A1-7004 (SK1).
Please clarify.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached sketch SKS-0390 for stair support framing at lower concourse level.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1542	SSS - Steel Plate Availability	Closed	07/24/2014	08/03/2014	08/21/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Webcor Construction LP Gregory Kemerer

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

After reviewing the specifications and standards for ASTM A572 Gr. 50 steel, along with speaking with our steel suppliers, Herrick has found that the aforementioned grade of material is not manufactured below 3/16". Please confirm that A606 Type 4 Mod is acceptable where A572 Gr 50 is specified at 1/8" (Please see attached SK1).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

RFI VOIDED - See T-1542.1

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1542.1	SSS - Steel Plate Availability	Closed	07/28/2014	08/07/2014	08/15/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

After reviewing the specifications and standards for ASTM A572 Gr. 50 steel, along with speaking with our steel suppliers, Herrick has found that the aforementioned grade of material is not manufactured below 3/16". Please advise.

SUGGESTION:

A606 Type 4 Mod may be acceptable where A572 Gr 50 is specified at 1/8" (Please see attached SK1).

ANSWER: **Accept Suggestion:** ☐

No specific drawing, location, or specification is refered to. Question is too vauge to respond to.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1542.2	SSS - Steel Plate Availability	Closed	08/28/2014	09/07/2014	09/04/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

The Type 3 drag connection detail, 1/S1-5018, calls for shim plates as required at connections between beams of

SUGGESTION:

Please confirm that A606 Type 4 Mod is acceptable where A572 Gr 50 is specified at 1/8" (Please see

ANSWER: **Accept Suggestion:** ☐

Suggestion acceptable

different depth. The contract documents specify, "Shims/Fillers: Match Material Strength of Connecting Members", which in this case would be ASTM A572 Gr. 50.

After reviewing the specifications and standards for ASTM A572 Gr. 50 steel, along with speaking with our steel suppliers, we have found that the aforementioned grade of material is not manufactured below 3/16".

Please advise.

attached SK1).

T-1543 **SSS - ST201A Missing Information** **Closed** **07/24/2014** **08/03/2014** **08/07/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 500 SK1 for items 1 to 4:
1) Confirm the missing beam size should read W12x26.
2) Supply missing dimension.
3) Supply the slab type.
4) The noted (2) davits are shown located on Grid 'D' but A1-7003 shows the davits located north of Grid 'D' with providing the location. Please provide the north/south location of the davits.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.

2) Missing dimension is 3' - 11 1/2".

3) Slab type is S7.

4) Dimensions to locate the two noted davits in the north/south direction are noted on A1-7003.

T-1544 **SSS - SE201 & SE202 Connection Clarification at W16X36 Beams** **Closed** **07/24/2014** **08/03/2014** **08/05/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 522 SK1 & SK2:
Confirm it is acceptable to connect the noted W16 beams per 1/S1-5011 as 1/S1-5010 will not work with the connection on the opposite side.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed. Note that the framing plan shown on SK1 in the RFI is not current. S1-2602 was revised and submitted as part of Roof Park Restaurant IFC package on 5/30/2014. Refer to attached sketch SKS-0383 for current framing layout.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1545	SSS - SE201 & SE202 Beam Connection and Location Clarifications	Closed	07/24/2014	08/03/2014	08/11/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 523 SK1 for items 1 & 2:

1) Confirm it is acceptable to locate the beam 6" from the edge of slab.

2) Confirm it is acceptable to connect the beam per 1/S1-5011 at both ends to avoid fouling the HSS beam connection.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.

2) Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1546	SSS - Brace Connection Clarificationat GL 3 W40X149 Beam	Closed	07/24/2014	08/03/2014	08/07/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 526 SK1:
Confirm it is acceptable to omit the brace per 5/S1-5015 as there is insufficient room below the noted W40x149.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Provide a WT 10.5x66 welded to the bottom flange of the W40x149 and to the transfer girder flange, in lieu of the kicker brace per 5/S1-5015. Connection of the WT to the W40 beam and the transfer girder including weld size, type and length, shall be similar to that shown in sketch SKS-0290 submitted with response to RFI T-0824.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1547	BGP - Seismic Joint Deformed Bar Anchor Variance	Closed	07/25/2014	08/04/2014	07/25/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference Detail 2, Sheet S 1-3205.

Please clarify the following deformed bar questions:

1. 1" diameter deformed bar is a non-standard diameter for deformed bar. This will require the bar to be specially manufactured which could take up to 4 weeks to procure. 3/4" diameter deformed bar is the largest standard size readily available. Is it acceptable to use 3/4" diameter in lieu of 1" diameter deformed bar?

2. The detail depicts a head on the end of the deformed

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). See response to #3

2). The detail was drawn graphically incorrect, see response to #3

3). Using 1" (#8) welded rebars is acceptable as long as ASTM A706 bars are used. Submit weld detail with the seismic joint shop drawings for review.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

bar. Headed deformed bar is also non-standard (see attached Nelson Stud Deformed Bar Product Data) and currently found to be unattainable. Is it the intent of the engineer to include a headed deformed bar anchor? Is it acceptable to use a standard A 108 bar per ASTM A496 as detailed in the attached product data?

3. If the 3/4" diameter deformed bar is unacceptable, is it acceptable to use 1" (#8) welded rebar in lieu of the 1" deformed bar? Furthermore, will the rebar require headed reinforcement?

T-1548 **BGP - Protection Slab at Seismic Joint** **Closed** **07/25/2014** **08/04/2014** **07/29/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference Detail 3 of A1-8881, S1-2027, and the attached Drawings.

Please confirm the protection slab is to stop 5" east of GL 35 as scaled on attached Detail 3 of Sheet Al - 8881.

Please confirm it is acceptable to eliminate the 12" section of protection slab against the east CDSM wall.

Please reference attached drawing S1-2027. If the protection slab is required to end 5" east of GL 35, the slab will be poured halfway up the slope on the center and north pits as depicted in S1-2027. Is it the engineer's intent to end the slab halfway up the pit? If not, please provide details of protection slab location at the seismic joint at the center and north pits.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Confirmed, the protection slab may stop 5" east of GL 35. Protection of the membrane is a means and methods issue and is the contractor's responsibility and does not require our comment.

2. It is acceptable to eliminate the 11" protection slab against the east CDSM wall. Protection of the membrane is a means and methods issue and is the contractor's responsibility and does not require our comment.

3. For the North and Center pits along GL 35, where the embed plates are shortened in accordance with RFI-1471, the protection slab will terminate at the vertical face of mud slab.

T-1549 **BGP - 3rd Wall Lift Vertical Unistrut Spacing Tolerance** **Closed** **07/25/2014** **08/04/2014** **07/29/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Vertical Unistrut embedded in the 3rd wall lift is spaced at 10' O.C. per plan drawing Al -6231. Due to locations of wall bulkheads, form work panel ribs, and other embedded items, the contractor requests a tolerance of plus/minus 4" off the 10' O.C. spacing. Please confirm if this is acceptable and if not, please provide an acceptable lateral tolerance.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed. It is acceptable to have +/- 4" off the 10'-0" spacing of the vertical Unistrut at the Lower Concourse foundation walls.

T-1550 **SSS - PE203 Connection Clarifications** **Closed** **07/25/2014** **08/04/2014** **08/11/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 512 SK1 for items 1 & 2:

1) Please confirm the noted connection (similar to RFI T-1105, SK 240.1, CD 183.1) is acceptable or supply a new detail.

2) The connection per 1/S1-7630 (shown in item 1) and the connection per 1/S1-7600 foul each other at this location. Please supply a solution.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Connection as shown on SK1 in the RFI is acceptable. Provide a 1/2" stiffener plate perpendicular to the 5/8" plate and centered on the HSS beam similar to that shown in attached sketch SKS-0386. Provide 1/4" double sided fillet welds for the stiffener plate at the beam flange and the 5/8" plate.

2) Provide connection per attached sketch SKS-0386 at the highlighted location

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T-1551 **SSS - SE201 & SE202 Connection Clarification at HSS Posts** **Closed** **07/25/2014** **08/04/2014** **08/07/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 516 SK1 to SK3:
The L8x4x1/2 is insufficient for the HSS10x10 posts in SE201 & SE202. Please supply an alternate detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The detail is applicable as is. The base plate to match the size of the post as indicated in the detail, and the L8 embed angle is large enough to weld the pipe section onto (pipe to embed angle weld).

T-1552 **BGP - Pit Rebar in South Pit at GL 35** **Closed** **07/25/2014** **08/04/2014** **07/29/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference Contract Drawings Sl-2027, Sl-3010, Sl-3004, and the attached drawings.

Sheet S1-2027 depicts the east edge of the south pit 2'-5" west of GL 35. As-built location of east edge of south pit is 1 '-0" west of GL 35. The south pit at GL 35 has typical pit rebar per Detail 4, S1-3004. Typically, the pit rebar extends 4' beyond the edge of pit and 4' in height (see attached drawing Sl- 3010). At the as-built location of the pit, pit rebar will extend into the seismic joint gap by approximately 14" as depicted in the attached drawing. Please provide alternate pit rebar detail for the south pit at GL 35.

Please note, pit rebar for all pits in Area 16 have been fabricated.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The condition is analogous to the pits shown to the north, detailed in Sections 7/S1-3010 and 1/S1-3007. Contract documents instruct the contractor to verify field dimensions, coordinate the drawings, and apply similar detailing. It is acceptable to apply the aforementioned details or for the contractor to provide an alternative equivalent detail for acceptance through the RFI process.

It is possible that pit has been placed too far east. Contractor to verify plan location of pit and the ability to comply with contract documents for the 5'-0" minimum clearance requirement between the bottom edge of sump and nearest face of waterproofing.

T-1553 **SSS - SE201 & SE202 Roof Level Framing Clarifications** **Closed** **07/25/2014** **08/04/2014** **08/07/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 524 SK1 for items 1 to 4:
1) These (2) beams have been located on center of the HSS10x10 posts above per 1/S1-7102. This results in the beams being 1'-0 from the edge of wall as shown but 8/S1-7631 indicates 10". Confirm 1'-0 is acceptable.
2) Detail 11/S1-7631 does not indicate that slab edge plate per 8/S1-5000 is required. Confirm that is the intent.
3) 6/S1-7631 is shown at the west side of the slab openings but it is not clear if slab edge plate per 8/S1-5000 is required. Clarify the slab edge requirement on the east and west sides of the openings.
4) Depending on the response to item 3, supply a connection detail for the HSS beam.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Framing plan shown on SK1 in the RFI is not current. See sketch SKS-0383 submitted with response to RFI T-1544 for current framing layout. The two noted beams are centered on the WF columns. Dimensions to locate WF columns are shown on attached sketch SKA-3923.

2) Confirmed. Edge plate per 8/S1-5000 is not required at the highlighted locations as there is no slab on either side of the concrete walls as shown in 11/S1-7631.

3) See attached sketch SKS-0388 showing updated details 6/S1-7631 and 10/S1-7631. Details 6/S1-7631 and 10/S1-7631 apply at the west and east edges of the opening, respectively. As shown in the details slab edge plate per 8/S1-5000 is required.

4) The HSS beam connects to a WF column. See

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

attached sketch SKS-0389 HSS beam to WF column connection detail.

Note that all the sketches attached with this RFI were already issued by the design team as part of the Roof Restaurant IFC package (5/31/2014). W/O to coordinate issuance of drawings to the sub-contractors

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T-1553.1 **SSS - SE201 & SE202 Stud Length Requirement and Dimension Clarification** **Closed** **08/25/2014** **09/04/2014** **09/08/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 524.1 SK1 for items 1 & 2:
1) Please update the stud length requirements to suit the revised wall thicknesses/beam locations.
2) This 5" dimension is shown as 1'-9 3/4 on SKS-0383 in RFI T-1544 (SK 712, CD 522). Please clarify which dimension is correct.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Sheets S1-7102 and S1-7631 have been updated and issued with Roof Park Restaurant IFC package on 5/31/2014. Refer to attached sketches SKS-0410 and SKS-0411 that show updated wall thicknesses and stud lengths.

2) See response to 1).

T-1554 **SSS - PE201 Missing Dimensions** **Closed** **07/25/2014** **08/04/2014** **08/11/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 491 SK1 for items 1 to 7:
1) Supply the missing clouded dimension and confirm the outriggers are spaced in 4 equal spaces.
2) Supply the missing clouded dimension and confirm the outriggers are spaced in 3 equal spaces.
3) Supply the missing clouded dimension and confirm the outriggers are spaced in 3 equal spaces.
4) Supply missing clouded dimension.
5) Supply missing clouded dimension.
6) Supply missing clouded dimension.
7) Confirm items 1 to 6 may be applied at details 2,3/S1/S1-7001; 1,2,3/S1-7002 & 1,2,3/S1-7003 unless

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Refer to detail 4/A1-7861 for outrigger locations and spacing.

2) See response to 1).

3) See response to 1).

4) Refer to drawing A1-7861, A1-7862, A1-7863 and A1-7864 to determine the extents of the outrigger beams.

5) See response to 4).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

the framing is clearly shown otherwise.

6) See response to 4).

7) We confirm that responses to items 1 through 6 apply to 2,3/S1-7001; 1,2,3/S1-7002 & 1,2,4/S1-7003 . Note that outriggers in detail 3/S1-7003 have been moved to detail 4/S1-7003. See also response to RFI T-1535.

T-1555 **SSS - PE201 HSS Connection Clarifications** **Closed** **07/25/2014** **08/04/2014** **08/06/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 492 SK1 & SK2 for items 1 & 2:

1) Detail 2/S1-7602 as shown does not apply at this location. Confirm the modified detail as shown is acceptable.

2) Confirm it is acceptable to cut the vertical leg of the angle as shown to fit below the cantilevered horizontal HSS10x8.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.

2) Confirmed.

T-1556 **SSS - E201 & E202 Connection Clarification with Current Framing** **Closed** **07/25/2014** **08/04/2014** **08/11/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 527 SK1:
With the framing shown it is not clear how detail 3/S1-7603 is to be applied. Please clarify.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Dimensions to locate HSS stringers as shown on SK1 in the RFI are incorrect. Refer to attached sketch SKA-3896 for location of the HSS stringers. The slab edge distance for the north-south W18 beams may be reduced to 5" so that the HSS stringer can be welded to the WT6x32.5 on both sides per 3/S1-7603.

T-1556.1 **SSS - E201 & E202 Connection Clarification with Current Framing** **Closed** **08/25/2014** **09/04/2014** **09/15/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 525.1 SK1 for items 1 to 3:
1) The WT22x167.5 fouls the continuity plates. Please provide a detail showing the solution.
2) Supply hole size for 2 1/2" dia. pretensioned rod thru the continuity plates
3) The WT22x167.5 fouls the continuity plates. Please provide a detail showing the solution.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Provide continuity plates on each side of the WT22x167.5 and on each side of the MF column web (total 4 plates) at the locations highlighted in the RFI.

2) For the pretension rods at this location, provide oversize holes per AISC 360-10 Table J3.3 at the continuity plates.

3) Apply response to item 1.

T-1557 **SSS - Domestic Material Availability** **Open** **07/25/2014** **08/04/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

At the Second Level Shaw Alley Bridge we have HSS 5 X .500 posts (Detail 6 on S1-5013). This size is not available domestically. Please confirm the substitution to HSS 5.563 X .500 as to meet the USA requirement is acceptable. Otherwise, provide an alternate solution.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T-1557.1 **SSS - Domestic Material Availability** **Closed** **07/28/2014** **08/07/2014** **08/13/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Detail 6 on S1-5013 calls for HSS 5 X .500 posts at the Second Level Shaw Alley Bridge. This size is not available domestically. Please advise.

SUGGESTION:

HSS 5.563 x .500 is available domestically.

ANSWER: **Accept Suggestion:** ☐

HSS 5.563 x .500 is acceptable - also Contractor shall coordinate this work with Steel Shop Drawings already reviewed.

T-1558 **BGP - Bracing removal sequence on the East end of Zone 4** **Open** **07/25/2014** **08/04/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Bracing removal sequence on the East end of Zone 4

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

WOJV is proposing the following sequence for the bracing removal for the east side of Zone 4.
See sketch SK1, attached.

Sequence
1. Remove level D struts and walers from within the green clouded area up to GL- 32.2 once the mat slab beneath has reached adequate strength.
2. Remove level D struts within the Blue clouded area STD-65 to 74, 82 & 83 and all corresponding walers once the mat slab beneath has reached adequate strength, the sequence for de-stressing will be the diagonals struts should be all de-stressing prior to the 4 remaining cross lot struts (STD-65,66,67 & 68).

For the remaining levels A, B and C WOJV is proposing to follow a similar removal sequence as Level D

Please confirm if this sequence would be acceptable.

T-1559 **SSS - TPG1 Stiffener Connection Clarification at GL 3** **Closed** **07/25/2014** **08/04/2014** **08/05/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Webcor Construction LP Gregory Kemerer

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 529 SK1 & SK2 for items 1a & 1b:

1a) The typical connection for the TPG1 to the perimeter BU Beam is per 6/S1-5010 as shown on SK2 but at this location a pull-out shear plate is shown. Supply thickness, bolt and weld information for the shear plate connection if that is the connection to be used at the noted location.
1b) The stiffener will foul the bolts for the top plate per 7/S1-5032 if the connection per 6/S1-5010 is used.
Please provide a solution.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1.) Detail 6/S1-5010 is to be applied at this location.

2.) For the 8 bolts on the same side as the stiffener: Move 4 bolts 1.5 inches to east and move the other 4 bolts 1.5 inches to west. This modification will increase the spacing between the central bolts from 4.5 inches to 7.5 inches and reduce edge distance from 4.5 inches to 3 inches (each side).

T-1559.1 **SSS - TPG1 Stiffener Connection Clarification at GL 3** **Closed** **08/25/2014** **09/04/2014** **09/08/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

The response to T-1559 will not work on north end beam A1135 (grids B/2) as the stiffener is not centered. Please confirm dimensions proposed on SK1.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed

T-1560 **SSS - Stiffener Connection Discrepencies at Roof Perimeter Beams** **Closed** **07/25/2014** **08/04/2014** **08/05/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 529 SK1 & SK2 for items 1 & 2:
1) The noted details on S1-8002 show different stiffener configurations than 2/S1-4205 without indicating the size/welding information for the stiffeners and a reference to detail 2/S1-4205 is also not shown on S1-8002. Please clarify which details show the correct information for the stiffeners.
2) The noted detail on S1-8002 shows a different stiffener configuration than 1/S1-4205 without indicating the size/welding information for the stiffeners and a reference to detail 1/S1-4205 is also not shown on S1-8002. Please clarify which detail shows the correct information for the stiffeners.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

At the locations identified in the RFI:

1) Apply stiffener size and welding info per 2/S1-4205 and configuration per S1-8002.

2) Apply stiffener size and welding info per 1/S1-4205 and configuration per S1-8002.

T-1561 **SSS - Weld Connection Clarification at Roof Perimeter Beam GL 2** **Closed** **07/25/2014** **08/04/2014** **08/06/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

The 1 1/2" stiffener with 1" fillet welds per 5/S1-4205 will not fit between the bolts.
Please provide a solution.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to RFI response T-1559.

T-1562 **SSS - Protected Zone Signage** **Closed** **07/28/2014** **08/07/2014** **07/30/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

SUGGESTION:

ANSWER:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Detail 10/S1-4202 shows the protected zone signage attached directly to both sides of the beam. The response to submittal package TG0701-37A includes a note directing the contractor to remove the signage before SFRM application, and then reattaching it after the SFRM is applied (See SK1). Please confirm this note is to be ignored.

Accept Suggestion: ☐

Contract documents indicate paint and signage for protected zone. It has been previously established that the paint may be applied directly to the beam before the application of SFRM. This should serve to designate the protected zone during erection and over the life of the building. The signage is intended to be an exterior alert, over the life of the building, and must be visible from the exterior. Therefore, the signage must be outside of the SFRM. The contract documents do not specifically indicate that the signage be present before the application of SFRM as the contract documents generally show the final condition. It would, however, behoove the contractor to have the signage present at all stages of construction, before and after application of SFRM, in order to mitigate the risk of accidental damage to the part, which would be very expensive to replace.

T-1563 **SSS - Erection Access Confirmation at TPG1** **Closed** **07/29/2014** **08/08/2014** **08/18/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

There is a 3 7/16" gap between the flanges of the TPG1 and W40x264. The north end of the W40x264 is connected to
the W40x297 per 1/S1-5010 and the south end is connected to the BU-40x28 per 1/S1-8001 including a field moment
weld at the top and bottom flange of the W40x264. Please review and supply any changes that are required for erection access.

Alternatively, please confirm that it is acceptable to move CP1D (shown on S1-4002) 6-inches away from TPG01.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is not acceptable to move W-1 awning connection CP1D from its current location. However, it is acceptable to move the W40x264 beam 6" away from TPG1 to allow access for field erection.

T-1564 **SSS - Bus Ramp Support Connection Clarifications** **Closed** **07/29/2014** **08/08/2014** **08/11/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

See attached CD RFI # 489 SK1 for items 1 & 2:

1) Please provide the hole diameter and hole size as noted.

2) Please provide the weld size for the 2" web plate to the 2" end plate.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1.) The drop-in span at the Bus Ramps is being revised by the Contractor as part of a post-bid value engineering proposal. This may impact the bearing details currently shown on the bus ramp drawings. WOJV to coordinate.

2.) Provide 1 inch thick fillet welds on each side of the web.

T-1565 **SSS - ST403 Embedded Angle Elevation & Orientation and Curb Dimensions** **Closed** **07/29/2014** **08/08/2014** **08/13/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 481 SK1 & SK2:
1). At Stair # 403 at the train platform level verify the embedded angles for the elevator posts per detail 11/S1-7600
are at elevation 29'-0 and confirm the angles orientation onto the concrete curb.
2). Confirm the 5'-4 dimension is to inside face of curb shown on SK1.
3). Confirm the 5'-10 & 6'-1 dimensions are to inside face of curb shown on SK2.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. It is confirmed that the embedded angles are at elevation 29'-0"and the embedded angles align with inside face of the curb.
2. Dimension is confirmed.
3. The dimension from GL E to the inside of the curb located at south is 5'-9" instead of 5'-10" . The dimension from GL E to the inside of the curb located at north is 6'-2" instead of 6'-1".

T-1566 **SSS - Pretension Rod Connection Clarification at Second Level GL 3** **Closed** **07/29/2014** **08/08/2014** **08/06/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 525 SK1:
The columns on Grid 3 indicate that the WT's/Pretensioned Rods in the web of the columns are to extend up to the
Bus Deck Level. If this is the intent, supply a detail showing how the continuity plates per 4/S1-5012 interface with
the WT/Pretensioned Rods at the Second Level.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

At this location, provide holes within the second floor moment frame beam continuity plates to run the pretension rods through.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1566.1	SSS - Pretension Rod Connection Clarification at Second Level GL 3	Open	09/03/2014	09/13/2014		Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 525.1 SK1 for items 1 to 3:
1) The WT22x167.5 fouls the continuity plates. Please provide a detail showing the solution.
2) Supply hole size for 2 1/2" dia. pretensioned rod thru the continuity plates
3) The WT22x167.5 fouls the continuity plates. Please provide a detail showing the solution.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1567	BGP - Substitute Fly-Ash Product - Salt River	Open	07/29/2014	08/08/2014		Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference attached product data sheet for the Salt River brand Fly-ash, product data sheet for Headwaters brand Fly-ash and product comparison spreadsheet.

If needed, due to a shortage in supply of the Headwaters brand fly-ash, please confirm it is acceptable to substitute Salt River brand fly-ash for use in all TG06.0 cast-in-place mix designs.

If Salt River Fly-ash is acceptable, will the design team require trial batches?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1567.1	BGP - Substitue Fly-Ash Product - Salt River - Attached Cemex Letter	Closed	08/11/2014	08/21/2014	08/11/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference attached CEMEX Letter and product data sheet for the Salt River brand Fly-ash, product data sheet for Headwaters brand Fly-ash and product comparison spreadsheet.

If needed, due to a shortage in supply of the Headwaters brand fly-ash, please confirm it is acceptable to substitute Salt

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Based on the assertion contained within the Cemex letter, that the proposed substitution will result in equivalent performance to the previously approved mix designs, the design team does not object to the proposed substitution or require additional trial batches. Should the proposed substitution be placed in elements whose strength is evaluated on predictive methods, the performance of the mix shall be tracked

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

River brand fly-ash for use in all TG06.0 cast-in-place mix designs.

If Salt River Fly-ash is acceptable, will the design team require trial batches?

separately.

T-1568 **BGP - Pile Location Discrepancy at GL E/34.5 - Zone 4** **Closed** **07/29/2014** **08/08/2014** **08/12/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

SCCI is in receipt of RFI response T-0741. RFI response T-0741 references RFI response T-0264.3, which states: " ... Note that a pile in this location will require the pile to be cut off at a lower elevation than the typical detail, which will involve a larger block-out..."

1. Please provide an elevation, referenced in the above mentioned RPI response, which the pile will be cut.

RFI response T-0264.3 also states: " ... the mat shall be re-braced at the block-out by TG03 ... "

2. Please provide a detailed description of this required re-brace and how it will effect TG06 formwork, rebar, etc.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Per the RFI attachments, the bridge pier appears to be completely contained between the shallow eastern sump and the deeper sump immediately west. As such, the cutoff elevation for the bridge pier may be the same as for blockouts at the typical top of mat slab elevation. Detail 4/S1-3009 will apply to the blockout in the north-south direction except that diagonal trim bars are not required. For the east-west direction, Detail 4 would not apply but may be modified such that the #5 at 8" infill cap bars lap with the pit wall reinforcing on the west side and lap with embedded dowels of same size and spacing on the east side. The resultant depth of blockout will be approximately 30". The (6) additional #11 bars shown on 1/S1-2065 may be relocated adjacent to the pier below the shallow east sump. Additional reinforcing beyond the (6) #11's mentioned is not required above the bottom of the mat. Additional reinforcing per Detail 7/S1-3009 is required at the bottom of the pit.

Temporary blockouts are the responsibility of the contractor and the suggestion above is but one acceptable way to accommodate the change in pier location. The contractor is requested to provide a sketch of the final proposed configuration and reinforcing for confirmation through the RFI process.

2) The comment regarding re-bracing may be ignored.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1568.1	BGP - Pile Location Discrepancy at GL E/34.5 in Zone 4	Closed	08/28/2014	09/07/2014	09/02/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference RPI response T-1568, attached photo of bridge pier/sleeve at Grid Lines 34.5/E and attached sketch.

SCCI is in receipt of RFI response T-1568. The bridge pier in question is not fully contained within the sumps pits referenced in RPI response T-1568 (see photo attached). The galvanized pile sleeve encroaches into the Eastern most sump pit approximately 5/8".

In order to facilitate the installation of this sump pit the provided contract details will need to be modified. The pile will need to be cut off at a lower elevation than the typical detail, which will require a larger block-out. The typical contract rebar details will need to be altered, as well as the typical waterproofing details.

1. Please confirm the attached sketch showing revised rebar and formwork details is acceptable.
2. In order to install a deeper blockout, the galvanized sleeve will be cut down to 4" above bottom Of blockout. This cut will remove the sleeve flange. Please confirm this is acceptable.

All waterproofing detail revisions will be performed per Grace's recommendation and referenced mat slab "Ready-to-Pour" sign-off document for Mat Slab 16

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Item 1 is confirmed.

Item 2 is not acceptable. Submit a proposal for providing a flange on the sleeve, field repair of galvanizing, and any waterproofing details that are proposed to be modified.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1568.2	BGP - Pile Location Discrepancy at GL E/34.5 in Zone 4	Open	09/15/2014	09/25/2014		Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

SCCI is in receipt of RFI response T-1568.1. Please see attached sketch for reference.

SCCI offers this response for Item #2.

1. Galvanizing will be removed from surface of the installed sleeve in order to weld a new identical flange centered 19" down from the top of sleeve. Weld will be a

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

¼" fillet weld, both top and bottom of flange all the way around the sleeve. The sleeve will then be repaired with approved cold galv spray.

2. All waterproofing details will remain typical.

Please confirm this is acceptable.

T-1569 **BGP - 3rd Lift Foundation Walls - Area 1 CJ Layout** **Closed** **07/29/2014** **08/08/2014** **08/04/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference attached sketch that illustrates a proposed CJ layout for the 3rd wall lift foundation walls located in Zone 1, above the knock-out wall locations.

Please confirm this layout is acceptable?

Please note: This layout, if deemed acceptable, will be submitted in the comprehensive layout drawings for 3rd wall lift area 1 through 5.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

T-1570 **SSS - PE201 Missing Information at Roof Level** **Closed** **07/30/2014** **08/09/2014** **08/11/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 506 SK1 for items 1 to 4:
1) Supply location and size for slab opening.
2) Supply missing dimensions.
3) Confirm the C8x11.5's per 12/S1-5003 connect to the HSS beams per 6/S1-5011.
4) The davit base plate per 12/S1-7600 will foul the top plate in detail 6/S1-7604.
5) Detail 9/S1-5000 shows the slab support connecting to WF beams. Please supply a detail showing how to

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to 1/A1-2964 for location and size of opening. Missing dimensions are supplied per attached RFI T-1570_Sketch.
Provide shear plate connections per 1/S1-5011 with two bolts at the C8x11.5 channels.
See attached sketch SKS-0392 for connection at base of the davit pedestal. Provide a cap plate in lieu of the top flange plate per 6/S1-7604 as shown in the sketch. Braces per 9/5000 may be waived at the HSS beams

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

connect the braces at the HSS beams. on this level.

T-1571 **SSS - PE302 Angle Brace Connection Clarification** **Closed** **07/31/2014** **08/10/2014** **08/13/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 532 SK1 & SK2:
Per RFI T-0973 (SK 061A, CD 070A) the angle braces per 5/S1-5015 are not possible in the space.
Confirm the alternate connection at this location is acceptable or supply a new detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Provide a WT 16.5x59 welded to the bottom flange of the W33x130 and to the transfer girder flange, in lieu of the kicker brace per 5/S1-5015. Connection of the WT to the W33 beam and the transfer girder including weld size, type and length, shall be similar to that shown in sketch SKS-0290 submitted with response to RFI T-0824.

T-1572 **SSS - Post Location Clarifications GL 19.1-19.9** **Closed** **07/31/2014** **08/10/2014** **08/11/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 534 SK1 for items 1 & 2:
1) 3 spaces at 11'-8 3/4 equals 35'-2 1/4. Please clarify which dimensions are correct.
2) The HSS 10x10 post will be located east of Grid 19.1. The result is that the east wall of the HSS 10x10 cannot be fillet welded to the beam below as it extends beyond the beam flange as shown. Confirm that is acceptable or supply a solution.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) The dimensions on A/S1-6030 should be taken as 3 equal divisions of 35'-2 3/8".

2) Per structural drawings, there are two HSS10x10 columns at the highlighted location; one for the W-8 system per 1/S1-8006 and the other for W-12 system per 1/S1-8016. HSS 10x10 per 1/S1-8006 shall be centered on workpoint WP1 (W-8 system) as shown in the attached sketch SKS-0391 and welded to the MF flange at the bottom per 1/S1-8006. The HSS10x10 post per 1/S1-8016 at WP1 (W-12 system) may be waived.

T-1573 **SSS - Dimension Clarifications for W-3 Support Beams on Ground Level** **Closed** **07/31/2014** **08/10/2014** **08/11/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

See attached CD RFI # 537 SK1:
Confirm the dimensions on B/S1-6050 are the dimensions to be used to locate the beams on S1-2305 noted thus * (beams indicated by bold red line on SK1).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

We confirm that the dimension provided on B/S1-6050 and 2/S1-6051 are to be used to locate the beams noted thus * on S1-2305. These sheets were part of the Design-Build Glazing IFB Addendum 10.

T-1573.1 **SSS - Dimension Clarifications for W-3 Support Beams on Ground Level** **Closed** **08/25/2014** **09/04/2014** **09/09/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 537.1 SK1:
It is not clear where the row of beams west of Grid 19.1 & east of Grid 24.9 are located. Per B/S1-050 they are located 3'-8 off the noted Grids. S1-305 appears to show the beams centered under the 1'-3 wide thick portion of the slab and detail 9/S1-5022 does not provide a dimension. Confirm the beams are located 3'-8 off the noted Grids.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The W12x14 beams east of GL 19.1 and west of GL24.9 shall be centered on the 1'-3" slab step shown on 9/S1-5022. The W14x68 beams with * symbols that are graphically shown in the same row as the W12 beams shall be centered on the W-3 system supports located on S1-6050. Note that the 3¿-8¿ dimension on S1-6050 locates the W-3 outside cable centerline at the corner condition, not the centerline of the W-3 supports. Refer to base plate detail PL3 on S1-8005 for centerlines of the W-3 system supports at the corner condition. Refer to the Architectural Slab Edge Plan A1-2865 for the location of the slab step and concrete curb.

T-1574 **SSS - Dimension Discrepancies at W-3 Support Beams on Bus Deck Level** **Closed** **07/31/2014** **08/10/2014** **08/11/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 539 SK1:
The dimensions on S1-2607 (SK2) do not match the dimension on A/S1-6058 (SK1).
Please clarify.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The beams indicated in the RFI are at the Roof Level, whereas W-3 system spans from Ground to Bus Deck Level. Refer to Bus Deck Level plans for W-3 support beams.

T-1575 **SSS - Locations for W-3 Support Beams on Ground Level** **Closed** **07/31/2014** **08/10/2014** **08/11/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 538 SK1:
D/S1-6058 appears to be the plan of the W-3 system at the Ground Level but dimensions to locate the beams noted thus * on S1-2307 (SK2) are not provided.
Please provide locations for the beams hi-lited on SK2.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

All necessary dimensions have been provided to locate the base plates, therefore the supporting beams are located accordingly. See details B/S1-6058 and C/S1-6059 for dimensioning.

T-1576 **SSS - Comment on W16 Elevation at GL19.9** **Closed** **07/31/2014** **08/10/2014** **08/15/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 536 SK1:
The noted W16 beam has been lowered in order for the de cking for the low slab to continue from Grid G thru to the W44x230 as shown in 9/S1-3703.
The (2) W16 beams on the east side of Grid 19.9 are flush with the top of TR19.9.
Confirm that is acceptable at Grid G & C or clarify the fram ing in this area.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed

T-1577 **SSS - E510-E512 Missing Connection & Support** **Closed** **07/31/2014** **08/10/2014** **08/15/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 542 SK1:
1) Supply a connection detail for the low W30 to the W40 on both ends.
2) The noted W12x14 beams have no support at the noted locations as the W30x99 is below at -2'-10 1/2. Supply a support/connection detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Provide connection per 1/S1-7604 at the low W30 beam that frames into the W40 beams at its two ends.

2) See attached sketch SKS-0393 showing the support for W12 beams at the knock-out slab.

T-1578 **SSS - Pipe Grade Requirement** **Closed** **07/31/2014** **08/10/2014** **08/06/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

SUGGESTION:

ANSWER:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Accept Suggestion: ☐

At Gridline 21 & 22 between D & F, S1-2505 shows two pipes 16 X 1.031, that are to be supplied as API 5L GR X52. Herrick has been unable to locate this grade of material that stays within the Buy America requirement. Please advise.

Herrick has found two pipes that are certified to API 5L GR X42 but meet the mechanical properties for API 5L X52 (Please see attached Mill Certification). Please confirm this material is acceptable.

Suggestion acceptable for the two pipes indicated in the RFI.

T-1579 **BGP - Seismic Joint Stepped Embed Clarifications** **Closed** **08/01/2014** **08/11/2014** **08/19/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche

To: Turner Construction Compan PHIL MILITELLO

Answered By: Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference Contract Drawing S1-3010 and Submittal TG0600-051 .1.

Please clarify the following:

1. Sheet 8.01 of Submittal TG0600-05 l.1 calls for a M30x4-1/2" stud welded to the embed. Due to the unavailability ofM30x4-1/2" studs, please confirm it is acceptable to fillet welding M30x4-1/2" long cut pieces of fully threaded rod.

2. Submittal TG0600-051.1 requested design to determine bar lengths for the hooked #6 welded rebar. Please provide missing lengths for the hooked welded #6 rebar.

3. Please clarify the (. 11 7) at the double flare bevel weld on the hooked #6 rebar and the deformed #6 bar. It is SCCI's understanding the 3/8" is the weld size and the 5 is the weld length. What is the (.117) referring to?

4. See attached SI-3010. The east embed top vertical leg appears to be welded to the horizontal leg with a square bevel and convex weld with a fillet on the other side. Typically, a square bevel has a given dimension that depicts the gap between plates. As no dimension is given and the other side is a fillet weld, it appears to be a flat fillet laid down on the joint, with no gap. Please confirm this is the design intent.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). The headed studs, their weld attachment forming a part of clamping assembly are a part of assembly designed by seismic joint supplier. Changing of the clamping assembly shall be approved by the supplier.

2). The hook #6 shall be 36" long (length without hook) same length as the 3/4" deformed bar anchors.

3). The double flare weld is 3/8" with 0.117" effective throat.

4). Gap of the square groove weld shall be per AWS prequalified weld joint detail. The gap size depending on the weld process used.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1580	SSS - Stiffener Fouling 2" Plate at GL21G	Closed	08/04/2014	08/14/2014	08/26/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 541 SK1:
With the actual location of MFB11 relative to TR21 as shown, the PL2 1/2" x 14 x 2'-6 will foul the vertical stiffeners. Confirm it is acceptable to locate the PL 2 1/2" as shown and terminate the vertical stiffener plates 1" below MFB11 as shown.
If not, please clarify detail 8/S1-3702 at Grid G/21.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) The 2 1/2" x 14" plate should locate as close to the 2" holes as possible, say changing the 1 1/4" clearance to 1/2" clearance.

2) The vertical stiffeners does not need to keep 1' clear from the bottom of MFB. They can be extended into MFB 11, just short of 2 1/2" plate.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1581	SSS - Inaccessible Welds at Corner GL Cast Nodes	Closed	08/04/2014	08/14/2014	08/22/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 474 SK1 to SK6 for item 1 to 10:
1-
8) Several of the shop and field welds required at the grou nd level corner cast nodes are inaccessible once the cast node is set in position. Please see items 1 through 8 on S K1 through SK8 for clarification and provide direction.
9) Supply the welding for the north flange plates of the BU column to the node.
10) The welds required at this external corner create an un weldable condition, See SK5 & SK6 for clarification. Pleas e
provide direction.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). The CP weld noted may be achieved by weld a backup bar/angle prior to setting the column.

2). The CP weld noted may be achieved by weld a backup bar/angle prior to setting the column. The back-gouge and 5/16" reinforcing fillet may be deleted.

3). The double bevel weld may be changed to single bevel weld from the east side.

4). The CP weld noted may be achieved by weld a backup bar prior to setting the column. The back-gouge and 5/16" reinforcing fillet may be deleted.

5). See response #4

6). See response #4

7). Backup bar may be installed prior to fitting the transfer girder to the cast node. The back-gouge and 5/16" reinforcing fillet may be deleted.

8). Cannot see when the weld cannot be made. The vertical stiffener may be installed after the 2" PP weld is completed.

9). The weld info is called out as CP weld with back gouge and 5/16 reinforcement weld, which is questioned in item 4 above.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

10). Weld access hole per AWS D1.1.

T-1581.1 **SSS - Inaccessible Welds at Corner GL Cast Nodes** **Open** **09/08/2014** **09/18/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

This is a follow up to RFI T-1581:

1-7) Confirm the backing bar may be left in place.
8)The "vertical stiffener" referenced in the response is the transfer girder web as per section 5B. This weld is inaccessible once the node is set in place. Confirm this section of 2" PJP can be omitted.
9) The weld detail requested was the vertical edge of the built-up column flange to node, not the column field weld indicated in item #4 as referenced in the response. Please provide weld detail or confirm weld is not required.
10a & b) Confirm access holes as per SK4 are acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T-1582 **BGP - Geothermal and Temperature Probe Manifold Sleeve Detail** **Open** **08/04/2014** **08/14/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

The CDSM wall has significant variation at the geothermal and temperature probe sleeve locations.

Please confirm the front flange and nelson stud at the manifold sleeve can be removed, as shown in the attached shop drawings. This would allow the sleeve to be cut to take the CDSM encroachment into consideration while still installing the sleeve flush to the face of the wall.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T-1582.1 **BGP - Geothermal and Temperature Probe Manifold Sleeve** **Closed** **08/04/2014** **08/14/2014** **08/14/2014** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

The CDSM wall has significant variation at the geothermal and temperature probe sleeve locations.

Please confirm the front flange and nelson stud at the manifold sleeve can be removed, as shown in the attached shop drawings. This would allow the sleeve to be cut to take the CDSM encroachment into consideration while still installing the sleeve flush to the face of the wall.

Note: The original sleeve shop drawings have also been included for comparison purposes.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed. No exception taken to the removal of the inside flange.

T-1583 **BGP - CB15 Added in ASI 121- Lower Concourse GL 7-8** **Closed** **08/04/2014** **08/14/2014** **08/04/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

SCCI received ASI 121 on 8/1/2014. Part of the change includes an added beam in Area 5 between GL7-8. Upon receipt of ASI 121 , the deck has been formed and rebar has been fully installed.

To accommodate the late beam addition, please confirm that CB-15 issued in ASI 121 on SI-2203 between Grids 7 and 8 near Grid D.8 may be constructed per the attached sketches in order to accommodate schedule and work in place.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

T-1584 **SCS - Wall Construction Joint - Moment Frame Beam Conflict** **Closed** **08/04/2014** **08/14/2014** **08/18/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

See attached diagram of a wall lift construction joint overlay on the ground floor plan. Per Specification Section 03 30 02 - 3.2, Foundation wall and ground floor construction joints shall align with the location of joint below in TG06 and will not impair the strength of the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The foundation wall construction joints cannot run through Ground Level MFB's. The best option to avoid this situation is to jog Foundation Wall construction joints around the MFB's as proposed. The recommended location for the offset is the horizontal

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

structure. A conflict occurs at the noted areas of the attached diagram, where the wall joint placed according to specification, will intersect at a moment frame beam. SCCI proposes to move wall construction joints in order to avoid conflicting with the moment frame beams.

Please confirm shifting construction joints to not align with the construction joints below is acceptable and provide permissible parameters to assign new construction joints for SCCI to reflect upon and modify the construction joint layout. A conceptual sketch is attached reflecting the proposed shift in vertical construction joint.

Foundation Wall construction joint immediately below the MFB's. The Design Team will evaluate contractor proposed construction joints during submittal review of the Ground Level construction joint layout that shall include any modifications to the previously reviewed and approved Foundation Wall construction joint layouts.

T-1586 **SSS - Telecom Vault - ToS Elevation** **Closed** **08/04/2014** **08/14/2014** **08/13/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 545 SK1:
Please supply the top of slab elevation.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For the top of slab elevations of the Telcom Vaults (North and South)at GL 33.5, refer to A1-9250 issued with the Main Package IFC dated March 31, 2014.

T-1587 **SSS - ST501 & ST502 Missing Dimensions** **Closed** **08/04/2014** **08/14/2014** **08/22/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 543 SK1 for items 1 to 3:

1) Confirm the set-back from edge of slab to center of beam is 6" on (3) sides noted or supply the missing dimensions.

2) Confirm the set-back from edge of slab to center of beam is 6" on (3) sides noted or supply the missing dimensions.

3) Confirm the 8" dimension offset to match the opening at

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) The offset between the edge of slab and centerline of beam shall be 5" for the noted W16 beams.

2) The offset between the edge of slab and centerline of beam shall be 5" for the noted W16 beams.

3) Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Grid C or supply the missing dimension.

T-1588 **SSS - E510-E512 Framing Clarification at GL 22** **Closed** **08/04/2014** **08/14/2014** **08/22/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 544 SK1:
It appears a beam is missing on the east side of the dropped slab to support the low steel.
If yes, supply the size and location of the beam.
If no, supply a connection for the east end of the (3) low W24x68 beams.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

There shall be a W24 x 55 at the east end of the depressed slab supporting W24x68s. Locate this beam similar to the W24x55 on the west side. Connections are detailed on 1/S1-7604 per plan.

T-1589 **SSS - Missing Beam Locations at OCS Posts** **Closed** **08/04/2014** **08/14/2014** **08/15/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 546 SK1:
Supply the missing dimensions to locate the beams. A1-2307 does not supply the dimensions.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per the structural note, the information requested can be found on drawing A1-2867, not A1-2307.

T-1590 **SCS - Concrete Form Support Kicked To Temp Bridge** **Closed** **08/04/2014** **08/14/2014** **08/09/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Henry Chiang

REQUEST:

A unique support system is necessary for the foundation wall under the temporary bridges (First, Fremont, Beale). Shimmick proposes that in these areas, the form work will kick to support brackets mounted to the underside of the bridges to provide better support. Without this, the form system will be a cantilever system supported by 1 row of anchors which will exert a significant force on the wall lift below.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The bridge is designed by a WOJV subcontractor. WOJV shall respond to this RFI.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please confirm it is acceptable for the fourth lift form system to be supported by the bridge underside.

T-1591 **SCS - Pendulum Bearing Test Results** **Closed** **08/05/2014** **08/15/2014** **08/15/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Henry Chiang

REQUEST:

Per Specification Section 03 20 02-1.4-A-7, "test results for [pendulum] bearings with similar size" are to be submitted for approval. Per Mageba, they have test data on pendulum bearings (isolators) with similar sizes which they believe have been tested under more severe conditions than the ones required for this project. See attached email correspondence with Mageba for further explanation and more
specific details in regards to their test and how the results apply to satisfy the requirements in the specifications. The referenced Annex documents in the email are also attached. Only a sample of the data has been included for preliminary approval; full test data will be submitted once this data is confirmed acceptable.

Please confirm that the mentioned test reports could serve as evidence of the proper functioning of mageba pendulum bearings, as well as the fulfillment for the requirements in the specifications.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Reports from past test data can serve as a basis to waive the testing requirement. However, the information provided with this RFI is not sufficient to waive the testing requirement. The test data provided in the RFI seems to belong to a bearing of similar size but it does not seem to meet vertical load carrying requirements outlined in the specifications. It is also not clear whether it meets the horizontal force requirements (friction coefficient) outlined in the specifications or not.

To waive the testing requirement:

- Provide specifications for the product that is intended to be used in this project that meets the design requirements outlined in the contract documents.

- Provide test data for a bearing that is comparable in size and performance to those intended to be used in this project tested with conditions that are comparable to the design requirements.

T-1591.1 **SCS - Pendulum Bearing Test Results** **Open** **09/10/2014** **09/20/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Shimmick Construction Company, Inc Henry Chiang

REQUEST:

RFI T-1591 response noted two requirements to waive the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

testing requirements.

1. Provide specifications for the product that is intended to be used in the project that meets the design requirements outlined in the contract documents.
See attached preliminary Pendulum Bearing product information and drawing.

2. Provide test data for a bearing that is comparable in size and performance to those intended to be used in this project tested with conditions that are comparable to the design requirements.
Please see attached additional performance test results from other bearings of comparable size and performance. Also reference T-1591 for previously submitted test results.

Please confirm that the mentioned test reports could serve as evidence of the proper functioning of mageba pendulum bearings, as well as the fulfillment for the testing requirements in the specifications.

T-1592 **SSS - PE201 Splice Location Clarifications for Weld Access** **Closed** **08/06/2014** **08/16/2014** **08/22/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI 490.2 SK1 for items 1 & 2:

1) Confirm it is acceptable to relocate the splice in order to have access to weld the interior plate diaphragms as shown.

2) Confirm the splice per item 1 will also be required at the noted location in order to have sufficient access to weld the interior diaphragm plates.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.

2) Confirmed.

T-1593 **BGP - Seismic Joint Corbel Spacing** **Closed** **08/08/2014** **08/18/2014** **08/15/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:
Contract Drawings A1-2057 dimensions the removal steel corbels at 5' OC UON. Reference attached sketch. Please confirm it is acceptable to space the first and last corbels at 5'-1 ¾ from the north and south interior wall edges. This will also confirm a total of 33 removable corbels at the seismic joint.

SUGGESTION:

ANSWER: Confirmed.

Accept Suggestion: ☐

T-1595 **SSS - Ring Elevation Clarification in Light Tower** **Closed** **08/11/2014** **08/21/2014** **08/13/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:
See attached CD RFI # 550 SK1:
Verify the Ring Elevation to be used is EL. 56'-7 3/8 to match the elevation shown on detail B/S1-6006 (SK2). Thornton Tomasetti's certified Tekla Geometry of the Light Tower also shows a ring EL. 56'-7 3/8.

SUGGESTION:

ANSWER:
We verify that the Ring Elevation to be used is EL. 56'-7 3/8".

Accept Suggestion: ☐

T-1596 **SSS - Light Tower Cast Node Clarifications** **Closed** **08/11/2014** **08/21/2014** **08/13/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:
See attached CD RFI # 551 SK1 for items 1 & 2:
1) It is not possible to use 9 3/4" at the noted locations as the edges of the lug plates will not completely land on the 3" thick round cap plate. Verify the 8 7/16" dimension is acceptable in lieu of 9 3/4"
2) Verify clouded dimensions.

SUGGESTION:

ANSWER:
1) We verify that the 8 7/16" dimension is acceptable.

2) Confirmed

Accept Suggestion: ☐

T-1597 **SSS - Transfer Girder Top Flange Stiffeners at GL3** **Open** **08/11/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:
At either side of transfer girder TR3, the lower slab elevati

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

on requires the deck to be cut around each of the girder sti ffeners compromising the rigidity of the deck, see attached SK1 for clarification.

Please confirm it is acceptable to shorten the short stiffene rs under both of the center columns to 1" above the top flu te of the deck.

T-1598 **SSS - Supplemental Pin Testing** **Open** **08/11/2014** **08/21/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Based on review of structural and referenced specification section it appears that Supplemental destructive testing of galvanized pins is not required after pins are galvanized per para 2.3.J. As per our previous QAQC meeting of June 17, 2014, it was requested by the TJPA representative that additional galvanized steel pin samples (ASTM A668 Class M) with associated nuts for each pin size be provided for destructive testing by TJPA representative testing lab and as follow:

1. 7" dia. X 2'-1" (A1551 as shown on 1551 of Pin shop drawings)
2. 7" dia. X 1'-2 3/16" (A1553 as shown on 1553 of Pin shop drawings).
3. 7" dia. X 1'-6 7/8" (A1554 as shown on 1554 of Pin shop drawings).
4. 8" dia. X 2'-7" (A1555 as shown on 1555 of Pin shop drawings).
5. 6" dia. X 1'- 8 13/16" (A13001 as shown on 13001 of Pin shop drawings).

Please provide the following:

1. Provide testing criteria to the testing lab agency after pins have been galvanized and in addition to the specified forged steel pins ASTM 668 Class M testing requirements.

2. Provide WOJV with a CR to supply and ship these additional pins and nuts to the testing lab.
3. If additional samples of other pins on the project are required, please specify.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

4. BRB pins are not included in this RFI to be tested.
Please confirm.

T-1598.1 **SSS - Supplemental Pin Testing** **Closed** **08/12/2014** **08/22/2014** **08/22/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Based on review of structural and referenced specification section it appears that Supplemental destructive testing of galvanized pins is not required after pins are galvanized per 05 10 00 para 2.3.J. As per our previous QAQC meeting of June 17, 2014, it was requested by the TJPA representative that additional galvanized steel pin samples (ASTM A668 Class M) with associated nuts for each pin size be provided for destructive testing by TJPA representative testing lab and as follow:
1. 7" dia. X 2'-1" (A1551 as shown on 1551 of Pin shop drawings)
2. 7" dia. X 1'-2 3/16" (A1553 as shown on 1553 of Pin shop drawings).
3. 7" dia. X 1'-6 7/8" (A1554 as shown on 1554 of Pin shop drawings).
4. 8" dia. X 2'-7" (A1555 as shown on 1555 of Pin shop drawings).
5. 6" dia. X 1'- 8 13/16" (A13001 as shown on 13001 of Pin shop drawings).

Please provide the following:
1. Provide testing criteria to the testing lab agency after pins have been galvanized and in addition to the specified forged steel pins ASTM 668 Class M testing requirements.

2. Provide WOJV with a CR to supply and ship these additional pins and nuts to the testing lab.
3. If additional samples of other pins on the project are required, please specify.
4. BRB pins are not included in this RFI to be tested.
Please confirm.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
8/12/2014
RESPONSE:
Per Turner on 08/12/2014, this RFI has been voided.

Ethan Heinrich
8/19/2014
RESPONSE:
The TJPA has not requested and has no plans for supplemental testing of galvanized pins. This RFI can be closed as not required/not requested.
If in the future, if the TJPA determines supplemental testing is requested, they will issue a CR only for additional pin sample material.

Webcor/Obayashi Joint Venture

PROJECT MANAGEMENT - REQUEST AND ANSWERS LOG

30100 - Transbay Transit Center Project

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1599	SSS - Top of Slab at Roof Park Level GL F	Closed	08/11/2014	08/21/2014	08/15/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 549 SK1:
Confirm the note should read 80'-7 1/2 to match S1-2605.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to attached SKA-4000, the correct elevation is 80'-7 1/2".

T-1600	SCS - Concrete Form Support Kicked to Temp Bridge	Open	08/11/2014	08/21/2014		Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Balfour Beatty Infrastructure, I Danny Walsh **Answered By:**

Co-Author: Shimmick Construction Company, Inc Henry Chiang

REQUEST:

A unique support system is necessary for the foundation wall under the temporary bridges (First, Fremont, Beale). Shimmick proposes that in these areas, the form work will kick to support brackets mounted to the underside of the bridges to provide better support. Without this, the form system will be a cantilever system supported by 1 row of anchors which will exert a significant force on the wall lift below.

Please confirm it is acceptable for the fourth lift form system to be supported by the bridge underside.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T-1601	SCS - Concrete Slabs Between Lower Concourse and Ground Level	Closed	08/11/2014	08/21/2014	08/11/2014	Potentially	☐

From: Shimmick Construction Company, Inc Henry Chiang **To:** Webcor/Obayashi Joint Ventu Spencer Sayles **Answered By:** Webcor Construction LP Claude Titche

Co-Author:

REQUEST:

See Detail 2/S1-2252 from ASI 117. On grid Line H - 23 there is a concrete slab between the Lower Concourse and Ground Level (elevation 1 '7"). The Slab is connected to a concrete partition wall on the south. On the north of the slab there is a concrete wall starting at the slab and connecting at the Ground Level Slab. Detail 2/S1-2252 was revised to add detail 2/S1-3504 in ASI 117.
1 . Is TG07.2 to add this scope of work and provide a price?

See Detail 1/S1-2252. On grid Line B - 23 there is a concrete slab between the Lower Concourse and Ground Level (elevation 1'7"). The Slab is connected to a CMU wall on the north side. On the south of the slab there is a

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Yes, Include scope shown in Detail 2/S1-3504 added in ASI 117 and provide pricing.

2. The elevated slab shown in Detail 1/S1-2252 at gridline B-23 is part of the 7.2 scope. This work is to be sequenced and coordinated with the masonry contractor.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

CMU wall starting at the slab elevation and ending at the Ground Level Slab.
2. Please confirm this slab does not belong to the TG07 .2 Package.
a. If this slab does belong to the TG07.2 Package, please advice on the sequence of work with the
CMU wall and steel.

T-1602 **SCS - Gas Line Lateral Pipe Size at GL 7.3/A** **Closed** **08/12/2014** **08/22/2014** **08/22/2014** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please reference attached excerpt drawings: U1-2002 (IFC - 3/31/14), 1/U1-3007 (IFC - 3/31/14), P1-2203 (ADD #4).

The utility drawing U1-2002 shows a Gas Utility Lateral east of GL 7/A at station 4+93.82. The size of the utility line is not provided on drawing P1-2203 or indicated on the utility plans.

Please provide the pipe size for the utility lateral located at station 4+93.82 with an invert elevation of 13.5'.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The natural gas service sleeve size is 4" and it is shown in detail D/P1-4001.

T-1602.1 **SCS - Gas Line Lateral Pipe Size at GL 7.3/A** **Open** **09/02/2014** **09/12/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

See attached RFI T-1602.

Per response to RFI T-1602 please confirm the following.

1.) Please confirm PG&E has approved both the gas meter room and the use of a 4" sleeve and routing/elbow to pull plastic tubing as reflected in this project design.
2.) Confirm the sleeve through the perimeter structural and

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

shoring wall is an 8" (or larger) sleeve.
3.) What are the required structural and architectural details for suspending a concrete encased gas main from the structural lid/deck for the entire run between perimeter wall and gas meter room?

T-1603 **SSS - Transfer Girder Flange Shop Splices** **Closed** **08/12/2014** **08/22/2014** **08/27/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

It has been understood that, due to the availability of mill r un plate size and length, it would be necessary to splice s ome of the top and bottom flange components of several o f the Transfer Girders in order to achieve the overall length required. The Contract provisions and AWS D1.1 Structu ral Code require that all splices made by welding are to be shown on the shop drawings. However, the location of the shop splice(s) was not shown on the shop drawings that were issued for fabrication to Thompson Metal Fab. TMF has fabricated flanges that have been spliced by full penet ration welds. The welds have been inspected and have be en accepted in accordance with the provisions of the AWS D1.1 Structural Code for static load criteria. The locations of the splices in the transfer girder components and the af fected flanges are shown in the attached documentation.

Girder A626 - top and bottom flange
Girder A627 - bottom flange only
Girder A630 - top and bottom flange
Girder A631 - bottom flange only
Girder A643 - top and bottom flange
Girder A645 - top and bottom flange

Please confirm it is acceptable to proceed as fabricated. A ll shop drawings will be revised to indicate all shop weld lo cations.
In addition TMF propose to shop weld flanges not currently indicated on shop drawings, please review appendix C an d confirm the splice locations are acceptable.
See Appendix A for shop drawing girder segments referen

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed that the as-built shop splices shown in Appendix B and proposed splice locations in Appendix C are acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

ced on Contract Drawings.
See Appendix B for as-
built splice locations including UT & MT reports.
See Appendix C for proposed splice locations.

T-1604 **SSS - Light Tower Cast Node Detail LC-702 Clarifications** **Closed** **08/12/2014** **08/22/2014** **08/26/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 559 SK1 for items 1 to 3:

1) Provide welding detail for the contact plate to lug plates.

2) Verify dimensions.
3) Confirm the dimensions in item 2 can be used at similar conditions e.g. 3&5/S1-6005, 4&6/S1-6006.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) 1/8 inch fillet weld all around the contact plate.
2) Dimensions confirmed.
3) Confirmed.

T-1605 **SSS - Light Tower Cast Node LC-302W Detail Clarifications** **Closed** **08/12/2014** **08/22/2014** **08/22/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 560 SK1 for items 1 & 2:

1) The CJP weld cannot be applied at the sharp edges of the 2 3/4" thick (2) plates and the 3" thick connection plate. Verify it is acceptable to shape the edges of plates as shown.

2) Confirm the solution in item 1 can be applied to similar conditions e.g. 4/S1-6006 and 3&5/S1-6005.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. It is acceptable to shape the edges of the plates at shown.

2. Confirmed.

T-1606 **SSS - Type Drag Connection Geometry at Bus Level Cast Node 29A-01 and 29B-01** **Closed** **08/12/2014** **08/22/2014** **08/19/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Please refer to attached SK RFI 744 SK01.
The shear plates at drag connection type 1-A at cast node 29B-01 and 29A-01 land on the edge of the welding pad. This condition does not make allowance for as-cast tolerances on the welding pad edge and may impact our ability to
achieve effective weld size. Please advise.

Skanska acknowledges the response to SK RFI 004.1 (T-0738) and 004.2 (T-0738.1). Following these RFIs, Skanska
increased shear plate spacing to give a 1/8" gap on the inside of each shear plate for erection clearance. Even had this
gap not been added, Skanska would still flag this issue for designers review as 1/8" still does not allow for as-cast tolerances at these locations.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The information provided in the RFI is not sufficient to provide a single solution at this time. Consider following solutions, which depend on the actual size of the pad:

1-) If the as cast dimensions of the pad allow the shear plate to land on the pad, no action needed. Since the contractor has opted to machine the pads, the rounded edges of the pads will likely be removed to create a wider weldable pad surface.

2-) Once the as cast dimensions of the pad are determined and if the plates do not fit in the pad, the ends of the plates can be tapered 0.25" with 1:2.5 ratio (e.g., 0.25"x 0.625" taper) at the outside faces of the plates.

Lastly, the contractor plans to use 1/8" gap on each side of the shear plate per the RFI. Considering that these are slip critical connections, a smaller gap might be considered by the contractor which can decrease the out to out connection width. To achieve slip critical, shim plates are needed if there is a 1/8" gap between the connection plate and beam web.

T-1607 **SCS - Fill Material at ST201** **Closed** **08/13/2014** **08/23/2014** **08/22/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche

To: Turner Construction Compan PHIL MILITELLO

Co-Author: Shimmick Construction Company, Inc Henry Chiang

Answered By: Adamson Associates, Inc George Metzger

REQUEST:

Drawing Sheets Al-7101 and A1-8714 shows backfill material between the stair tower grade beams.

1) SCCI suggests to neat cut the stair tower excavation to the bottom of the grade beams at ST201 in order to eliminate the need to form grade beams and backfill. Please confirm this is acceptable.

2) What fill does the hatching in the drawings indicate? Please confirm that the hatching refers to acceptable

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Item 1) "Neat cut" the stair tower excavation is a means and method issue, which needs to meet all requirements of codes and regulations, including OSHA requirements.

Item 2) Confirmed, hatching refers to acceptable material in Specification 31 00 00.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

material in Specification 31 00 00 (Earthwork) and do not have special requirements.

T-1608 **SSS - Light Tower Pin Clarifications** **Closed** **08/13/2014** **08/23/2014** **08/27/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 558 SK1 for items 1 to 11:
1) Confirm dimensions are correct.
2) Confirm dimensions are correct.
3) Confirm dimensions indicated can be used on all pin diameters.
4) Verify material grade for the cover plate is A572 Gr. 50.
5) 3,4&6/S1-6006 shows 3 1/8" hole size for 3" dia pin. Please confirm.
6) 5&7/S1-6005 shows 7 3/16" hole size for 7" dia pin. Please confirm.
7) Verify 5/8" Ø ASTM bolt can be used for cap screw. Please provide specification.
8) Provide thread pitch to use for the threaded hole.
9) Clarify the intent of the noted dimensions.
10) Confirm it is acceptable to use 11/16" thick plate.
11) Confirm hole diameters are correct.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1- OK
2 - See attachment
3 - See attachment
4 - OK
5 - OK
6 - See attachment
7 - See attachment
8 - Use standard thread pitch
9 - Threaded depth of bolt = 0.8 * bolt diameter
Depth of threaded hole = 1.2 * bolt diameter less than or equal to 0.6 * g [where g is thickness of lug plate, as shown in drawing]
10 - See attachment
11 - OK

T-1609 **SCS - Loads Imposed on Rebrace Struts by Wall Formwork** **Void** **08/14/2014** **08/24/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Balfour Beatty Infrastructure, I Danny Walsh **Answered By:**

Co-Author: Shimmick Construction Company, Inc Henry Chiang

REQUEST:

See attached Brierley Associates calculations.

Regarding imposed loads on rebracing struts due to fourth lift formwork, please confirm that the additional calculated loads on rebracing struts are acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1610	SSS - W14 Connection at Perimeter Framing GL20.1	Closed	08/14/2014	08/24/2014	09/04/2014	Potentially	

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 567 SK1 & SK2 for items 1, 2 & 3:

1) Work with RFI T-1573 and supply the clouded dimensions.
2) The connection per 1/S1-5028 does not work for the W14x68. The seat angles do not work due to the 8" MIN. criteria and there is insufficient room to fit the angles with (2) bolts. Please advise.
3) Confirm a W14x68 beam is required at the step in slab or provide a deck support detail.

Note: the same condition occurs on the north side at Grid 'C'

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) The W14x68 and W24x62 beams are centered on the W-3 system HSS posts shown on Sheet 1/A1-8215D issued with ASI 120 on 7/11/2014. The W14 beam is centered on the smaller HSS (8' -3 3/4" from GL 20.1) and the W24 beam is centered on the bigger HSS (8' -10 3/4" from GL 20.1). Note that with these dimensions, flanges of the two beams are going to foul each other. The W14 and W24 beam flanges may be coped 1" each to avoid this conflict.

2) Provide shear plate connections per 1/S1-5011 at the W14x68 beam with 2 bolts and a vertical bolt edge distance of 1 1/4".

3) No new beam is needed. The lower deck shall be extended and supported by an angle welded to the web of W14 x68 similar to the typical metal deck detail 10/S1-5002.

TT disagrees that there is a cost increase for this RFI (no new beam is needed per #3).

T-1611	SSS - Mis-Drilled Holes in Transfer Girder A628	Closed	08/14/2014	08/24/2014	08/28/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Skanska's transfer girder fabricator, TMF, has drilled girde r A628's top flange hole pattern 5/16" north of the designe d location. Please confirm it is acceptable to offset the hol e pattern and machined grooves on the column base plate to account for the offset on the girder. This will allow the c olumn to be positioned at the required location while acco mmodating the offset holes. The girder short stiffeners will also need to be shifted 5/16" to allow bolt clearance. See a ttached 628AC & 628AB for as-built hole locations, also see attached p4284 for proposed offset on column base plate.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

T-1612	SSS - Transfer Girder Stud Clarifications at GL6G	Closed	08/15/2014	08/25/2014	08/15/2014	Potentially	☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 568 SK1 & SK2 for items 1 & 2:
1) Please clarify what is meant by "SIM".
2) Please supply the missing stud information.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). The text "SIM" shall be deleted.

2). Use 2- 3/4"dia x 6" studs at 6" on center (total 6 rows @ 6" on center).

T-1613 **SSS - Deck Support at TR3 Grid C & G** **Closed** **08/15/2014** **08/25/2014** **08/27/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

At grid C3 the BU perimeter beam butts into the transfer gi rder TR3. The deck support angle in the web of the BU beam stops back 4' 9-
5/16" from the center of the girder. This results in a region of about 4'-4" without deck support
at an end bearing.

Design drawings do not provide a specific detail for this co ndition. Deck support at column detail 1/S1-5001 should not be used as this detail typically only supports one or tw o flutes of deck. The condition described above has 4 ½ unsupported flutes in an end bearing condition with 10" of nominal weight concrete. This is too much for a 12 gauge angle. Please advise.

SUGGESTION:

A 4x4x3/8" steel angle can be field welded from the perimeter beam deck angle to the transfer girder deck angle to span the unsupported deck or provide an alternative detail. See SK1 for clarification. This condition also applies at line G.

ANSWER: **Accept Suggestion:** ☐

Deck support is a "means and methods issue" and we disagree with the cost increase claim. Deck support angles proposed in the RFI and as shown on SK1 in the RFI are acceptable at the two locations on GL 3.

T-1614 **BGP - Gridline L/X Moment Frame Beam Bottom Reinforcing** **Closed** **08/15/2014** **08/25/2014** **08/22/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Per conversations with the SEOR, for MFB-X near Grid L, please confirm that it is acceptable to place the southern MFB bottom bars with the heads on the column side and hooks on the wall side provided that matching hooks are spliced onto all of the MFB bottom bars so oriented. Please also confirm that skin reinforcing is required to wrap around both exposed faces of the MFB below the reduced MFB section.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

Webcor/Obayashi Joint Venture

PROJECT MANAGEMENT - REQUEST AND ANSWERS LOG

30100 - Transbay Transit Center Project

Number	*Subject*	*Status*	*Date Created*	*Date Required*	*Date Answered*	*Cost Impact*	*Proceed*
T-1615	**BGP - Gridline 4.5 Elevator Pit Top Layer Hook Orientation**	**Closed**	**08/15/2014**	**08/25/2014**	**08/22/2014**	**Potentially**	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

For the Lower Concourse suspended elevator pit between Grids 4 and 5 near Grid E, please confirm that is acceptable to install the top layer of elevator slab reinforcing with the hooks oriented up provided that the hooks positively engage the exterior wall horizontal reinforcing or a nosing bar of equivalent diameter.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

T-1616	**SSS - Drag Beam Web Stiffener Plate Connection Clarification**	**Open**	**08/18/2014**	**08/28/2014**		**Potentially**	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 572 SK1:
Confirm it is acceptable to end the web stiffener plate as shown to avoid fouling the shear plate for the beam connection.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T-1617	**SSS - Drag Beam Connection Symbol Clarifications GL 20**	**Closed**	**08/18/2014**	**08/28/2014**	**09/04/2014**	**Potentially**	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 570 SK1 for items 1 to 3:
1) Confirm the kicker brace symbol is not required as the beams are the same size.
2) Confirm it is the intent to show the symbol indicating shear plate connections.
3) Confirm the kicker brace symbol is not required as the beams are the same size

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.

2) Confirmed.

3) Confirmed.

T-1618	**SSS - E610 & E611 Dimension Discrepancies at Ground Level**	**Open**	**08/18/2014**	**08/28/2014**		**Potentially**	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

See attached CD RFI # 569 SK1:
Please clarify the discrepancy in dimensions for the escalator pit. Supply/confirm the clouded dimensions if A1-2866 is correct.

T-1619 **SSS - E510 & E511 Edge Plate Support Clarification** **Closed** **08/18/2014** **08/28/2014** **08/27/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 564 SK1:
There is no support for the edge plate per 7/S1-5004 for the permanent slab at this location. Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The slab edge plate shall be welded (1/4" fillet weld) to the HSS cap plates shown on 6/S1-7661 at its two ends. Welds at the cap plates shall be minimum 3" long.

T-1620 **SSS - Drag Beam Welding Conflict at North Elevation GL 21-22** **Closed** **08/18/2014** **08/28/2014** **09/04/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 565 SK1:
A portion of the W36x231 top flange cannot be CJP welded due to the top flange cut on the W40x362. Please confirm that is acceptable or supply a solution.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed

T-1621 **SSS - PE704 & PE705 Missing Slab Information** **Closed** **08/18/2014** **08/28/2014** **08/27/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 548 SK1 for items 1 to 4:
1) Dimension is not shown on structural drawings. Confirm the dimension per 5/A1-7204 is correct.
2) Confirm top of slab elevation is 106'-7 3/4.
3) Supply location and size for slab openings.
4) Supply edge of slab locations.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed, The dimension noted on 5/A1-7204 to locate the HSS columns are correct.
2) Refer to Architectural Drawing A1-2966 issued with IFC package dated 03/31/14 for dimension.
3) Refer to Architectural Drawing A1-2966 issued with IFC package dated 03/31/14 for dimension.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

4) Refer to Architectural Drawing A1-2966 issued with IFC package dated 03/31/14 for dimension.

T-1622 **BGP - Top of Vertical Wall Interface with Ground Level MFB** **Closed** **08/18/2014** **08/28/2014** **08/22/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

The current design indicates the top of the # 11 vertical wall reinforcing terminating with a terminator maintaining 2" concrete clear cover above the bar as seen in Section 1 on S-3201 .

A # 11 555 t-head is 11/ 16" thick and a #11 Lenton Terminator is 11/16" thick. The Ground Moment Frame Beams appear in Section 5 of S1-3600. The concrete clear cover indicated over the stirrup is 2 3/4".

Due to the designed concrete clear cover called for, the thicknesses of the different terminator products and the allowable tolerance in fabrication and placement per ACI a conflict with the two interfacing componets is expected to occur at the top bars of the MFB.

Please confirm if the tenninator on the vertical bar can terminate below the ground level MFB top bars to avoid the expected conflict similiar to that allowed between the column and concourse MFB as indicated within RFI T-0917.

Should this proposed solution not be acceptable please provide direction how to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed, provided that the resulting clear cover to the Foundation Wall Vertical Reinforcing Terminator is within the parameters of the RFI T-1622 response including the supplemental U-bars. We disagree that a potential clash is anything other than insufficient means and methods.

T-1623 **SSS - ST601B Missing Beam Location** **Closed** **08/18/2014** **08/28/2014** **08/22/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 547 SK1:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached SKA-4040 that provides the requested

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Supply the missing dimension (not shown on Arch. drawings).

dimension.

T-1624 **BGP - CMU Wall Dimensions Deck 220 GL20-H** **Closed** **08/18/2014** **08/28/2014** **08/20/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please provide dimensions for CMU walls near Gridline 20-H. See attached marked-up contract drawings for the dimensions needed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For dimensions to CMU wall/pier adjacent to Door B1560B, refer to SKA-4032.

For dimension to the CMU wall at the south of the Main Switchgear Room B1560, it is confirmed that south face of CMU wall is aligned with Gridline H.

T-1625 **SCS - Embedded Column Inner Vertical Bars at Foundation Walls** **Closed** **08/19/2014** **08/29/2014** **08/22/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Henry Chiang

REQUEST:

See attached marked up contract drawings.

The TG0600 rebar subcontractor is using HRC 420 friction welded standard couplers at the top end of the 3rd lift foundation walls and embedded columns C21, C33, C34 vertical bars. The inner set of embedded column vertical bars are indicated in sections as having a 90 degree SH tail at the top of bar. It isn't possible to install the bar with the 90 tail into the 3rd lift HRC 420 standard coupler as the tail of the bar needs to spin circular to engage the threads into the coupler with the final tail orientation dictated by torquing of the bar into the coupler. A possible solution to this issue is to utilize the HRC 555 Forged head in lieu of the 90 degree tail. The top of the inner vertical bar 555 head could be held 4" below the top of the outer vertical bar 555 head for concrete encapsulation.

Please confirm that the proposed solution is acceptable

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Proposed solution is acceptable for Embedded Columns C21, C33, C34 and C23. Coordinate head elevation with requirements of framing coming into the joint. Indicate target head elevations on submittals for review.

REVISED RESPONSE:

Proposed solution is not acceptable, hooks shall be provided as shown in construction drawings. This is a means and methods issue. The work between the two sub-contractors shall be coordinated by the general contractor.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

for the typical embedded column in foundation walls.

T-1626 **BGP - Column 101E and 101F Concrete Elevation** **Closed** **08/20/2014** **08/30/2014** **08/27/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Webcor Construction LP Adib Sassine

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Column 101E and 101F was poured 1 ft below shoring elevation.

Is it acceptable to use concourse slab concrete mix 1558218 to pour back the remaining top foot concurrently with concourse deck D201?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Proposed using concourse slab mix to pour back both columns is unacceptable.
Pour the remaining 1 ft of concrete at both columns 101E and 101F the same mix as the concrete columns with the following options as discussed with Sean McNeil:

Option 1: Pour both columns separately under separate IR.
Option 2: Or pour both columns at the same time as the concrete deck D201 provided you allow 2 hours for the concrete to set and then you pour the deck with the scheduled concrete mix. This will require a separate IR to track this condition at both columns. Include special instruction in the IR to ensure consolidation of both columns are inspected separately as well as paying close attention not to disturb the concrete of poured column sections when consolidating. Prep the top of concrete column surface to achieve the required amplitude as required per previous column pour cold joint condition.

T-1627 **SCS - Bridge Blockout CIDH Piles** **Closed** **08/21/2014** **08/31/2014** **09/05/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Please provide details for blockout(s) at the concrete roadway section as shown in the attached sketch.
A Blockout will be necessary to allow the CIDH pier(s) to be removed from the ground level, pulled up through the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Reference RFI T-0470 and RFI T-0807. Temporary blockouts are the contractor's responsibility. Refer to General Notes GR-4, GR-5, and GR-9.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

deck, after the concrete bridge(s) section has reached design strength.
Once the CIDH piers have been removed the circular section will need to have rebar installed, concrete poured back, and waterproofing repaired prior to receiving infill pursuant to contract documents; 10 sets of CIDH piers, per temporary structure, will require Blockouts at First, Fremont, and Beal street.

2. Refer to attached conceptual detail representing an acceptable method of restoring a temporary opening to contract final condition at the roadway slabs. It does not relieve the contractor from the obligation of verifying the suitability of the detail to actual field conditions and construction loading.

3. Should the contractor elect not to shore the temporary condition, the contractor shall submit a statement or supporting calculations justifying the unshored condition under construction loads signed by a licensed professional engineer. Should the contractor elect to use conceptually different detailing, the detailing and any required supporting calculations shall be submitted for review.

4. The final choice of detailing shall be explicitly indicated on the deck reinforcing submittals for each unique blockout case for coordination with surrounding reinforcing.

T-1628 **SSS - Weld Columns to TG-33.2** **Open** **08/25/2014** **09/04/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See SK-1 attached
1) Ref.; 3/S1-4357 Confirm no weld at 1-inch plate to web as shown
2) Ref.: 3/S1-4357 Confirm no weld at 2-inch plate to TG-33.2 inside of pipe column as shown
3) Ref.; 3/S1-4357 Cannot back gouge weld as shown - access is not provided please resolve
4) Ref.; 4/S1-4357 Clarify 5/16 fillet weld shown - provide complete extents for all-around weld. No weld show for WF flange to TG-33.2 shown please confirm
5) Ref. S1-4357 Suggest use of base plate to resolve weld issues

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1629	SSS - Shop Prime Coat Thickness for Carbozinc 859	Closed	08/25/2014	09/04/2014	09/08/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Specification 05 10 00 3.2.P.1.b.1 requires a primer of DFT 2.5 to 3.4 mils. The product data sheet for the approved Carbozinc 859 specifies a DFT of 3-5 mils. OIW coating instruction CI-2770-14-04 notes the 3-5 mils as recommended by the coating manufacturer.

Please confirm that a prime coat of 3-5 mils of Carbozinc 859 is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed. Prime coat of 3-5 mils of Carbozinc 859 is acceptable. Specification Section 05 10 00 3.2.P.1.b.1 is changed to: Apply primer to a DFT between 3 and 5 mils.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1630	SSS - ST201 Weld Details for Access at W14x311	Closed	08/25/2014	09/04/2014	09/08/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

For erectability and weld access, the following is proposed: stiffener plates will be shop welded while the HSS will be
field welded (as far back as allowable with only a 2-5/16" gap). Please confirm sketch is acceptable; otherwise, provide
alternative.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Provide connection detail per attached sketch SKS-0409 where detail 10/S1-7605 is called out on plans except at two locations on 2/S1-7003. At these two locations, provide detail as shown on SK1 in the RFI.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1631	SCS - Elevation at Transformer Vaults Room	Closed	08/25/2014	09/04/2014	08/27/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Henry Chiang

REQUEST:

On Sheet Al-2203, on the slab around the transformer vaults room, grid lines 12-C, the elevation is indicated as TOFF -7'-9". On Plan 1/A1-3002, there is an elevation point corresponding to the same slab at grid lines 12.1-B.5 that indicates an elevation of TOC -7'-9". On the detail A/Al-9236 same point has an TOC elevation of -8'-2". Please confirm that elevation -7-9" on Detail 1/A1-3002 corresponds to TOFF instead of TOC.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The elevation -7'-9" on Detail 1/A1-3002 corresponds to TOFF instead of TOC. Refer to SKA-4049 which reflects updated elevation tag.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1632	SSS - Ground Level Kicker Brace Detail Clarification at GL 20	Closed	08/25/2014	09/04/2014	09/08/2014	Potentially	☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 562 SK1:
The kicker braces will extend thru the lower deck but still remain within the slab as shown. Confirm that is acceptable or supply a detail showing the design intent.
Note: the condition is the same at Grid 'C'.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The kicker braces shall frame into the underside of the lower slab at the W16x26 beam. The upper gusset plates for the kicker braces shall be welded to legs of the L4x4 deck support angle.

T-1633 **SSS - Shear Plate Connection Clarification at GL 20.1** **Closed** **08/25/2014** **09/04/2014** **09/08/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 574 SK1:
Confirm it is acceptable to connect the W12x14 to the W16x26 with a shear plate per 1/S1-5011 as the double angle connection will extend past the edge of slab 4" north of the W12.
The same condition occurs on the symmetrical framing at Grid D.4.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed

T-1634 **SSS - Crash Rail Post Hole Clarification GL 21-22** **Open** **08/25/2014** **09/04/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 576 SK1:
This hole for the crash rail post per S1-8000 cannot be supplied as indicated. Confirm it may be omitted or supply a solution.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T-1635 **SSS - Exit Mezzanine Framing and Connection Clarifications at South Exit** **Closed** **08/25/2014** **09/04/2014** **09/08/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 554 SK1 to SK3 for items 1 to 14:
1) Supply missing dimensions.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. For updated slab edge drawing confirming and showing missing dimensions, refer to SKA-4081.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

2) Confirm dimensions.
3) Supply location for the MC4.
4) Confirm the vertical hanger is interrupted at the upper beam. Please clarify.
5) Clarify where the MC4x13.8 is located and supply a connection to the W12 & CMU wall.
6) Supply missing dimension.
7) Connection per 9/S1-5028 will not work at the noted location. Supply an alternate detail.
8) Confirm off-center connection per 9/S1-5028 is acceptable or supply an alternate detail.
9) Supply the elevation for the W12x40 at the landing and depending on the elevation, supply a connection detail at each end.
10) Supply missing dimension.
11) Supply length of weld.
12) Supply a connection detail for brace to hanger/beam.
13) Confirm dimension for plate orientation.
14) Confirm detail 9/S1-5028 also applies to the top of the hangers.
15) Confirm a 2-sided fillet is acceptable as the welding access of the end of the brace is not sufficient.

2. See updates on SKS-0403. Braces to be placed at equal spacing.

3. The MC4x13.8 channel may be waived at the highlighted location. In lieu of the MC4x13.8, provide a W12x40 beam as shown in sketch SKS-403 and SKS-0405.

4. See SKS-0403 and SKS-0405 for hanger locations.

5. See response to question 3. Connection of W12 to CMU wall per 12/S1-9001. Connection of W12 to W12 per 1/S1-5011.

6. For wall dimension to GL F.7, refer to A1-7009 issued with ASI-123.

7. See SKS- 0403.

8. Align W12x40 with centerline of W40x230 above, as specified on 2/S1-2252. See SKS-0403.

9. See SKS-0405.

10. S1 slab to attach to top of W12x40 bottom flange, as shown on 4/S1-5032. Requested dimension approx. 3-7/8¿.

11. Provide 6¿ min weld length at double angle brace to gusset plate.

12. Connection of brace and hanger to beam above per 6/S1-5028 sim.

13. Confirmed.

14. Confirmed.

15. Confirmed.

T-1636	**SSS - Exit Mezzanine Framing and Connection Clarifications at North Exit**	**Closed**	**08/25/2014**	**09/04/2014**	**09/08/2014**	**Potentially**	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 555 SK1 for items 1 to 9:
1) Supply/confirm all clouded dimensions (9 clouds total).
2) Verify dimension.
3) Connection per 9/S1-5028 will not work at the noted location. Supply an alternate detail.
4) Confirm off-center connection per 9/S1-5028 is acceptable or supply an alternate detail.
5) Confirm the noted dimensions may vary to match the W-3 supporting beam locations above.
6) Confirm the orientation for the MC4.
7) Confirm the vertical hanger is interrupted at the upper beam. Please clarify.
8) Clarify where the MC4x13.8 is located and supply a connection to the W12 & CMU wall.
9) Supply the elevation for the W12x40 at the landing and depending on the elevation, supply a connection detail at each end.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. See attached sketch SKS-0406 for requested dimensions and for updated slab edge drawing, refer to SKA-4081 and 6/A1-7011 issued with ASI-118.

2. Confirmed.

3. Move the W12x40 beam northwards so that the 2L6x6 clears the W33x118 flange by 1". The EOS of the mezzanine floor will also move with W12x40.

4. Move the W12x40 beam so that it aligns with the W44x230 beam above. The EOS of the mezzanine floor will also move with W12x40.

5. Confirmed.

6. Confirmed.

7. Provide 1 hanger on each side of the slab step on both sides of the slab as shown in attached sketches SKS-0404 and SKS-0405.

8. The MC4x13.8 channel may be waived at the highlighted location. In lieu of the MC4x13.8, provide a W12x40 beam as shown in sketch SKS-0405

9. Provide a W6x25 beam in lieu of the W12x40 beam at the upper slab as shown in sketch SKS-0405.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1637	SSS - North Exit Mezzanine Clarifications	Closed	08/25/2014	09/04/2014	09/11/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 561 SK1 to SK4 for items 1 to 20:
1) Confirm all dimensions shown in a green rectangle box.
2) The noted W12x40 appears to be shown as one continuous beam from west of Grid 22 to east of grid 24. Supply splice locations and a splice detail.
3) Confirm the CMU wall aligns with the west edge of the slab opening or supply more information.
4) Confirm it is acceptable to locate the MC4's 1" from

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. For confirmation of dimensions highlighted in green on CD RFI 561 SK1, A1-2854 should be read in conjunction with A1-3020, A1-7010 and structural details.

a. 12'-0" is confirmed

b. 2'-8 5/8" - should be 2'-0 5/8", refer to A1-2854

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

edge of slab openings.
5) It is not clear where the MC4 is located. Is it backed against the CMU wall? Please provide more information and connection details.
6) The location of the hangers are not correct at the locations noted as a red rectangle box based on the concrete beam locations per RFI T-1010 (SK 287, CD 230). Confirm the updated dimensions are correct.
7) Confirm connection is per 9/S1-5028.
8) Supply a connection detail.
9) Supply a connection detail for MC4 to MC4.
10) Confirm all W12x40's and all MC4x13.8's are located vertically per 4/S1-5032 (SK3). If not, supply more information.
11) The location of the hangers are not correct at the locations noted as a red rectangle box based on the concrete beam locations per RFI T-1010 (SK 287, CD 230). Confirm the updated dimensions are correct.
12) Confirm the CMU wall aligns with the east edge of the slab opening or supply more information.
13) Confirm dimension to edge of slab.
14) Confirm MC4 is located 1" west from the edge of slab or supply more information.
15) Confirm the underside of the slab is typically at the top of the bottom flange of the W12x40's or supply more information.
16) Supply a connection detail for the MC4 to the W12x40.

17) Supply a connection detail for the MC4 to the CMU wall.
18) Please supply dimensions for hooked deformed bars.
19) Confirm stud spacing to avoid the bending radius.
20) Confirm 1 1/4" I/S cold bending radius.

issued with ASI-118.

c. 11'-6" - should be 11'-2", refer to A1-2854 issued with ASI 118.

d. 11 5/8" is confirmed.

e. 19'5 ¾" - is acceptable

2. Refer to response to RFI T-1073 for clarification on W12 beam splice locations and detail.

3. Wall below is 3" offset from EOS. Refer to Detail 5/A-0024.

4. MC4s shall be 2" (clear) away from the slab openings.

5. The MC4 channel may be waived at the highlighted locations.

6. Confirmed.

7. Confirmed.

8. Move the W12x40 and 2L6x6 hanger northwards so that the W12x40 beam is 1" offset from the W40 beam at the ground level.

9. Refer to response to RFI T-1073 for MC4 to MC4 connection detail clarification.

10. Confirmed.

11. See attached sketch SKS-0414 for correct hanger locations.

12. Wall below is 3" offset from EOS. Refer to Detail 5/A-0024.

13. Dimension of EOS to GL 24.9 is 6'-2 1/8" as shown on A1-2854 issued with ASI-118.

14. The edge of the MC4 shall be aligned to the edge of slab. The MC4 shall span between the W12x40

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

beam on the south to the first perpendicular CMU wall and not the entire width of the slab.

15. Confirmed.

16. Refer to response to RFI T-1073 for MC4 to W12x40 connection detail clarification.

17. Refer to detail 12/S1-9001 for MC4 to W12x40 connection detail. Detail 12/S1-9001 is called out on 4/S1-5032.

18. Develop the deformed bar anchors 24¿ into the MFB beam. Refer to detail 4/S1-3001 for hook lengths.

19. Confirmed.

20. Confirmed.

T-1638 **SSS - Framing Beam Location at GL20.1G & C** **Closed** **08/25/2014** **09/04/2014** **09/08/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 577 SK1 for items 1 & 2:
1) Supply location for W14x68.
2) Supply welding information for L4x4x3/8 deck support a ngle flush with the top of the plate on the Transfer Girder.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) The W14x68 beam is 2' - 1 3/4" away from GL 20.1 and is centered on the W-3 system door HSS post shown on Sheet 1/A1-8215D issued with ASI 120 on 7/11/2014.

2) Provide horizontal fillet welds per detail 10/S1-5002 at the bottom of the transfer girder flange and 5/16" vertical fillet welds at each end of the angle.

T-1639 **SSS - Light Column LC-301 Detail Clarifications** **Closed** **08/25/2014** **09/04/2014** **09/04/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

See attached CD RFI # 581 SK1 for items 1 to 8:
1) Verify dimension.
2) Verify dimension.
3) Provide elevation.
4) Provide dimension.
5) Confirm the noted dimension should be 8 3/4" to match the dimension shown on 7/S1-6005.
6) Verify dimension.
7) Verify dimensions.
8) Verify dimension.

1) Dimension confirmed
2) Dimension confirmed
3) The slope of the tapered girders at GL23 (hence elevations at any intermediate point) can be calculated using elevations at GL B (H) and D (F). Top of steel elevations at GL B and D are 80'-11" and 79'-9 ½", respectively, as indicated on plans.
4) Dimension as per SBPs detail 5/S1-6005 = 10-1/2". To be confirmed with calculated elevations as per TTs response to item 3.
5) Dimension confirmed
6) Dimension confirmed
7) Dimension confirmed
8) Dimension confirmed

T-1640 **SSS - Light Column LC-302E Detail clarifications** **Closed** **08/25/2014** **09/04/2014** **09/04/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 582 SK1 for items 1 to 4:
1) Verify dimension.
2) Verify elevation.
3) Verify dimension.
4) Verify dimensions.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Dimension confirmed.
2) Top of steel is confirmed. However, the beam is W30x173 as shown on the plans, not W40x397 as indicated in the RFI.
3) Dimension confirmed.
4) Dimension confirmed.

T-1641 **BGP - Embedded Column Base Plates** **Closed** **08/25/2014** **09/04/2014** **08/27/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please reference detail 6, section B of S1-3503 and attached sketch.

Please confirm concrete column collar plate can be fabricated out of continuous plate at the concourse and bike/vehicle ramp level.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1642	BGP - Electrical Junction Box at GL 2.8/V.3 Beam	Closed	08/25/2014	09/04/2014	08/27/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Plan sheet AI-2850 shows an electrical junction box located at GL 2.8/V.3 which is directly in the B18 Beam. Please confirm this location is correct or provide revised locating dimensions for this EJB.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For the updated location of the embedded junction box at GL 2.8/V.3, refer to attached SKA-4053.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1643	SSS - W40 Moment Connection Clarification GL 21-22	Closed	08/25/2014	09/04/2014	09/08/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 583 SK1:
The required 11 bolts per 1/S1-5010 for the W40x149 does not leave room for the weld access hole at the bottom flange for the moment connection. Confirm it is acceptable to supply 10 bolts or supply an alternate solution.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1644	SSS - Steel Fouling at Telecom Vault GL 33	Closed	08/25/2014	09/04/2014	09/08/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 585 SK1:
The W12x53 is flush with the underside of the sloping WT40x53 on the left end of the W12x53 and fouls the WT40x503 by 1" at the right end of the WT. Please provide a solution.
Note: The same condition occurs on Grid C.3.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The W12x53 shall be flush with the bottom of the WT40x503 and shall follow the same slope as the WT40x503. Shim plates tack welded to the bottom flange of the W12x53 may be provided as required between the S4 slab and the W12 beam bottom flange.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1645	SSS - SE201 & SE202 W16 Connection Clarification	Closed	08/25/2014	09/04/2014	09/09/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 587 SK1:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Provide a shear plate connection per 1/S1-5011 at the

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please supply a connection for the W16x36 to avoid fouling the connection per 9/S1-5032 on the opposite side.

W16 beam at the location highlighted in the RFI. Note that S1-2602 has been updated and issued with Roof Park Restaurant IFC package on 5/31/2014. Refer to sketch SKS-0383 submitted with response to RFI T-1544 that shows updated framing in the area highlighted on SK1. As shown in the sketch, the W16 beam aligns with the W40x503 beam.

T-1646 **SSS - TPG1 Moment Connection Detail Clarification GL 21** **Closed** **08/25/2014** **09/04/2014** **09/09/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 588 SK1:
The bottom flange moment weld per 8/S1-5013 is not possible as the flange of the W44x230 only partially contacts the sloping flange of the TPG1. Please supply a detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Provide moment connection at bottom flange of W44x230 as shown in attached sketch SKS-0412.

T-1647 **SCS - 12" Thick Partition Walls over 24' height** **Open** **08/25/2014** **09/04/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Shimmick Construction Company, Inc Henry Chiang

REQUEST:

Partition walls taller than 24'-0", as indicated in Section 3/S1-9050, have vertical reinforcing of #7 bars @12" centers. Section 4/S -9051 indicates that the vertical bars will have a 90 degree tail at the top end of the bar. The standard tail length for #7 bars is 14" and will not fit within the 12" thick walls. Rotating the #7 bar tails to clear the concrete face by 1 1/2" clash with one another. Harris Rebar requests permission to utilize #7 straight vertical bars with a #5 'U' shaped cap with 30" lap@ 6" centers at the top of walls. Is this acceptable?

In order to minimize multiple varying lengths of the #7 vertical wall bars, the #7 threaded vertical dowel bar length will be increased from 49" to 56". The #7 wall vertical bar will be held up to the top of wall elevation, less clear cover,

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

and maintain a minimum 49" lap splice at the Concourse Level. Is this acceptable?

T-1648 **SSS - Deck Support Angle at Drum Café Roof** **Closed** **08/26/2014** **09/05/2014** **08/29/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 584 SK1:
Supply the size, length and spacing for the expansion anc hors shown on SK1.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Expansion anchors shall be 3/4" dia Hilti Kwik Bolt TZ anchors with 4 3/4" embedment spaced at 18" on center and at 4" from each end. Provide a L6x4x3/8" (LLV) angle in lieu of the L3x3x1/4 shown on 1/S1-3281A.

T-1649 **SSS - Review Comments on Embed Angles** **Closed** **08/26/2014** **09/05/2014** **09/08/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 589 SK1 for items 1 & 2:
1) 5" long studs are correct per detail 1/S1-7600. Confirm no further action is required. (The same applies to drawing 9519 & 9526).
2) 3 3/4" is correct to place the pipe collar on the centerline of the HSS8x8 post per 1/S1-7600 above as shown. Confirm no further action is required.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Detail 1/S1-7600 applies to HSS posts landing on composite decks. For HSS posts landing on concrete slabs details 11/S1-7600 and 12/S1-7602 are applicable. Details 11/S1-7600 and 12/S1-7602 call out 8" long studs.

2) Embed Angle A9516 is noted in two locations, 3 on Train Platform (drawing EM46) & 2 on Bus Deck Levels (drawing EM47). The Corrected dimension applies to embeds at the Train Platform level (see drawing EM46). Skanska to confirm if Embed A9516 is designed for both levels.

T-1650 **SCS - Requesting Approval for Precast Panels in Lieu of Cast-In-Place** **Closed** **08/27/2014** **09/06/2014** **09/15/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Shimmick Construction Company, Inc Henry Chiang

REQUEST:

See attached Exhibits A through D as a possible means of precast installation method. Using a precast yard facility in lieu of concrete cast in place will reduce the construction duration for the scallop, perimeter, and sky light eliptical wall operations since production can start prior to the construction start date. Precasting concrete elements also results in a better final product. Quality advantages of using a precast yard facility over cast in place methods are improved formwork design, curing procedures, temperature control, and form striping methods since work space, formwork weight, formwork relocation and reassembly, and hoisting equipment restrictions are greatly reduced if not eliminated.

shimmick requests approval from the engineer to allow precast manufactured panels in lieu of the cast in place walls shown on S1-2752 & S1-3282 scallop walls, S1-2602 stair well, S1-2603 eliptical skylight, S1-2604 light column opening, S1-2606 stair shaft, and S1-2607 elevator shaft.

Please confirm that the concept drawing is acceptable as well.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

In concept, the proposed P/C scheme will work structurally. However, we would point out that the support of the panel on the steel beam shall be detailed to allow for in/out and up/down adjustments. The detail shall also accommodate the nature camber in the steel beam. Structural calculations and shop drawings shall be submitted for review. The calculations and shop drawings shall be stamped and sealed by a California Structural Engineer.

In concept, the proposed P/C scheme will work visually for the architectural team. However, without an existing precast concrete specification and drawings that outline visual and quality control issues there may be some details that require a joint agreement on what is to be provided between the Contractor, TJPA, and the TJPA Representatives. Submit a draft design package including specification, confirmation on waterproofing details, and more developed design drawings to the TJPA Representative for review prior to final agreement on this substitution.

T-1651 **SCS - Concrete Anchor Inserts at Temp Bridges** **Open** **08/27/2014** **09/06/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Balfour Beatty Infrastructure, I Danny Walsh **Answered By:**

Co-Author: Shimmick Construction Company, Inc Henry Chiang

REQUEST:

See attached photo and concept sketch.

A unique support system is necessary for the foundation wall under the temporary bridges (First, Fremont, and Beale). A top tie is required to avoid the significant forces caused by a cantilever system supported by 1 row of anchors. In the attached photo, a concrete ledge can be seen along the CDSM wall under the temporary bridges. SCCI proposes to utilize these concrete ledges to install anchors for tie points.

Please confirm it is acceptable to install anchors into the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

concrete ledges underneath the temporary bridges and provide rebar layout and concrete strength information for the concrete.

T-1652 **BGP - B45 Beam Proposed Move Between GL 20.1 and 21** **Closed** **08/28/2014** **09/07/2014** **09/02/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Due to trestle pile conflict with Beam B45 between GL 20.1 and 21 at two locations, SCCI proposes that two B45 Beams be moved per attached drawings.

Please confirm that this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1653	SCS - Partition Wall Elevation	Closed	08/28/2014	09/07/2014	09/04/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Henry Chiang

REQUEST:

On sheet A1-2203 and A1-3002, at the Transformer Vaults Room located about GL 11, Section detail A/A1-9236, regarding the elevation of the top of the partition walls.

1. Is the gap between the top of the wall and the Ground Level slab constant along the wall? This would mean that the top of wall would slope with the ground level. Please confirm.
2. Please clarify how to obtain the elevation of the top of the partition walls. Note: The elevations obtained through those two methods below conflict.
a.Should be obtained using the ground slab elevation points on plan S1-2303 and a constant slope between two consecutive elevation points? -OR-.
b.Scale the elevation from the section detail in Al Al-9236?
3. Please confirm if the above answers are applicable to all similar partition walls.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Confirmed. The Top of the wall slopes with the ground level structural slab and the joint gap is constant.

2. The elevations of the top of the partition walls (which extend to U/S ground floor slab) is determined from the elevations on the slab edge drawings together with structural slab design, framing design and details on the structural drawings. Scaling the elevations from section details is not acceptable.

3. The above answers are applicable to similar partition walls.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1654	SSS - Cast Node Work Points	Closed	08/28/2014	09/07/2014	09/10/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Candraft have identified several dimensional discrepancies between the Structural Engineer's certified Tekla model and the cast node shop drawings. Please verify correct dimensions queried in attached sketches

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

TT confirms that the dimensions per Tekla model are accurate. Cast Connex looked into the discrepancy between the dimensions from the Tekla model and in cast node shop drawings and it was not entirely clear where the discrepancy is coming from.

The discrepancy only effects the angular position of the pad; the worst case discrepancy was determined to be 0.0107 degrees which is far less than the allowable angular tolerance on this as-cast feature, therefore the discrepancy is not significant from constructability perspective and can be ignored in detailing the light column.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1655	SCS - Additional Information Needed to Cut CDSM Soldier Pile Beam.	Closed	08/28/2014	09/07/2014	08/28/2014	Potentially	☐

From: Shimmick Construction Company, Inc Henry Chiang **To:** Webcor/Obayashi Joint Ventu Spencer Sayles **Answered By:** Webcor Construction LP Claude Titche

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Direction provided is limited to: EXHIBIT A - TRADE SUBCONTRACTOR BID PACKAGE MANUAL AND FORMS, IV. SCOPE OF PACKAGE, D - 13. pg-13 - "Cut Interior Flange and Web of the CDSM Shoring Wall Steel Soldier Pile. Assume that the cutting of the pile will occur between 2' and 8' below the finish grade surface. The precise elevations for the cutting of the pile beams will be determined by a future design requirement."

In order to perform this work the elevation of the cut is needed.
Shimmick was informally provided a copy of the attached drawing from Webcor Obayashi Joint Venture which only identifies a vertical distance in elevation from finished grade elevations. Shimmick was then informed by WOJV that Thornton Tomassetti is currently making corrections to the site grading civil drawings C1-1000's to C1-8000's Rev 0 Dated 03/31/14 which show top of curb elevations. The civil drawings do not provide complete curb elevations to determine the elevation of the cut at all piles.

1. Confirm that the attached drawing which identifies a vertical distance in elevation from finished grade elevation is to be used.
2. Are the top of curb elevations in the civil drawings to be used as finish grade elevations for the depth of cut on the CDSM piles?
a. Provide finished grade elevations for cutting the interior flange and web of the CDSM piles or provide a height from top of concrete elevations shown on the ground level deck on plans sheet A1- 2862 to A1-2781. Also, please provide a drawing identifying the type of cut required ie., horizontal, angling up, or angling down.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. See attached sketch for notching depths.
2. ASI 123 roadway at curb (low point) elevations will be used to calculate notching elevation.

Note. Refer to submittal package "TG0702-145 SCS - CQC Plan for CDSM Notching" for "Means and Methods" procedures.

T-1656 **SSS - Beam Spacing Clarification at W-4 System GL20.1-22** **Open** **08/28/2014** **09/07/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

The beam spacing does not meet the 6'-0 max. spacing requirement in 10/S1-5004. Please clarify the beam

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

locations to match 10/S1-5004.

T-1657 **SCS - Lower Concourse MEP Room Construction Joints** **Closed** **09/03/2014** **09/13/2014** **09/15/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Henry Chiang

REQUEST:

ASI 121 issued new wall CJ locations. Reference sheet Al-2203, Detail l/Al-3008 and B/Al-9240.

A. On the south wall of the room at GL 13-B.2 there is a construction joint (see plan attached indicated as location "A") running through one of the MEP blocks outs. That creates a cantilever section below the beams cutout and above the MEP block out. Is that acceptable? If not, where should the CJ be relocated?

B. On the same wall there is a construction joint (see plan attached indicated as location "B"), the distance between the MEP block and the construction joint is 5' 5/8", which is not enough to place diagonal trim bars on the comers of the MEP block out that are closer to the construction joint. Please provide detail for this location.

C. In the same wall, the construction joints are not shown in the area cover by the spall plate, do the CJ's start at the top of the wall plates? Please confirm intent and provide further direction.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

A. Omit wall CJ running through Mech opening.

B. Wall CJ to be moved 1'-0" west of Electrical opening.

C. Wall CJs are continuous behind steel plates and are shown as hidden lines.

For updated A1-9240, refer to SKA-4049.

T-1658 **SCS - ST201 Intersection of grade beams, shoring wall, and foundation wall** **Closed** **09/04/2014** **09/14/2014** **09/15/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Henry Chiang

REQUEST:

The contract drawings do not provide a section or detail for the intersection between the foundation wall, stair tower grade beams, and ground floor deck slab. A rebar detail for the grade beams at the connection is not provided. The

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1) Confirmed.

2) Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

bottom of the stair tower walls are not provided. Shimmick has been provided with updated sketches that show the connection of the stair tower grade beams and foundation wall.

I) Please confirm that the SKS-400 details show the intersection between the foundation wall, stair tower grade beams, and ground floor deck slab as intended per the contract drawings.
2) Please confirm that the SKS-400 details show the rebar detail at the grade beams as intended per the contract drawings.
3) Please confirm that the bottom of wall elevations called out in SKS-400 match the intended elevations per the contract drawings.

3) Confirmed.

T-1659 **SCS - ST201 Sloping of grade beams** **Closed** **09/04/2014** **09/14/2014** **09/15/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Henry Chiang

REQUEST:

Drawing S 1-2302 at Stair Tower 201 call only the grade beams north of GL E as sloping and the grade beams south of GL E are not identified to have a slope. A section view is not provided to confirm the slopes for either set of grade beams. Shimmick has been provided with updated sketches that show the slopes for each set of grade beams.

1) Please confirm that SKS-400 shows the slopes for each grade beam at Stair Tower 201.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1.) Confirmed

T-1660 **SCS - ST201 Thickened foundation wall** **Open** **09/04/2014** **09/14/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Shimmick Construction Company, Inc Henry Chiang

REQUEST:

The contract drawings do not provide a section view for the foundation wall at Stair Tower 201. S1-2302 calls out

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

the foundation wall as a uniform 3' thickness. S1-3201 provides a typical foundation wall section, shown with uniform thickness. Shimmick has been provided with updated sketches that call out a thickened foundation wall of 4' 3 1/2" at Stair Tower 201 as opposed to the uniform 3' thickness.

1) Please confirm that, at Stair Tower 201 between Grid Line D and E.6, the foundation wall will be thickened to 4' 3 1/2" per the sketches provided.

T-1661 **SCS - ST201 Wall thicknesses A1-2960 with SKS 0398** **Closed** **09/04/2014** **09/14/2014** **09/12/2014** **Potentially** ☐

From: Webcor Construction LP Stephanie Azzolino **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Henry Chiang

REQUEST:

Shimmick has been provided with sketches, namely SKS-0398, calling out thickness of the walls at the foundation of Stair Tower 201. The wall thickness called out in the sketches do not match the thickness provided in the contract drawing Al-2960 nor SKA-2991 as provided in Bid Addendum 3.

1) Please confirm which set of drawing wall thickness dimensions are correct.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SKS-0398 calls out the correct thickness of the foundation walls. See attached SKA-4052 (based on A1-2960) now matching structural information.

T-1662 **SCS - CDSM Shoring Wall Pre-Cut** **Open** **09/04/2014** **09/14/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author:

REQUEST:

Please see attached documents.

Pursuant to the response given in T-0774 WOJV is proposing the following means and method for precutting the interior flange of the CDSM beams in order to prevent damage to the waterproofing.
Attached is a narrative along with a map of the locations, and depth wherein beams will be notched prior to

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

installation of the waterproofing.

Please confirm that the proposed notching of the CDSM beam will not compromise the design intent of the system.

T-1663 **BGP - Construction Joint Between Walls W318 - W319 and W357-W358** **Closed** **09/05/2014** **09/15/2014** **09/12/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

In an effort to mitigate delays, WOJV is proposing moving the construction joint between walls W318 - W319 and W357-W358 2' to the west, See markup sketch attached, this move if approved would result in the contractor forming and pouring walls W318 and W358 prior to Deck pour D219.

As part of this change WOJV is also requesting using Lenton A2 couplers in lieu of the #7 horizontal reinforcement lap splices between these walls

Please confirm if this is acceptable at this one-off location.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed

T-1664 **BGP - Pier and Opening Sizes on Decks D220-D236** **Open** **09/08/2014** **09/18/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please confirm the Pier and Opening Sizes for Lower Concourse Decks D220 to D236 are per the attached drawings as the specific sizes and wall heights are not shown in the Contract drawings. (Reference RFI T-1461)

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1665	BGP - B20 Spandrel Beam at Knock-Out Walls	Closed	09/08/2014	09/18/2014	09/09/2014	Potentially	

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please see attached S1-2210 and S1-3204 D4.

SCCI inadvertently poured the Shear Wall against the Knock-out Wall without any blockout for West Spandrel Beam B20, as shown in S1-2210 and S1-3204.

Please confirm the following remedy is acceptable:

1. The affected #7 bars are drilled and bonded to supports (Shear Walls) with standard embedment per approved epoxy manufacturers recommendation.
2. Tie spacing, which is presently at 12". Will be reduced to 8"; Tie size will remain #4 rebar.
3. Contact surface not to receive ¼" X 8" continuous neoprene pad, will be roughened to 1/4" amplitude.

SUGGESTION:

ANSWER: Confirmed.

Accept Suggestion: ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1666	SCS - Wall Opening Detail Conflicts	Open	09/08/2014	09/18/2014		Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Shimmick Construction Company, Inc Henry Chiang

REQUEST:

Please reference drawing S1-3001.

See attached marked up drawing 4/S1-3207 details typical wall opening reinforcement, noting to use additional bars for 10" to 30" wall openings with lengths LTS + W. The typical vertical bars used for the foundation walls are #11 rebar and the added bar length is 19'-6" (LTS + W + W + LTS + W = 102" + 1 0" + 10 + 102" + 10"). Depending on the location of the penetration, the added bar would have to extend LTS + W beyond the opening, which in the 10" opening case is 9'-4" (102" + 10").This is not possible considering the foundation walls under TG07.2 scope of work are between 8' to 12'.

Additionally these additional vertical bars will potentially conflict with moment frame beam rebar at ground level by adding to the rebar congestion. See attached marked up drawings for example conflict.

1. Please provide an alternative to the current wall opening

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

detail for the foundation wall.
2. Please provide an alternative detail for cases where additional vertical bars conflicting with moment frame beam rebar.

T-1667 **SCS - Foundation Wall Conduit Penetration Locations** **Closed** **09/08/2014** **09/18/2014** **09/08/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Webcor Construction LP Claude Titche

Co-Author: Shimmick Construction Company, Inc Henry Chiang

REQUEST:

Reference drawings: A1-2862 to A1-2871, E1-2862 to E1-2871 and E1-3208 to E1-3210.

Please see attached marked up drawings noting atypical set of conduit penetrations. A1-2862 provides a lateral distance relative to a grid line to set of conduits; however 3/E1-3208 details the set of conduits as not aligned. On top of this, the referenced drawings do not provide an elevation for the conduit penetrations. SCCO requires the locations of these penetrations to proceed with foundation wall rebar detailing.

Please provide information on the location of the electrical conduit foundation wall penetrations.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached drawings for electrical conduit penetration locations.

T-1668 **SSS - Weld Access Hole at Transfer Girder** **Closed** **09/08/2014** **09/18/2014** **09/15/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please confirm it is acceptable to provide weld access hol es as indicated on 628BC per AWS D1.1 to adequately ter minate the CJP weld to cast node. For plates not fabricate d, confirm it is acceptable to omit the hole closest to the pr oposed access hole to maintain AISC min edge distance. This typically occurs at all cast node to girder connections.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). Confirmed that weld access holes shown on P77 attached is acceptable. The hole above the transfer girder flange should have rounded corner similar to the one below the flange. The bolt nearest to the hole shall still be installed.

2). Confirmed that for the plates that still yet to be

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fabricated, the hole nearest to the access hole may be omitted to maintain minimum edge distance.

T-1669 **SSS - Insufficient Cope for Erection Clearance** **Closed** **09/09/2014** **09/19/2014** **09/15/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please refer to beams highlighted in S1-2503 (attached) and work with this RFI.

The 7" cope shown in 2/S1-5017 is not sufficient for erection clearance. The connections on the other end of these beams dictate that the beams cannot be dropped vertically into position during erection (Please refer to attached SK RFI 813 SK1 and SK RFI 813 SK2). Beams have either a gravity moment connection (per 1/S1-8003) at odd gridlines or a shear plate connection (per 1/S1-8000) at even gridlines. These beams connect into the bus deck perimeter beams which must be installed first in our erection sequence due to the constraints of knife/pin connections at either end at the bus deck level cast nodes.

Please advise.

SUGGESTION:

We propose increasing the 7" bottom flange cope to 9.5" for both scenarios. We have modelled both cases and can erect the beams with a cope of this size.

ANSWER: **Accept Suggestion:** ☐

Suggestion acceptable.

T-1670 **SSS - Reviewer Comments - Decking Dwgs GL 1-4** **Open** **09/09/2014** **09/19/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Reference metal decking shop drawings submittal package TG0701-92D & SK1

1) On sheet 24, reviewer's comment requires studs on transfer girder. Note at TR3 the concrete cover on top of girder flange is 3". T/slab=21.344, T/steel=21.19) The shortest available stud is 3" after welding, resulting in insufficient concrete coverage. Please confirm shear studs

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

are not required at TR3.

2) On sheet D16, detail 4, reviewer's comment requires 3" of bearing at S3 slabs per 2/S1-5000. Note, detail 4 depicts a deck flute parallel condition, note 2 on 2/S1-5000 indicates 2" bearing (3" bearing where noted) at supporting members perpendicular to deck span and 1-1/2" at members parallel. As this is a parallel condition the minimum bearing required is 1-1/2". Confirm detail is acceptable as is.

T-1671 **SSS - Kicker Interference at Ground Level GL 22-24** **Open** **09/09/2014** **09/19/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 578 SK1 for items 1 & 2:
The kicker brace connections to the girder will foul the 2-1/2" stiffeners at two locations on each grid line. Confirm if option 1 or 2 is acceptable.
1) Option 1: Confirm it is acceptable to remove the fouling 2-1/2" thick stiffener plate and model the full height 1" shear plate as shown.
2) Option 2: Confirm it is acceptable to move the W30x90 as shown and connect to a 2 1/2" thick full height stiffener plate extended to the top as shown. Note option 2 has additional cost implications.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T-1672 **SSS - Stiffener Interference at Ground Level GL 24** **Open** **09/09/2014** **09/19/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 595 SK1:
Confirm the beam location dimensions per S1-6050 & RFI T-1573 shown in red may be adjusted as shown in blue in order to connect the noted W44x230's to the 2" stiffener plate below the column flange. If not, supply an alternate solution.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1673	SSS - Structural Steel Additional Seismic Requirements	Open	09/09/2014	09/19/2014		Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Per Project Specification 'Structural Steel-Additional Seismic Requirements' 05-12-10-7, Section 2.3 - Source Quality Assurance, Part C - Non-Destructive Testing of Welded Joints, #1 states 'Non-destructive testing shall be conducted at locations required by AWS D1.8 and AISC 341 Appendix Q5.2. Frequency of testing shall be as required by AISC 341 Appendix Q5.2 and Table 2-1 (please see attached).

AISC 341 Appendix Q5.2, Part g - 'Reduction of Percentage of Ultrasonic Testing and Part h - 'Reduction of Percentage of Magnetic Particle Testing specifies a formula for reduction of percentage of weld testing UT and MT (please see attached).

XKT has welded each type of weld joint we will see for the 130 Moment Columns. XKT's repair percentages have been well below the required limit of 5%, to demonstrate the quality of our welders.

Per this section of specifications, the amount of UT and MT testing is permitted to be reduced if approved by the engineer of record.

To facilitate production and project schedule, XKT is requesting the engineer of record to implement this reduction to be performed by ISI QA Inspection Services.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1674	SSS - PE502 & PE503 Ground Level Connection Clarifications	Open	09/09/2014	09/19/2014		Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 597 SK1 for items 1 & 2:
1) The W12x19 & W24x55 cannot both be connected with double angle connections per 1 /S1-5010 because of insufficient space. Confirm it is acceptable to connect the W12x19 per 1/S1-5011.
2) The W12x19 & W16x26 cannot both be connected with double angle connections per 1 /S1-5010 because of insufficient space. Confirm it is acceptable to connect the W12x19 per 1/S1-5011.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Webcor/Obayashi Joint Venture

PROJECT MANAGEMENT - REQUEST AND ANSWERS LOG

30100 - Transbay Transit Center Project

Number	*Subject*	*Status*	*Date Created*	*Date Required*	*Date Answered*	*Cost Impact*	*Proceed*
T-1675	**SSS - Roof Level Moment Connection Clarifications GL 22**	**Open**	**09/09/2014**	**09/19/2014**		**Potentially**	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 598 SK1 for items 1 TO 3:
1) Confirm the prep. shown on the 2 1/2" thick flange is acceptable for the moment connection or supply an alternate detail.
2) The flange of the BU-beam does not align with the flange of the W44x230 for the moment connection. Please advise.
3) Confirm the prep. shown on the 1 3/4" thick flange is acceptable for the moment connection or supply an alternate detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T-1676	**SSS - Missing Weld Access Hole Information at Roof Level GL 28**	**Open**	**09/09/2014**	**09/19/2014**		**Potentially**	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 600 SK1:
Confirm the weld access hole as shown is acceptable or supply the missing information.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T-1677	**SSS - TPG1 Connection Clarification GL 32**	**Open**	**09/09/2014**	**09/19/2014**		**Potentially**	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 601 SK1:
Please confirm the skewed TPG1 is to be connected to the BU-40x28x1x2.25 per 8/S1-5032 (skewed). If not, supply the missing detail.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T-1678	**SSS - TR23 Missing Moment Connection Detail**	**Open**	**09/09/2014**	**09/19/2014**		**Potentially**	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 602 SK1:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

The W30x90 connects to the BU-60x24 per 1/S1-5010 with the flanges moment welded but no detail is provided for the moment connection of the Transfer Girder to the BU-60x24 connect.
Please provide a detail.

T-1679 **SSS - TR29 Bolted Connection Clarifications** **Open** **09/09/2014** **09/19/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 604 SK1 & SK2 for items 1 & 2:
1) Condition at Transfer Girders with 4" thick flange:
It is not possible to fit in the number of bolts as requested in 1/S1-5010 with the 4" thick Transfer Girder flange even with minimizing the end distance on the angles to 1 1/4" as shown. This condition occurs at W40x183, W36x135, W33x118, W30x108, W30x90 & W21x44 on S1-2606 & S1-2607. Confirm it is acceptable to reduce the number of bolts by one or supply an alternate connection.
2) Condition at Transfer Girders with 3" thick flange:
It is not possible to fit in the number of bolts as requested in 1/S1-5010 with the 3" thick Transfer Girder flange unless we minimize the end distance on the angles to 1 1/4" as shown. This condition occurs at W40x183, W36x135, W33x118, W30x108, W30x90 & W21x44 on S1-2606 & S1-2607. Confirm this is acceptable or supply an alternate connection.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T-1680 **SSS - ST301 Post Location Discrepancy** **Closed** **09/09/2014** **09/19/2014** **09/11/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 591 SK1 & SK2:
The dimensions locating the HSS posts shown in detail 2/S1-7007 and detail 3/A1/7006 do not match as shown.
Please clarify the discrepancy.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The dimension locating the HSS post are correct in detail 2/S1-7007. Architectural drawing revised, refer to SKA-4002.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1681	SCS Clarification of Amount of Camber in BU-40x28x1x2.25 Beam	Open	09/09/2014	09/19/2014		Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Shimmick Construction Company, Inc Henry Chiang

REQUEST:

Shimmick is requesting the engineer to provide the amount of camber that the roof top perimeter beams BU-40-28x1x2.25 will have before the perimeter walls are installed and after the roof is fully loaded.
Refer to S1-2602 for location of BU-40-28x1x2.25.

Shimmick is requesting the engineer to provide the amount of vertical tolerance that should be anticipated in the perimeter beams BU-40-28x1x2.25 at the connection points.

Shimmick is requesting the engineer to provide the amount of vertical tolerance that will be acceptable for the roof top perimeter walls.

See attached Exhibit A for visual aid.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1683	SSS - Stair Opening Framing Clarification GL 16-16.9	Open	09/10/2014	09/20/2014		Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 593 SK1:
The new slab opening shown on A1-2884 in ASI 121 is not shown on the current version of S1-2404 and will foul the steel as shown.
Please clarify.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-1684	BGP - Ramp Dimensions to RPC-308V and RPC-309V	Open	09/10/2014	09/20/2014		Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Shimmick Construction Company, Inc Sylvia Hartanto

REQUEST:

Please provide missing dimensions for RPC-308V and RPC-309V. On AI-2870 there are N-S dimensions between RPC-308V, RPC-309V, RPC-310V, and RPC 3111V, but no reference dimension to anything else.
Please provide N-S dimension to a reference point (i.e.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Gridline L).

The E-W dimension for RPC-309V is given to the slab centerline. Please provide E-W dimension for RPC-309V to a valid reference point (i.e. Gridline 3).

T-1685 **SSS - PE301 & PE302 Brace to BU-WT Connection** **Open** **09/10/2014** **09/20/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 467 SK1 & SK2:
Please clarify how the braces per 1/S1-7600 are to be applied at the noted locations with the close proximity of the beams and the BU-WT's on top of the beams.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T-1686 **SSS - Stiffener Interference at Ground Level GL 24** **Void** **09/10/2014** **09/20/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 595 SK1:
Confirm the beam location dimensions per S1-6050 & RFI T-1573 shown in red may be adjusted as shown in blue in order to connect the noted W44x230's to the 2" stiffener plate below the column flange. If not, supply an alternate solution.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T-1687 **SSS - Light Column Pipe Ring Bending Radius at EL 12ft** **Open** **09/10/2014** **09/20/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

The light column ring at EL. 12'-0" is specified as 6'-11 3/4" diameter (measured from center of pipe), from 14"

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

diameter pipe with a wall thickness of 1.97". Refer to section C on S1-6006.

The minimum achievable bending radius for a pipe this size and wall thickness is 42". This exceeds the actual designed radius by 1/8". We are requesting permission to change the diameter of this ring to 7' which will allow the minimum bending radius to be achieved. The difference in ring member size will be accommodated in the connection plates which join the ring to the cast nodes.

Please confirm acceptance for this proposal

T-1688 **SSS - Connection Clarification at GL 21.5** **Open** **09/10/2014** **09/20/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 610 SK1 for items 1 & 2:
1) The top flange of the W40x503 is cut 1/2" past the PL 2 1/2". The shear plate for the W30x231 is only 3/8" past the end of the PL 2 1/2" and can therefore only be welded to the top flange on one side. Confirm if acceptable or supply an alternate solution.

2) The shear plate is 3/8" past the end of the PL 2 1/2" and the 5/16" fillet weld for the shear plate will clear the PL 2 1/2" by 1/16". Confirm that is acceptable or supply an alternate solution.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T-1689 **SSS - Nut Grade Clarification** **Open** **09/12/2014** **09/22/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please see attached SK1 and note the following:

After reviewing structural design drawing S-0007, structural note SS-2 calls for nuts to be provided as A563

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

DH.
It is industry standard, as well as permissible by both
AISC and RCSC, for nuts to be supplied also as A194 2H.
Please
confirm this is acceptable.

T-1690 **SSS - W30 Connection Clarifications at W40 GL 33.2** **Open** **09/12/2014** **09/22/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 609 SK1:
The W40x503's are web vertical and the W30x90's are canted to match the slope. This makes it difficult to supply double angle connections per 1/S1-6010 for both beams. Confirm it is acceptable to connect the W30x90 per 1/S1-5011at the noted locations.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T-1691 **SSS - PE201 Connection Clarifications at Moment Symbols** **Open** **09/12/2014** **09/22/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 495 SK1:
The moment symbol is shown at the noted locations while detail 12/S1-7604 is being referenced. Note that the moment symbols are not shown on plans 2,3/S1-7001 & 1,2,3/S1-7002 with detail 12/S1-7604 also being referenced. Confirm the moment symbols may be ignored and detail 12/S1-7604 applies at all locations where it is referenced.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T-1692 **SSS - PE201 Missing Connection Details** **Open** **09/12/2014** **09/22/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

SUGGESTION:

ANSWER:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Accept Suggestion: ☐

See attached CD RFI # 493 SK1 & SK2 for items 1 & 2:

1) Detail 12/S1-7604 cannot be applied at this corner because the column size is HSS6x6x1/4. See attached SK2 and supply a detail showing how to connect the members at this intersection. The same condition occurs in details 1,2,3/S1-7002 & 1,2,3/S1-7003.

2) Supply a slab edge detail.

T-1693 **SSS - WS8 Approval Comment Clarifications** **Open** **09/12/2014** **09/22/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

The Approver notes on drawing 11564 that the camber is missing. Drawing S1-2502 does not indicate that a camber is required for this beam. Please confirm no further action is required.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T-1694 **SSS - PE 301-302 Anchorage Detail Clarification** **Open** **09/12/2014** **09/22/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 553 SK1 for items 2 and 3:

2) Confirm the noted weld is intended to be a one-sided fillet weld as there is insufficient access for a 2-sided fillet weld.
3) 1 1/2" is insufficient space for the expansion anchors considering the inside radius of the angles. Confirm the 5 1/2" dimension may be reduced to 4 1/2" to increase the 1 1/2" to 2 1/2".

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T-1695 **SCS - Foundation Wall Conduit Penetration Location** **Open** **09/12/2014** **09/22/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: Shimmick Construction Company, Inc Henry Chiang

REQUEST:

See attached exhibits.

See Exhibit A mark-ups. A minimum depth criteria is provided but the actual elevations or a finite depth for the 2" PVC conduits are not given. The dimensions for the typical support bracket are not given either.

1. Please provide either an elevation or a finite depth for the conduits.
2. Please provide the spacing between the 2" RG conduits and 6" RG conduits.

The section detail A/ES-2107 provides elevations and dimensions between the 6" PVC to 2" PVC but the numbers do not add up nor does the dimension convert correctly.

3. Please clarify which value to use in detail A/ES-2107 and correct the remaining values.

See Exhibit B. There is a spacing discrepancy between A1-2862, E1-3208 and ES-2108 for the 2" PVC sleeves. The architectural slab edge plan A1-2862 shows a typical dimension 1'-9" centers between pairs of electrical sleeves. Detail 3/E1-3208 shows a 3' clear spacing between conduits. ED-2108 showing the vertical centerline matching the below 6" sleeve.

4. Please clarify whether to use the detail from the architectural slab plan or E1 or ES drawings for 2' RG conduit lateral spacing.
5. Please clarify whether to use the detail form the architectural slab plan or E1 or ES drawings for 6" RG Conduit lateral spacing.
6. The variation in width between conduits in E1 and ES suggest a transition from one spacing to the other. Please confirm that the PVC pipes transition from the spacing shown in ES to E1 drawings before reaching the foundation wall.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T-1696 **SCS - Scallop and Fin Wall Rebar Connection** **Open** **09/15/2014** **09/25/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** **Answered By:**

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Turner Construction Compan PHIL MILITELLO

Co-Author: Shimmick Construction Company, Inc Henry Chiang

REQUEST:

Per S1-3282 detail 7 and section B sows continuous horizontal bars 3-#4 rebar each face and 2-#10 rebar in the fin wall with tails embedded into the scallop wall.

Shimmick requests approval to have the option of a lap splice for the scallop wall to fin wall connection and or the use of Dayton Form Savers at the location. See attachment A.

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

T-1697 **SCS - Request To Use Snap Ties for Roof Top** **Open** **09/15/2014** **09/25/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Shimmick Construction Company, Inc Henry Chiang

REQUEST:

Per specification section 03 10 01 Part 2 - Products 7. H. Snap-Off Ties: Use for concrete walls below grade and walls which will not remain exposed to view and are not scheduled for architectural finishes.

Drawing A 1-8608 shows the scallop and perimeter walls and A 1-8402 shows the skylight walls not being visible from the sides because of the fascia details and the earth backfill. These walls are not called out as architectural walls on the architectural drawings.

Please confirm that typical snap ties are acceptable at perimeter wall, scallop wall, and sky light wall locations.

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

T-1698 **SCS - Wall Opening Detail Conflicts for Horizontal and Diagonal Bars** **Open** **09/15/2014** **09/25/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Shimmick Construction Company, Inc Henry Chiang

REQUEST:

Please reference detail 4/S1-3207 and RFI T-1666 about foundation wall opening conflicts. Since

SUGGESTION:

ANSWER:

Accept Suggestion: ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

submitting RFI T-1666, more concerns regarding 4/SI-3207 have been brought to our attention.

One of the concerns mentioned in RFI T-1666 was the case of additional vertical bars potentially conflicting with moment frame beam rebar. This issue can also occur with the diagonal cross bars and additional horizontal rebar.

1. Please provide an alternative detail for cases where either additional horizontal bars and diagonal cross bars conflict with moment frame beam rebar.

Due to the length of additional horizontal bars, wall openings near foundation wall CJs will cause the constructability issue of requiring rebar to be built out further to proceed with concrete pours.

2. Please confirm that the alternate wall opening detail (requested in RFI T-1666) for additional vertical bar lengths can also be applied to additional horizontal bars.

T-1699 **SSS - Drag Beam Web Stiffener Plate Connection Clarification** **Open** **09/15/2014** **09/25/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 572 SK1:
Confirm it is acceptable to end the web stiffener plate as shown to avoid fouling the shear plate for the beam connection.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T-1700 **SSS - Shaw Alley Bent Plate Clarification** **Open** **09/15/2014** **09/25/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 533 SK1 for item 2:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

2) Confirm the 3/8" bent plate (50 ksi) terminates on top of the "S1" slab on the Second Level and it does not extend to the top of the side plates in detail 5/S1-5004.

T-1701 **SSS - Insufficient Cope for Erection Clearance** **Open** **09/15/2014** **09/25/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please refer to beams highlighted in S1-2503 (SK1) and work with this RFI.

The 1' 11 ½" cope is not sufficient for erection clearance as shown on A4644, A4645 (SK2, SK3). The Type 4 (V) drag connection on the other end of the beam limits the position in which the beam can be erected (See SK4, SK5). The beam needs to be erected from below and positioned through the shear plate on the moment frame column. As you slowly lift the back side that is currently coped, a ¼" clash transpires between the top flange of W40x327 and the shear plates on the bus deck casting.

Please advise.

SUGGESTION:

We propose increasing the 1' 11 ½" top flange cope to 2' 0 ½", please confirm this is acceptable.

ANSWER: **Accept Suggestion:** ☐

T-1702 **SSS - Weld Terminations on Moment Frame Column Shafts** **Open** **09/15/2014** **09/25/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

Please see Section 5.17.1- Figure 5.2 from the AWS D1.1 Structural Welding Code (See SK1). In the sketch, proper terminations are shown for both a CJP weld and fillet weld as they approach an access hole.

The moment frame column shafts have been designed with a varying thickness of web. These web splice locations require an access hole to account for the different weld details between the web and flange, with

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

generally a CJP weld being performed on one side and a fillet on the other (See SK2).

The shaft drawings that have been detailed show an access hole that conforms to 5.17.1 - Figure 5.2. Note, however the shaft drawings do not show the weld termination detail. It is industry standard for the modeler to exclude these details as it is up to the fabricator/inspector to understand that welds should always be terminated as per the section of the AWS code they fall under, unless the design engineer specifies otherwise.

Currently, the TJPA shop inspection staff has directed our fabricator to terminate both the CJP & fillet welds similarly - as shown for a fillet weld (See SK3). Please confirm that this is acceptable as currently shown.

Please also confirm that the weld terminations should be completed as per AWS D1.1 - Section 5.17.1- Figure 5.2 for all columns fabricated in the future. Terminating CJP welds, as currently directed by the inspection staff to be flush with the end of the access hole will result in additional costs to our fabricator.

T-1703 **SSS - Fouling Issues for CP8** **Open** **09/15/2014** **09/25/2014** **Potentially** ☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 611 SK1 to SK4 for items 1 to 4:
1) This hole at the bottom flange for CP8 fouls the full depth gusset plate for the CP6 brace per 4/S1-8003. Please provide a solution.
2) The noted hole at the bottom flange for CP8 fouls the full depth gusset plate for the W40x277 beam on Grid 1.4. Please provide a solution.
3) The noted 4 holes will not be accessible as they are within the plate closure for CP5 per 1/S1-8003. Please provide a solution.
4) The noted holes are too close to the 2" thick stiffeners for the CP5 connection per 1/S1-8003. Please provide a solution.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Webcor/Obayashi Joint Venture

PROJECT MANAGEMENT - REQUEST AND ANSWERS LOG

30100 - Transbay Transit Center Project

Number	*Subject*	*Status*	*Date Created*	*Date Required*	*Date Answered*	*Cost Impact*	*Proceed*
T-1704	**SSS - Roof Connection Discrepancy**	**Open**	**09/15/2014**	**09/25/2014**		**Potentially**	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

See attached CD RFI # 614 SK1:
The connection per 9/S1-5032 is not possible at the noted locations because a CP4 connection per 1/S1-8002 occurs on Grids D.4 & E.6. Please supply an alternate connection

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T-1998	**SCS - Wall Opening Detail Conflicts for Horizontal and Diagonal Bars**	**Void**	**09/15/2014**	**09/25/2014**		**Potentially**	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: Shimmick Construction Company, Inc Henry Chiang

REQUEST:

Please reference detail 4/S1-3207 and RFI T-1666 about foundation wall opening conflicts. Since submitting RFI T-1666, more concerns regarding 4/SI-3207 have been brought to our attention.

One of the concerns mentioned in RFI T-1666 was the case of additional vertical bars potentially conflicting with moment frame beam rebar. This issue can also occur with the diagonal cross bars and additional horizontal rebar.

1. Please provide an alternative detail for cases where either additional horizontal bars and diagonal cross bars conflict with moment frame beam rebar.

Due to the length of additional horizontal bars, wall openings near foundation wall CJs will cause the constructability issue of requiring rebar to be built out further to proceed with concrete pours.

2. Please confirm that the alternate wall opening detail (requested in RFI T-1666) for additional vertical bar lengths can also be applied to additional horizontal bars.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

T-2024	**SSS - Transfer Girder Studs and Rebar Holes**	**Closed**	**12/12/2013**	**12/22/2013**	**03/11/2014**	**Potentially**	☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Gregory Kemerer

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

At TR8 near grid line G refer to sketches CD RFI 220 SK1 to SK3 for items 1 to 3:
1) Confirm the headed studs as shown are correct (work with item 2).
2) Detail 2/S1-5023 is referenced with a "SIM' designation and it is not clear what is required on grid 8 for the additional headed studs shown in detail 2/S1-5023. Confirm the headed studs as shown on SK3 are acceptable or supply a clarifying detail specifically for this location showing the stud locations.
3a) Confirm the 2" dia. hole locations as shown on SK3 are acceptable to clear the bolts in the bottom flange and the stiffeners.
3b) Detail 2/S1-5023 shows the holes at 5" OC but this contradicts the 6" OC shown in detail 7/S1-3701. Confirm the spacing shown in item 3a above is acceptable.
3c) Confirm the 3" dia holes are not required at grid 8 as they are not shown in detail 7/S1-3701. Supply location dimensions if they are required.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

RFI was re-named. See RFI T-1024 response.

T-267 **BSE - DI Installation at First Street** **Closed** **11/29/2011** **12/09/2011** **12/13/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran

To: Turner Construction Compan Gary Krutsch

Answered By: AECOM Technical Servic Eric Zagol

Co-Author: Balfour Beatty Infrastructure, Inc. Ural Yal

REQUEST:

Reference RFI U-101, Sheet U-3021

The RFI response U-101 dated 02-28-2011 eliminates the CB #501 from the RUP contractor's scope of work. However there has been no replacement or adequate surface water control system neither suggested nor installed to replace the CB # 501.

BBII recommends that this catch basin # 501, be installed per the original design to control surface water. Please confirm it will installed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

CB#501 was deleted from RUP due to unforeseen field conditions. For RUP, runoff from adjacent area to drain south to existing CB at STA 4+20. Existing CB at STA 4+20 to remain in place and active at completion of RUP.

BSE Contractor to provide stormwater control on site accordance with BSE documents.

T-268 **BSE - Rebar in Secondary Shafts** **Closed** **12/08/2011** **12/18/2011** **12/12/2011** **Potentially** ☐

From: Webcor Construction LP Joanne Filipas

To: Turner Construction Compan Gary Krutsch

Answered By: Arup Kevin Clinch

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Reference GT-2201, Installation Sequence Note 5

Please confirm the reinforcement in the secondary shafts should be installed in the last buttress shaft of each row.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

As described in Note 5 on sheet GT-2201, since the cost-add option has been excercised, the reinforcement shall be installed in the secondary shafts along rows 15 and 16.5.

T-474.1 **BGP - Waterproofing Micropile on Slope** **Closed** **05/02/2013** **05/12/2013** **05/03/2013** **Potentially** ☐

From: Webcor Construction LP Kody Cooper **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Please reference response to RFI# T-0474. The manufacturer and installer will not provide a waterproofing detail for the micropile located in the sloped sump pits. Please provide a waterproofing detail acceptable for the use under the conditions specified in RFI# T-0474.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

As indicated in the response to RFI T-0519, the contract drawings and specifications cover the general requirements and waterproofing system parameters.

Per the General Conditions, shop drawings shall be submitted to demonstrate the way the CM/GC proposes to conform to the information given and the design concept expressed in the contract documents.

As the response to RFI T-0474 previously directed, please submit a shop drawing based on the waterproofing manufacturer's recommendations for this condition.

T-509 **BGP - Orientation of Protection Board** **Closed** **04/23/2013** **05/03/2013** **04/26/2013** **Potentially** ☐

From: Webcor Construction LP Kody Cooper **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Shimmick Construction Company, Inc Ben Gordon

REQUEST:

Reference Specification: 07 12 10 - 3.2.D

This section states "Install Protection board on vertical surfaces with long dimension vertical and the polyethylene film side facing the soil/cement surfaces." Per the manufacturer's installation instructions, "the protection board will be installed length wise for easier handling during the fastening procedure." SCCI suggests installing

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Install the protection board as specified. It is not intended for protection, but to serve as a substrate for the waterproofing assembly.

Protection board is 4' x 8'. When installed vertically, the edges of the boards will be butted and fastened at each pile. This will provide a line of fasteners on the edge of each board and help accommodate the board

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the protection board length wise per the manufacturer's instructions. Is this acceptable?

to pile misalignment. When installed horizontally, the board will be fastened on the intermediate pile which will complicate the installation if the piles are twisted or misaligned.

The board should not be fastened to the CDSM. It should only be fastened to the steel soldier piles.

T-701 **SSS - Dimension Clarification Required** **Closed** **08/29/2013** **09/08/2013** **08/30/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference Drawing: 1/S1-5131

Please see attached blow up of Plan Sheet S1-5131 Detail 1 View D (Front View). Please provide the location for the center of the 8" radius.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The dimension indicated as "X" in this RFI is 26 inches.

T-719 **BGP - Spandrel Beam Modifications in Area 7** **Void** **09/11/2013** **09/21/2013** **09/16/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author:

REQUEST:

Reference Documents: Exhibits A - B

Further to response to RFI T-637 please find attached proposed changes to the spandrel beams in pour Area 7 for location plan see exhibit - A

Exhibit - B shows the plan view of the modification necessary to the spandrel beam on the north and south elevations due to the revised reinforcement width of the foundation wall due to encroachment of the CDSM beams as well as typical cross sections of the revised spandrel beams.
RFI T - 628.1 shows the extent of the modification to the foundation wall on the north and south elevations of Area

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See RFI T-0719.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

7.

Please confirm that this modification as outlined at this location is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
T-777.1	BGP - Lower Concourse Concrete Finishes	Closed	06/05/2014	06/15/2014	06/13/2014	Potentially	☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Reference specification sections
- 03 30 20 (Dated August 30, 2012)
- 09 67 24 (Dated March 31, 2014)

Reference Drawings
- A1-2202 thru A1-2211 (Dated March 31, 2014)
- A1-9523, A1-9524, A1-9525 (Dated March 31, 2014)
- A1-9602 (Dated March 31, 2014)

Per specification 03 30 20-3.6, B.1 Concrete Finishes: Scratch finish is specified with FF/FL and is clarified in RFI T-777. (see attached)

New Lower Concourse drawings A1-9523, A1-9524 & A1-9525 issued in IFC set dated 3.31.14 delineate certain areas of structural concrete slab to remain as exposed and will not receive topping slab. These sheets do not show any reference for concrete surface finish other than what is specified under specification 03 30 20 and RFI T-777. The contractor has stated that this finish will be provided using a Fine Broom.

Please confirm this understanding is in alignment with the designer's intent for the areas of structural slab that will remain exposed.

Also, please confirm for all Concourse floor areas (topping slab, interim topping slab or no topping slab) that are to receive floor coating FC-3 the specified scratch finish is the designer's intent for concrete finish. FC-3 Spec section 09 67 24 located per floor finish plans A1-22__ Series drawings and Floor finish schedule A1-9602.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to attached (SKA-3576, SKA-3577, SKA-3578, SKA-3579, SKA-3580 and SKA-3581) which show updated topping slab information at B1 and B2 .

Fine broom finish is to be used at water storage tank rooms as specified in 07 13 55.

Elevator/ escalator pits and transformer vault's sump pump areas to receive float finish.

All Lower Concourse floor areas that are to receive floor coating FC-3 are to comply with surface preparation requirements as specified in 09 67 24, so that in all cases CSP shall not exceed 6 or less than 3.

T-980.1	SSS - Perimeter Girders at Ground Level	Closed	12/30/2013	01/09/2014	01/13/2014	Potentially	☐

From: Webcor Construction LP Gregory Kemerer **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author: Skanska USA Civil West California Dis Ryan Clayton

REQUEST:

As a revision to parts 1 & 2 of SK RFI 238 (T-0980), please refer to the following and CD RFI 162.1 SK1 & SK2 attached which are modifications to the BU girder connection details on 3 &7/S1-4350:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1). Confirmed.

2). Confirmed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

1.) Confirm it is acceptable to provide the beam web, flange, and plate assembly as indicated. The CJP indicates the plate to flange weld above the beam per 5/S1-4350 while the PJP indicates the proposed web to flange weld. The web to flange fillet welds per RFI # T-0704.1 will be applied beyond the shown CJP and PJP welds.

2.) Per the response to SK RFI 238 (T-0980), it is acceptable to stop the bottom flange plate short as shown, extend the web plate of the BU WT to the web plate of the BU beam. Please verify the proposed weld is acceptable. The web to flange fillet welds per RFI # T-0704.1 will be applied beyond the shown CJP welds.

T0860.1 **BGP - Rebar barlocks for interior Walls in Area 3** **Closed** **11/13/2013** **11/23/2013** **11/19/2013** **Potentially** ☐

From: Webcor Construction LP Michael Spillane **To:** Turner Construction Compan Gary Krutsch **Answered By:** Adamson Associates, Inc George Metzger

Co-Author:

REQUEST:

Further to the response to RFI-860, Please find attached information (see exhibit A) on the proposed class 2 barlocks which are intended to be used at the noted partition walls in Area 3 as outlined in original RFI T-0860 see exhibit B.

Due to the overall diameter of these Type-2 bar locks, please confirm that it is acceptable to have reduced concrete clear cover to the barlocks which will be approximately ¾". This reduced clear cover will only be applicable for the length of the barlocks itself, which at worst case is approximately 12".

Please confirm that this is acceptable

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

George Metzger
11/18/2013
RESPONSE:
Acceptable

TG05.02-0001 **Inclusion of Engineering Enterprise in Bid** **Closed** **02/11/2011** **02/21/2011** **02/14/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Webcor Construction LP Tim Maxwell

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Sieera Electric wants to include the Engineering Enterprise for this bid. The Engineering Enterprise (at the advise of their insurance carrier) carries a $75K deductible not a $50K deductible. The Engineering Enterprise is registered as an SBE with the State of California. They have been in business for 36 years and never have had a claim filed against them. Their Insurance Company will not allow the deductible changed for any singular project. Is there a way the deductible difference can be waived?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Insurance requirements as set forth in the subcontract boilerplate exhibit is the responsibility of the firm entering into contract with Webcor/Obayashi Joint Venture.

TG05.02-0002 **Amount for Liquidated Damages** **Closed** **02/11/2011** **02/21/2011** **02/14/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Webcor Construction LP Tim Maxwell

Co-Author:

REQUEST:

An actual Dollar amount is not specified for the LD's. What is the Dollar amount in the LD's and will it be based on per calendar day.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Refer to Specification Section 00 05 20 Article 4 paragraph 4.02

TG05.04-0001 **Insurance Requirements** **Closed** **02/10/2011** **02/20/2011** **02/03/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Kevin Chiu **Answered By:** Webcor Construction LP Tim Maxwell

Co-Author:

REQUEST:

Does a submitting JV need its own insurance meeting the requirements stated in the RFP, or is the specified coverage being met by the partner firms making up the JV sufficient for the General Contract/Selection Panel?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

YES - if contracting as a JV the JV must be a legal entitiy with it's own insurance.

TG05.04-0002 **Definition of a Joint Venture** **Closed** **02/10/2011** **02/20/2011** **02/14/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Kevin Chiu **Answered By:** Webcor Construction LP Tim Maxwell

Co-Author:

REQUEST:

What is the Agency's Definition of a Joint Venture and what agreements need to be in place if firms want to

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The CM/GC defines a joint venture as provided in California Business and Professions Code section

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

submit their proposal as a Joint Venture?

7029, et seq. Any respondent joint venture must be properly licensed as a single entity and must submit with its Qualification Statement a copy of the joint venture agreement. The agreement shall identify the responsibilities of each partner in the joint venture for the scope of work established by the RFP, demonstrate the relationship between partners, and provide for contractual relationships and authorities to bind each entity to the obligations of the joint venture. The joint venture respondent should submit experience and qualifications as an entity and should submit experience and qualifications for each joint venture partner.

TG05.04-0003 **Temporary Pavement Clarification** **Closed** **02/10/2011** **02/20/2011** **02/14/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Kevin Chiu **Answered By:** Transbay PMPC Alfred Lau

Co-Author:

REQUEST:

In the Traffic Control Specification 01570-2F # 10 "TEMPORARY PAVEMENT" is Temporary Pavement in regards to traffic controls limited to the following:
A. Pothole Patching;
B. "Cutback or Coldpatch" at bridging and plating, handicap ramps, and sidewalk repairs;
C. Misc Roadway Maintenance;
D. Does not include Roadway Grinding or Hot Asphalt Application.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Section 01 15 70, paragraph 1.2.F.10 defines ¿temporary pavement¿ as part of the scope for Traffic Routing Work. The requirement for ¿temporary pavement¿ is to accommodate construction traffic control and maintenance of public and construction safety throughout the complete construction duration. It is envisaged that the scope may include pothole patching; "cutback or coldpatch" at bridging and plating, handicap ramps, and sidewalk repairs; and misc. roadway maintenance. Usually, roadway grinding and hot asphalt application, which are typically utilized for larger paving areas, and possibly permanent installations, will not be necessitated by ¿temporary pavement¿ work. However, without the opportunity to review the traffic control plan as stipulated in 1.2.A of the same section, we cannot preclude the need at this time.

Webcor/Obayashi Joint Venture

PROJECT MANAGEMENT - REQUEST AND ANSWERS LOG

30100 - Transbay Transit Center Project

Number	*Subject*	*Status*	*Date Created*	*Date Required*	*Date Answered*	*Cost Impact*	*Proceed*
TG05.2R-0001	**Bass Electric - Switch Board AIC Rating**	**Closed**	**03/29/2011**	**03/29/2011**	**03/29/2011**	**Potentially**	☐

From: Webcor Construction LP Daniel Foudy **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Webcor Construction LP Tim Maxwell

Co-Author:

REQUEST:

Please provide AIC rating for the (5) five 2500 Amp temp switch boards.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

All overcurrent protective devices within equipment must be able to clear a fault without extensive damage to the equipment itself, as required by the NEC. Therefore, it is the responsibility of the design engineer of the switchgear/switchboard manufacturer/supplier retained by the successful bidder to determine the required AIC rating.

TG05.4-0004	**Team Leader Preference**	**Closed**	**02/10/2011**	**02/20/2011**	**02/10/2011**	**Potentially**	☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Kevin Chiu **Answered By:** Webcor Construction LP Tim Maxwell

Co-Author:

REQUEST:

Will there be a preference for teams led by a Contractor versus a Professional Services Company.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

No Preference as long as the entity possess requried licensing.

TG05.4-0005	**CityBuild/First Source Referral Program Certificate**	**Closed**	**02/10/2011**	**02/20/2011**	**02/10/2011**	**Potentially**	☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Kevin Chiu **Answered By:** Webcor Construction LP Tim Maxwell

Co-Author:

REQUEST:

The proposal checklist (attachment 2) includes "CityBuild/FirstSource Referral Program Certificate" but section 00 04 57 includes no Certification form. What should submitters included in their proposal to satisfy this checklist requirement?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Section 00 04 57 refers your to Section 00 08 20 - required forms are located at the end of Section 00 08 20.

TG05.4-0006	**Warning Sign Clarification**	**Closed**	**02/10/2011**	**02/20/2011**	**02/14/2011**	**Potentially**	☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Kevin Chiu **Answered By:** Transbay PMPC Alfred Lau

Co-Author:

REQUEST:

In reference to section 01-15-50-6, is the GC committed to the specs laid out for the changeable warning signs or can an alternate sign model be used, so long as it meets/exceeds the capabilities of the model specified?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

In accordance with Section 01 15 70 (paragraph 2.4) "Contractor may supply any other model of any other manufacturer meeting these requirements."

Webcor/Obayashi Joint Venture

PROJECT MANAGEMENT - REQUEST AND ANSWERS LOG

30100 - Transbay Transit Center Project

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

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TG05.4-0007 **Subcontractor List** **Closed** **02/10/2011** **02/20/2011** **02/10/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Kevin Chiu **Answered By:** Webcor Construction LP Tim Maxwell

Co-Author:

REQUEST:

The proposal checklist states the submissions must include the item "Subcontractor List (SL)" but there is no "subcontractor list" in the package - does the checklist actually refer to the "Subcontracting Request (SR)" included on page 45 of the proposal manual?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The "Subcontractor List" (SL) requirement in trhe Exhibit A is a misprint. Use the "Subcontracting Request" (SR) form as noted in the Proposal Manual.

TG05.4-0008 **Traffic Control Plan Budget** **Closed** **02/10/2011** **02/20/2011** **02/10/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Kevin Chiu **Answered By:** Webcor Construction LP Tim Maxwell

Co-Author:

REQUEST:

Has an overall budget for the Traffic Control Plan development and execution been establish or is that TBD?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

No Budget Established for this RFP.

TG05.4-0009 **Non-Discrimination in Contracts and Benefits** **Closed** **02/10/2011** **02/20/2011** **02/10/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Kevin Chiu **Answered By:** Webcor Construction LP Tim Maxwell

Co-Author:

REQUEST:

The proposal checklist in Attachment 2 specifies "NonDiscrimination in Contracts and Benefits (section 00 04 70)" but the only mention of this section is in the Specifications' table of contents where the title and information are struck through/crossed out. What do the submitters need to include in proposals to satisfy the checklist requirement?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Inclusion of form is a misprint. Section 00 04 70 was deleted under Rev. 2 of the contract Specifications. The form is no longer required and will not be included in RFP reviews.

TG4.2R-0001 **AWSS Experience Requirement** **Closed** **01/24/2011** **02/03/2011** **01/28/2011** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Webcor Construction LP Joanne Filipas

Co-Author:

REQUEST:

Reference BOE Specifications Section 02723, Part 3

There was discussion at the Pre-Bid Meeting that an upcoming addendum may change the experience requirements to do the AWSS work, above the usual DPW requirements currently in the specifications. This has the potential to rule out perfectly competent bidders and reduce the pool of bidders. Shaw Pipeline hopes there will not be a change from the specifications in this regard

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

There will be no change to requirements currently carried in bid documents.

TG4.2R-0002 **AWSS Fittings Procurement Schedule** **Closed** **01/24/2011** **02/03/2011** **01/25/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Webcor/Obayashi Joint Ve Richard Buellesbach

Co-Author:

REQUEST:

The foundry that fabricates the fittings recently quoted Shaw Pipeline Inc. 18-20 weeks to procure fittings. Assuming this timeframe will be similar at the time of contract award, the current schedule will not be achievable. Will an extension of time by granted, equal to the time taken to get the fittings?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The response to this QBD will require input from all parties involved. W/O will not be providing a preliminary answer at this time

---

TG4.2R-0003 **AWSS Fittings Materials Payment** **Closed** **01/24/2011** **02/03/2011** **01/25/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Transbay Joint Powers Au Sara Gigliotti

Co-Author:

REQUEST:

The foundry that fabricates the fittings will require payment in full upfront. Assuming it is a further 18-20 weeks before the contractor get the fittings to install, will a payment be made upfront to the trade subcontractor at the time the foundry requests payment and of the full cost of the materials?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Federal, State, and local law prohibit TJPA from paying for materials prior to their incorporation into the public work. The limited exception to this rule is that the CM/GC may apply for a partial payment (up to 75% of fair market value) for materials delivered and stored on site, subject to inspection and specified restrictions. (Contract General Conditions (Section 00 07 00), at 9.03I.)

TRANSWORLD 012 **Detail required for concrete sleeve installation** **Closed** **02/08/2011** **02/08/2011** **04/20/2011** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Transworld Construction, Inc. Erik Liu **To:** Webcor Construction LP David Hungerford **Answered By:** Webcor Construction LP Marina Rosso

Co-Author:

REQUEST:

---- detail required for concrete sleeve installation
The existing condition of the manhole covers is not consistent with our contract documents. Detail 1/C- 5001 indicates
that the existing manhole sits on existing concrete slabs to which we are to drill 1 inch embedment. However, if you refer
to the attached photograph indicated as picture one, you can clearly see that the manhole cover is actually a part of a
concrete ring assembly. Please provide a new detail and instructions for the installation of the required concrete sleeve.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This RFI is superseded by Transworld RFI 012.1, forwarded to Turner as T-0030.

TRANSWORLD 014 **RFI is not applicable** **Closed** **04/20/2011** **04/30/2011** **04/20/2011** **Potentially** ☐

From: Transworld Construction, Inc. Erik Liu **To:** Webcor Construction LP David Hungerford **Answered By:** Webcor Construction LP Marina Rosso

Co-Author:

REQUEST:

RFI has been VOIDED. See attachment.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

RFI has been VOIDED. See attachment.

TRANSWORLD 021 **Instructions on new Barricade Wall** **Closed** **03/21/2011** **03/22/2011** **03/28/2011** **Potentially** ☐

From: Transworld Construction, Inc. Erik Liu **To:** Webcor Construction LP David Hungerford **Answered By:** Webcor Construction LP David Hungerford

Co-Author:

REQUEST:

Please provide instructions on what barricade wall is desired in lieu of the plywood wall. The storm this past weekend is
a clear indication that a solid material wall should not be used as a visual baricade. The storm blew down that wall.
Please issue instructions on how we are to proceed.
At present, A-frame barricades, caution tape, and safety cones are up.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Due to field directives to mitigate the problem, this RFI is null and void.

TRANSWORLD 022 **Electrical work for the existing conduit protruding from the soil from the basemen** **Closed** **03/29/2011** **03/29/2011** **03/29/2011** **Potentially** ☐

From: Transworld Construction, Inc. Erik Liu **To:** Webcor Construction LP David Hungerford **Answered By:** Webcor Construction LP David Hungerford

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

There is one existing conduit on the south side of the wall protruding from the soil coming from the basement wall. The
electrical conduit is approximately 6 feet east from the western transformer vault vent opening. Attached you can see the
pictures of this conduit that is currently sticking out below the scaffolding planking.
Please provide instructions on electrial work.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This RFI is superseded by Transworld RFI 022.2, forwarded as T-0031.1.

TRANSWORLD 022.1 **Electrical work for the existing conduit protruding from the soil from the basemen** **Closed** **03/29/2011** **03/29/2011** **03/29/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Webcor Construction LP David Hungerford **Answered By:** Webcor Construction LP David Hungerford

Co-Author:

REQUEST:

There is one existing conduit on the south side of the wall protruding from the soil coming from the basement wall. The
electrical conduit is approximately 6 feet east from the western transformer vault vent opening. Attached you can see the
pictures of this conduit that is currently sticking out below the scaffolding planking. An added supplemental plan is also
attached for your reference.
Please provide instructions on electrial work.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This RFI is superseded by RFI 022.2, forwarded to Turner as T-0031.1.

TRANSWORLD 023 **Void below existing embed** **Closed** **03/31/2011** **04/10/2011** **03/31/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Transworld Construction, Inc. Erik Liu **Answered By:** Webcor Construction LP David Hungerford

Co-Author:

REQUEST:

Regarding the grouting work scheduled for tomorrow to fill the voids per W/0 RFI #T-0045 ... the grouting contractor is
requesting to use the grout mix design as indicated in the following sheet. Apparently this matter was raised with Mr. Doug Jacobson who knows that this substitution
request!RFI is on the way. The attached sheet is a

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

VOID RFI. Work was already compelted and this RFI no longer applies. See confirmation attached.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

specification
program from another project not related to the Transbay Project. Our contractor's recommendation is to use this same
grout mix design. Please advise if the use of this grout mix design is acceptable.

TRANSWORLD 025 **Electrical conduit and box detail** **Closed** **04/04/2011** **04/05/2011** **04/15/2011** **Potentially** ☐

From: Transworld Construction, Inc. Erik Liu **To:** Webcor Construction LP David Hungerford **Answered By:** Webcor Construction LP David Hungerford

Co-Author:

REQUEST:

We need direction for the electrical installation inside the new concrete stem wall. We are planning on installing the formwork for the south-side of the wall starting Wednesday morning. As such, we need to install the electrical conduits
and boxes tomorrow, Tuesday, at the latest to meet our schedule.
Please provide detailed information on the entire conduit run and the elevation of the boxes.
It is our understanding that we are completing abandoning the originally anticipated electrical lighting work as anticipated
in our contract documents.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The question stated "It is our understanding that we are completing abandoning the originally anticipated electrical lighting work as anticipated in our contract documents." However there are no electrical drawings in the contract documents. This RFI was recieved at 4:28pm, the day before the wall was to be closed up, and requests an answer by tomorrow, which is not enough time to review. Due to the timing of this RFI, it was not submitted to the design team, but instead a meeting was held with URS in the field for direction. For record, see the attached inspection report and email for what is to be done.

TRANSWORLD 026.1 **301 Mission Wall - Framing Modifications and Base Plate Conflict** **Closed** **05/06/2011** **05/16/2011** **06/01/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Daphne Faulkner **Answered By:** Webcor Construction LP Marina Rosso

Co-Author:

REQUEST:

Reference: C/S-5000, B/A-6000, attached sketches, and referenced RFI's

Field verified measurements and layout for the location of the structural steel does not coordinate with the stucco inset locations as shown on detail C/S-5000. In addition framing around the perimeter of the wall (aluminum panel locations) had to be modified due to assembly and

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Can't find answer in Constructware.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

installation methods. (See attached pictures and sketches. This RFI addresses three framing issues. All issues have been discussed in the weekly 301 Mission Wall subcontractor meeting with URS, Turner, Transworld, TJPA and Webcor-Obayashi.

1.) In two of the four stucco slot locations, field conditions show that a portion of the base plate conflicts with the stucco slot. This base plate encroaches into the stucco panel per dimensions shown on the attached sketch. Please advise.

2.) The structural steel had been relocated to CL of the wall (per RFI T-0098) and therefore studs around the steel per B/A-6000 could not be set per plan. Transworld has installed hat channel metal framing to the face of the structural steel tube using fasteners into the structural steel as per RFI T-0106 as well as modified the boxed framing per attached sketches around the perimeter of the wall. Sizes of metal framing were used to align with adjacent framing per plan. This work is currently installed, please confirm framing modifications per attached marked up details are acceptable.

3.) Blocking a the top of the wall at the north side (between the framing and 8"x 8" tube steel) was not installed, as there was no room between the framing and steel. Framing was attached directly to the tube steel. See attached.

Please confirm that the framing modifications in item 2 and 3 are acceptable and provide direction at the base plate conflict per item 1.

TRANSWORLD 028 **Install the sleeves for light fixtures** **Closed** **04/14/2011** **04/24/2011** **04/14/2011** **Potentially** ☐

From: Transworld Construction, Inc. Erik Liu **To:** Webcor Construction LP David Hungerford **Answered By:** Webcor Construction LP David Hungerford

Co-Author:

REQUEST:

Per W/O Field directions, TCI was required to install 1-1/2" sleeves for future light fixtures at new concrete footing below the asphalt paver. Please confirm if this is

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached URS email for direction on placement of conduit installations through the 301 Mission concrete wall.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

acceptable.

Email from David Fyfe on 04/07/11 states:
"We met in the field this morning and agreed to provide/install three conduit layout options to maintain scheduled pour and help ensure the new electrical/conduit alignment provides a code compliant preferable connection to the future lights;

1) conduit/boxes in wall as installed prior to today with minor adjustments to provide required clearances to steel;
2) conduit running east-west along north side of wall as installed this morning;
3) conduit running east-west along south side of wall, (note this option only required providing 4 short (approx. 18") conduit runs from south side of wall to north side of wall prior to pour, and was provided in case there are issues with options 1 and 2)."

TRANSWORLD 029 **Extra HSS Steel Column needed** **Closed** **04/13/2011** **04/23/2011** **04/13/2011** **Potentially** ☐

From: Transworld Construction, Inc. Erik Liu **To:** Webcor Construction LP David Hungerford **Answered By:** Webcor Construction LP David Hungerford

Co-Author:

REQUEST:

Reference: S-4000

On sheet S-4000, it is indicated that the tube steel should be maintained 8" clear on both sides where the utility vault is located. The two (2) steel tube at the east end wall is more than 5' apart. Please clarify that an additional tube steel is needed?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Proceed per contract documents. Specifically notes on S-4000 regarding the spacing requirements of the 10" x 10" tube steel.
1. HSS 10" x 10" x 5/8" at 5'-0" O.C. MAX, UNO
2. Maintain 8" clear from edge of utility vault vent opening to centerline of post.

TRANSWORLD 031 **Stone and Aluminum Panel layout sketch** **Closed** **06/08/2011** **04/19/2011** **04/19/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Transworld Construction, Inc. Erik Liu **Answered By:** Webcor Construction LP David Hungerford

Co-Author:

REQUEST:

Please confirm the attached aluminum and stone tile layout is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This RFI does not clearly state an issue or a good question. Why is it being asked? We will not forward

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

this on until more detail is provided.

Responded to RFI in an email on 4/19/11.

TRANSWORLD 038 **Concrete mix design for concrete repair work** **Closed** **06/08/2011** **06/18/2011** **06/08/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Webcor Construction LP David Hungerford **Answered By:** Webcor Construction LP David Hungerford

Co-Author:

REQUEST:

This is to respond to submittal title TA1010.S-5000.A01 Rapid Set for Concrete Repair (TCI #31)
Please identify a product or a custom mix design that would meet these specifications. In our past practice we have
successfully used the suggested grout product as a concrete patch. In our investigations with suppliers and other
contractors, it seems that the general conclusion is that using a grout product (such as the one proposed) would be
the appropriate product for this application and condition. The proposed grout seems to offer greater strength and structural performance than the original concrete that has since been removed.
Is there another product that you could identify that would achieve these specifications? Since we are not the project designers, we can only suggest those products that would generally be used and accepted in our standard of practice It was based on this standard of practice that we submitted the RapidSet grout product.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The submittal response referenced in this RFI is incorrect. The suggested product was never submitted past Webcor-Obayashi's possession. Due to compliance with the direction given per response to RFI T-0130, a submittal was not required.

An email chain was generated from conversations between W/O and Turner, then a message sent between Turner and URS, which relayed the product type and an email chain starting from URS was recieved noting that the material is not acceptable. Upon further review of codes, the material is acceptable, which had been discussed in the weekly subcontractor meeting held on Monday June 6, 2011.

This RFI is no longer valid. Transworld is to submit products that will be used to repair this condition, per sub meeting.

Transworld is aware of this and is submitting product for review.

TRANSWORLD 039 **301 Mission Wall - New concrete curb detail** **Closed** **06/13/2011** **06/30/2011** **06/13/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Webcor Construction LP David Hungerford **Answered By:** Transworld Construction, I Erik Liu

Co-Author:

REQUEST:

Please provide detail for the new concrete curb

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

David,

Hold the RFI and product submittal that you got today.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

I will revise the rfi b ased on today's discussion and the concrete submittal may not be necessay based on a conversation I had with danny.

-Erik

U-0066.1 **Minna St Station 2+09 - 4in Water Service Lateral Encountered** **Closed** **01/10/2011** **01/20/2011** **01/14/2011** **Potentially** ☐

From: Webcor Construction LP Jason Dunne **To:** Turner Construction Compan Kevin Chiu **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Reference Sheet U-3107 and Trinet RFI 059.1

This is a follow up to the engineer's response to Trinet RFI #59 (RFI#U-0066). Upon further evaluation of the 4" fire service connection at 83 Minna by Tom Farhnam (SFWD Senior Inspector), the water department proposed the attached installation detail for an 8"x4" tee in the 8" main, to be performed by Trinet, and the connection detail to the existing 4" service, to be performed later by the SFWD crew. This change was proposed to avoid conflicting utilities running along the south side of teh new 8" main. AECOM's Design Engineer, Eric Zagol, was advised of the changed design plan proposed by SFWD in the field on 12/28/2010. Please confirm if the attached plan is acceptable and approved for construction.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Construct water serive lateral in accordance with contractor's attached plan and note the following:

1. Provide full joint restraint in accordance with contract documents

2. Provide 4" DI pipe for the section labeled "9" DI NIPPLE"

U-0069 **Street Light CCTV Camera-East Side of Fremont St. @ Stn. 5+45** **Closed** **01/05/2011** **01/15/2011** **01/14/2011** **Potentially** ☐

From: Webcor Construction LP Richard Buellesbach **To:** Turner Construction Compan Kevin Chiu **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Reference Sheet U-3302 and Trinet RFI 62

During removal of the light pole arm on the east side of Fremont St. @ Stn. 5+45, Trinet observed that there is a CCTV camera and associated wiring on the light pole. Please advise of the plan for removal of CCTV camera.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1/14/11

Remove and salvage existing CCTV camera as part of the traffic signal equipment removal. Deliver traffic signal equipment and camera to the Traffic Signal Shop Yard in accordance with specification 02 41 00

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

par. 3.4 C 4.

****

1/12/11

Please clarify how this RFI relates to RFI U-0073
"VOID - reference RFI U-0069"

U-0070 **Subsurface Structures in Conflict with Minna St. AT&T Vault** **Closed** **01/10/2011** **01/20/2011** **01/12/2011** **Potentially** ☐

From: Webcor Construction LP Jason Dunne **To:** Turner Construction Compan Kevin Chiu **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Reference Sheet U-2008 and Trinet RFI 63

During our potholing on Minna St. for the proposed AT&T vault in the sidewalk (Stn. 3+72), we encountered an existing subsurface foundation and slurry shoring wall. The top of the subsurface foundation is at a depth of approximately 4' from the top of the sidewalk and is in conflict with the installation of the proposed AT&T vault. Installation of the proposed AT&T vault in accordance with the plans will require partial demolition of the existing foundation wall encountered. Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

As determined during a site visit on 1/10/11 with W/O, Turner, AECOM and Tishman Speyer, the exposed wall is an abandoned sidewalk basement wall. Remove and dispose of existing abandoned sidewalk basement wall as required (approx. 1.5 feet in depth) to construct proposed AT&T vault.

U-0071 **Existing fittings at tie in location for Minna St. 8 in. Water Main (Stn. 9+30)** **Closed** **01/10/2011** **01/20/2011** **01/12/2011** **Potentially** ☐

From: Webcor Construction LP Richard Buellesbach **To:** Turner Construction Compan Kevin Chiu **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Reference Sheet U-3109 and Trinet RFI 64

Due to the presence of existing fittings installed in the existing 8 inch water main at our tie in location (Stn. 9+30) at First St. and Minna St. for the new 8 inch water main on Minna St., SFWD inspector Dan Helmnik has requested to

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Provide labor and equipment to excavate and shore trench for pipes, fittings, and valves as necessary for connections to the existing water mains by SFWD in accordance with U-3100 Note 4 and specification section 33 11 00 par. 3.5.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

extend the limits of the tie in excavation beyond the locations of the existing fittings. This is beyond what would normally be required for a tie in of this nature. Existing conditions were reviewed in the field by W/O, Turner, SFWD, Eric Zagol from Aecom, and Trinet personnel.

Please advise. An expedited response is requested.

U-0072 **Fremont St traffic Signal Pole to be removed and salvaged - has Muni Cable attach** **Closed** **01/10/2011** **01/20/2011** **01/18/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Kevin Chiu **Answered By:** Turner Construction Comp Jack Adams

Co-Author:

REQUEST:

Reference Sheet U-3302 and Trinet RFI 65

Per contract, Trinet is required to remove and salvage the existing light pole indicated in the attached drawing. Through observation in the field, the existing light pole has a MUNI cable attached which runs to the intersection of Fremont St. and Mission St.. Based on these findings, should the light pole be removed as indicated? Mario Saldana from W/O was present when this item was observed and issue has been discussed with Eric Zagol from AECOM.

Please advise. An expedited response is requested by 01/12/2011.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

J. Adams 01/18/2011

These are MUNI OCS Poles not Lighting Poles. Both OCS poles along east side of Fremont near 301 Mission Tower are in use by MUNI OCS System. MUNI has designated each OCS pole to hold different guy wires at Fremont and Mission see Demolition drawing Sheet 105 of 137. The poles are to remain and be deleted from Webcor-Obayashi/Trinet scope.

NOTE: Evans Bros Subcontractor Reliance Electric are to correct OCS cables to both of these OCS Poles. Reference Demolition drawing plan sheet 105 of 137. A second cable will be installed at OCS Pole 4030 and the cable will be reinstalled at OCS Pole directly north of Pole 4030 per contract.

****

J. Adams 01/13/2011

The MUNI Overhead Contact System (OCS) Pole in question not light pole. This OCS pole was to have the guy wires relocated to nearby MUNI OCS Pole by the Demolition Contractor in July 2010 during mods to Transbay Terminal MUNI OCS system. Demo drawing plan sheet 105 of 137 shows the guy wires relocated to pole 4030 - this is in EBi scope.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Pole 4030 is shown to remain per Demo drawing above - But, Pole 4030 is shown to be removed per RUP U-3302 .

It should be noted that upon relocation of this OCS guywire the removal of the pole is Webcor-Obayashi scope per drawing U-3302.

****

E. Zagol 01/13/2011

Change in existing conditions. New MUNI guy wire was attached to existing pole at STA 5+45 as part of the Existing Terminal & Ramps Demolition Plans project.

1. Remove and salvage traffic signal equipment per U-3302.

2. Protect in place existing MUNI pole.

****

E. Zagol 01/12/2011

Change in existing conditions. New MUNI guy wire was attached to existing pole at STA 5+45 as part of the Existing Terminal & Ramps Demolition Plans project. Existing Terminal & Ramps Demolition Plans project to remove the MUNI pole at STA 5+60.

1. Remove and salvage traffic signal equipment per U-3302.

2. Protect in place existing MUNI pole at STA 5+60.

U-0073 **Fremont St. Light Pole and Muni Cables to be protected - indicated light pole has r** **Closed** **01/10/2011** **01/20/2011** **01/10/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Kevin Chiu **Answered By:** Webcor Construction LP Marina Rosso

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference Sheet U-3302 Traffic Signal E and Trinet RFI 66

As indicated on the plans, Trinet is required to "Remove and Salvage Traffic Signal Equipment. Protect Pole and Muni Cables in Place." Conditions were reviewed in the field and there is no Muni cable attached to the (E) light pole.

Mario Saldana from W/O has observed there is a CCTV cable attached to the pole not mentioned in Trinet RFI 66 and requests clarification on ownership and status of the CCTV line. This issue has been discussed with Eric Zagol from AECOM.

Please advise. An expedited response is requested by 01/12/2011.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Can't find answer in Constructware.

U-0074 **Unidentified 9in Concrete Wall in First St Invest Trench - 10ft-5in west of Conc. Mu** **Closed** **01/10/2011** **01/20/2011** **01/25/2011** **Potentially** ☐

From: Webcor Construction LP Jason Dunne **To:** Turner Construction Compan Kevin Chiu **Answered By:** AECOM Technical Service Eric Zagol

Co-Author:

REQUEST:

Reference Sheet U-1007 Traffic Signal E and Trinet RFI 051

See attached, plan views of the investigative trench on the east side of First St., west of the concrete Muni median, from Stn. 9+70 to 9+59.5. Per note 4 of sheet U-1007, Trinet requests that Webcor "notify TJPA" of the unidentified 9" concrete wall at 10ft-5in west of the concrete Muni median face of curb and 3ft-6in cover that Trinet encountered "not indicated on plans". Per same note, Trinet requests "direction on the demolition" of this structure. Trinet has plated but would like to backfill the trench as soon as possible. Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Unknown concrete wall to be demolished by Transit Center Project (NIP) within the area impacted by the CDSM shoring wall and mass excavation.

U-0075 **Water Main Connection at 2nd St and Minna St - expose new line for SFWD** **Closed** **01/11/2011** **01/21/2011** **01/12/2011** **Potentially** ☐

From: Webcor Construction LP Mario Saldana **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Service Eric Zagol

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Reference Sheet U-3107 and attached photos

At the intersection of 2nd St and Minna St, there is an existing 2in gas line running directly on top and next to the existing 8in main to be tied into. SFWD cannot make the Tee connection due to the bells of the fittings with the 2in gas line so close.

The end of the new line installed by Trinet will need to be exposed about 2ft for SFWD to move the end of the line by 1ft east so that SFWD can make the connection without moving the gas line. This will require extra work for Trinet to expose the new line for SFWD. Eric Zangol from AECOM and Dan Helminiak from SFWD were present during the discussion of this issue.

Please provide direction as soon as possible as this will impact the chlorination and tie-in schedule.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Provide labor and equipment to excavate and shore trench for pipes, fittings, and valves as necessary for connections to the existing water mains by SFWD in accordance with U-3100 Note 4 and specification section 33 11 00 par. 3.5.

U-0076 **Water Main Connection at 2nd St and Minna St - demo/excavate per SFWD** **Closed** **01/11/2011** **01/21/2011** **01/14/2011** **Potentially** ☐

From: Webcor Construction LP Mario Saldana **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Reference Sheet U-3107 and attached photos

At the intersection of 2nd St and Minna St, the new 8in water main is to be connected to an existing 6in water line. The new 8in line installed by Trinet is above and below existing utilities, and SFWD requires more demo/excavation to make the connection.

This will require extra work for Trinet to demo/excavate per SFWD. Inspector Dan Helminiak is scheduling the SFWD to come back and measure this afternoon (01/11/2011). Eric Zangol from AECOM was also present during the discussion of this issue.

Please provide direction as soon as possible as this will impact the chlorination and tie-in schedule.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Provide labor and equipment to excavate and shore trench for pipes, fittings, and valves as necessary for connections to the existing water mains by SFWD in accordance with U-3100 Note 4 and specification section 33 11 00 par. 3.5.

Webcor/Obayashi Joint Venture

PROJECT MANAGEMENT - REQUEST AND ANSWERS LOG

30100 - Transbay Transit Center Project

Number	*Subject*	*Status*	*Date Created*	*Date Required*	*Date Answered*	*Cost Impact*	*Proceed*
U-0077	**Fire Hydrant Installation at Minna St Stn. 0+90**	**Closed**	**01/12/2011**	**01/22/2011**	**01/14/2011**	**Potentially**	☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Reference Sheet U-3107

With reference to the fire hydrant at Minna St. Stn. 0+90, (northeast corner of Second St. and Minna St.) General Note #5 on sheet U-3107 directs Trinet to "replace in place existing fire hydrant."

Per on site field discussions with Eric Zagol from AECOM, Robert Friend from Trinet and Mario Saldana from W/O, it was determined that the existing hydrant would remain in place until after the new water main connections are performed by CDD crews. After which the existing hydrant will be removed and new hydrant and lateral piping will be installed and tested.

Please confirm if this is acceptable. An expedited response is requested.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

As discussed on site with Daniel Helminiak (SFPUC Inspector) and those mentioned above, the proposed construction sequencing of the fire hydrant at Minna St. STA 0+90 is acceptable.

Coordinate with Daniel Helminiak (or assigned SFPUC Inspector) and the SFWD to ensure the fire hydrant is properly decommissioned by SFWD and SFFD following main connections by SFWD and prior to abandonment of the existing main in Minna Street by SFWD prior to fire hydrant installation by Trinet. Coordinate with SFPUC inspector to ensure SFWD and SFFD installs a black hydrant "donut" on the existing fire hydrant and new fire hydrant prior to the new fire hydrant being placed in service. Coordinate the removal of the "donut" once new fire hydrant is in service.

U-0078	**6in and 4in Service Laterals to 2 Shaw Alley**	**Closed**	**01/12/2011**	**01/22/2011**	**01/14/2011**	**Potentially**	☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Reference Sheet U-2008

The existing 4" water service found at Stn. 5+37 has been confirmed abandoned by SFWD personnel through on site investigations. Since the service is determined to be inactive, Trinet intends to not provide service from the new main for this 4" service as discussed in the field, with Eric Zagol from AECOM, Mario Saldana from W/O, Dan Helminick from SFWD and Robert Friend from Trinet. In addition, Dan Helmnick from SFWD requested to have the service tee installed in the new 8" main which was to provide service for this 4" lateral removed and straight pipe installed. Please confirm if this is acceptable.

The 6" water service lateral found at Stn. 5+30 has been confirmed as an active fire service to 2 Shaw Alley by SFWD personnel through on site investigations. Trinet

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Existing 4" water service at STA 5+37. Subsurface utility investigations should have been performed and submitted prior to installation of water main to determine status of existing lateral in accordance with U-3108 General Note No. 3. It is acceptable to remove the 8"x8"x4" tee installed and replace with straight pipe per the request of SFPUC SFWD inspector.

Provide 6" water service later at STA 5+30 per contract documents.

AECOM suggests that there is no change in contract price to perform this work.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

intends to provide service from the new water main for this 6" service as discussed in the field with Eric Zangol from AECOM, Mario Saldana from W/O, Dan Helminiak from SFWD and Robert Friend from Trinet.

An expedited response is requested.

U-0079 **Fremont St Temp Water Line Installed over AT&T Duct** **Closed** **01/17/2011** **01/27/2011** **01/19/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Reference Sheet U-3123 and attached detail

During Trinet's installation of the temporary water line in Fremont St., Trinet encountered an existing AT&T duct that was in direct conflict with the temporary water line. Trinet was directed by Eugene Chu of SFWD/SFPUC to run the temporary water line over the existing AT&T duct using 45 degree bends. This resulted in less cover for the piping than what is required by the Water Department. Due to the lack of cover, Trinet was directed to install a 1/2in steel plate beneath the concrete base along the trench as depicted in the attached detail. The plate was approximately 2ft wide by 6ft long and extended to the limits of the installed 45 degree bends.
Please provide confirmation that this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

It is AECOM's understanding that Trinet encounter an existing PG&E electrical duct (4-4") crossing the water alignment feeding 301 Mission property and not an AT&T duct as referenced above. It is also AECOM's understanding that Trinet encountered an existing PG&E electrical duct (8-3") parallel to the water alignment which is ultimately to be abandoned by PG&E and demolished by Trinet. Both PG&E ducts are shown in the plans. Per sequencing shown on U-1123, the water line should be constructed after PG&E completes their work on Fremont Street.

Given the fact that the PG&E duct parallel (8-3") has not been abandoned by PG&E, and given the fact the option to go under the existing 4-4" PG&E duct per plans is not feasible because the existing 8-3" PG&E duct is not demolished, and given the fact that the new water main is a temporary condition, the above mentioned installation proposal is acceptable.

AECOM suggests no additional cost to contract price to perform this work.

U-0080 **Proposed Design Change for MH #501** **Closed** **01/17/2011** **01/27/2011** **01/28/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference Sheet U-2021 and attached drawings

Trinet proposes to change the design of sewer manhole #501 from a Modified Box Manhole (per SF Standard Plan #87,184) to a Precast Concrete Manhole (per SF Standard Plan #87,181 - see attached drawing). The proposal includes the installation of a temporary 24" PVC pipe stub, extending south from the manhole and connected to the brick sewer per SF Standard Plan #87,197.

The proposed manhole design will facilitate construction around the many utilities identified in the excavation - see RFI # U-0021 (Trinet RFI 04). It is also the preferred manhole design for 24in pipe per the SF Standard Drawings, especially since the brick sewer on the south side will later be abandoned and plugged (in the manhole) by the owner. This plan will also facilitate the later abandonment of the outlet to the south, as the owner will just have to plug the 24in outlet pipe and not a 3x5 brick sewer.

Please consider. An expedited response is requested.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

CCSF DPW Standard Plan #87,181 referenced specifies a 4 ft diameter precast concrete manhole. Three (3) 24-inch pipes connecting to a 4 ft diameter manhole at invert elevation as proposed by contractor may yield an unstable structure and is not approved. A larger diameter precast concrete manhole may be acceptable however the alternative would need to be submitted as a substitution for CCSF SFDPW approval.

As per the response to RFI U-0021, please provide a mark up of U-3021 indicating the size, and horizontal and vertical location of the utilities identified in the excavation for review.

U-0080.1 **Proposed Design Change for MH #501** **Closed** **02/09/2011** **02/18/2011** **02/22/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** Turner Construction Comp Kevin Chiu

Co-Author:

REQUEST:

Reference Sheet U-2021, RFI #U-0080, and attached drawings

In response to the Engineer's concerns with the number and size of pipes in Trinet's original revised detail for MH 501 (RFI#U-0080), Trinet has changed their proposed installation drawing to include a 5' I.D. cast-in-place MH base. The lower precast section of the MH will be 5' I.D., with a precast reducer section transitioning from 60" to 48" I.D. placed above. Attached is the revised drawing for MH 501 and shop drawings for the precast MH sections. The design was discussed with Cliff Wong from the SF Bureau of Engineering, Hydraulics Department, and he did not have a problem with a 5' I.D. manhole.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

02/22/2011 - Kevin Chiu

A Change Request (CR) may be issued for the accepted substitution of the 5-foot diameter precast concrete manhole in lieu of the cast in place Modified Box Manhole.

02/18/2011 - Eric Zagol

The proposed design change for sewer manhole #501 from a Modified Box Manhole per SFDPW Standard

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Trinet requests an expedited response.

Plan #87,184 included in the contract documents to a 5-foot diameter precast concrete manhole with a temporary 24¿ PVC pipe connection to the existing 3¿x5¿ brick sewer per SFDPW Standard Plan #87,197 is acceptable.

Provide flexible pipe connections to the 5-foot diameter precast concrete manhole as shown in SFDPW Standard Plan #87,181.

As per the response to RFI U-0080 and U-0021, please provide a markup of U-3021 indicating the size, and horizontal and vertical location of the utilities identified in conflict for review. This request is now 7 weeks outstanding.

AECOM suggests a cost credit for the substitution of the 5-foot diameter precast concrete manhole for the larger cast in place Modified Box Manhole per contract documents.

U-0081 **Water Main Alignment - Howard St STA18+72 and STA19+98** **Closed** **01/19/2011** **01/28/2011** **01/24/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Service Eric Zagol

Co-Author:

REQUEST:

Reference Sheet U-3119 and attached drawing

Please confirm that it is acceptable for M Squared to install the new 12in water line in a straight line as sketched on the attachment. Contract Drawings show the pipe offsetting between Sta 18+72 and Sta 19+98.
Due to existing utilities discovered in potholes the 12in line will be installed 18ft from centerline.

Also, please confirm the elevations of the water line can be raised dependant on the depths of the existing utilities

Also, the referenced drawing has a discrepancy shown between the 12in water line bend station called out and the location shown in plan view. Please confirm that the first 45degree bend is located at 18+72, and not 18+27.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Contract Drawings indicate an offset to avoid a bus island, as shown on the plans, that was to be constructed as part of the Transbay Temporary Terminal Project. AECOM received confirmation from Philip Sandri TJPA/PMPC that the bus island was deleted from the Transbay Terminal Project. It is acceptable to eliminate the offset and construct water main between STA 18+72 and STA 19+98 at 18ft from centerline.

2. Elevations of the water line can be raised dependant on the depth of the existing utilities. Minimum depth of cover shall be 18-inches below the bottom of the concrete base pavement section per DPW Order No. 176,707 or 28" which ever is greater.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

3. 45 degree at STA 18+72. 45 degree bend no longer required due to response provided in item 1 above.

U-0082 **Sewer System Quality Assurance Clarification** **Closed** **01/19/2011** **01/29/2011** **01/21/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** Turner Construction Comp Michelle Smith

Co-Author:

REQUEST:

Reference Specifications Section 33 31 10, 1.4.E

Please clarify if TJPA or DPW is going to complete the inspection of the pipe as described in the referenced specification section.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

For general materials, please follow the specification requirements regarding delivered materials in 01 16 00 1.6D.

For materials falling under specification section 33 31 31, section 1.4C determines that all piping is SUBJECT to inspection by TJPA and/or DPW. This means that all piping is to be made available upon delivery if TJPA/DPW deems it is necessary to inspect the material. Contractor to inform TJPA of all deliveries and assure the storage facility is accessible. TJPA will inform contractor if material will be inspected prior to installation. When TJPA determines that additional labor is needed to move materials around for inspection, please reference 1.4E, which states that contractor is to furnish labor as needed to assist TJPA with this effort.

There is no ¿HOLD POINT¿ for TJPA or SFWD to inspect materials at manufacturer or upon delivery. TJPA/DPW intends to inspect the materials deliveries of each subcontractor until such time as a confidence level is built that subcontractor and W/O are ensuring the proper amount of quality control through their own material inspections.

Per specification Section 01 14 00 1.4, W/O shall verify all dimensions in the field and shall check all field conditions continuously during construction, including materials. Any inspection of materials by TJPA, DPW, or any other agency does not alleviate the subcontractor or W/O of the responsibility of

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

performing your own quality assurance measures, or constitute an acceptance of materials. Ultimately, it is the responsibility of the subcontractor and W/O to ensure the materials used for the project meet the contractual requirements set forth in the drawings and specifications.

U-0083 **Water Main Alignment on Howard at Beale** **Closed** **01/19/2011** **01/29/2011** **01/20/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Reference Sheet U-3118

Potholes on Beale Street at Sta 14+00, Sta 14+90 and Sta 16+25 reveal a 6in steel line that is unmarked and not shown on contract drawings. The line is 18ft south of the Howard St centerline. This is the proposed alignment for the new 12in water main. The pothole at Sta 14+00 also reveals a 3in steel conduit which is 16ft south of the Howard St centerline. Also there is a 6ft x 6ft wooden telecom duct bank that runs east to west on Howard Street at 15ft south of the Howard Street centerline. This location offers the closest window for the new 12in water line to the original alignment shown in the contract drawings.

This would require the removal of the wooden duct bank and the removal of the abandoned manhole shown on U-3118 (Sta 14+96 ¿ 15ft from Howard St centerline)

Please confirm the alignment of the new 12in water main.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Existing 6-inch steel pipe appears to be a 6-inch cast iron abandoned PG&E gas main. Confirm the "6ft x 6ft wooden telecom duct bank" is a 6-inch x 6-inch wooden duct bank and is abandoned.

Refer to RFI # U-0083.1

U-0083.1 **Water Main Alignment on Howard at Beale** **Closed** **01/24/2011** **02/03/2011** **01/25/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

M Squared has confirmed that the wooden duct bank is a

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Construct 12-inch water main at the location

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

6inch x 6 inch wooden duct bank and is abandoned.

Please direct M Squared on how to proceed.

****

Question from U-0083:

Reference Sheet U-3118

Potholes on Beale Street at Sta 14+00, Sta 14+90 and Sta 16+25 reveal a 6in steel line that is unmarked and not shown on contract drawings. The line is 18ft south of the Howard St centerline. This is the proposed alignment for the new 12in water main. The pothole at Sta 14+00 also reveals a 3in steel conduit which is 16ft south of the Howard St centerline. Also there is a 6in x 6in wooden telecom duct bank that runs east to west on Howard Street at 15ft south of the Howard Street centerline. This location offers the closest window for the new 12in water line to the original alignment shown in the contract drawings.

This would require the removal of the wooden duct bank and the removal of the abandoned manhole shown on U-3118 (Sta 14+96 15ft from Howard St centerline)

Please confirm the alignment of the new 12in water main.

proposed; 15 ft south of Howard Street centerline. Remove and dispose of abandoned wooden duct bank and abandoned manhole as required to construct new 12-inch water main.

Refer to response provided for RFI U-0083.

U-0084 **Water Main Alignment on Beale Street** **Closed** **01/21/2011** **01/31/2011** **01/25/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Reference Sheet U-3124

M Squared potholed at Sta 1+10 on Beale Street. We discovered that the 10in High pressure water line is 9ft-5in from the FOC. The existing 12in water line is 14ft-8in from the FOC. The 10in High Pressure line is closer to the FOC that shown on contract drawings. This now means that there is a larger window between the 10in high pressure water and the existing 12in water main.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contract drawings show existing 10-inch HPW (AWSS) at 9ft-7in from FOC. Contract drawings show existing 12-inch water line at 13 ft-11in from FOC.

Please clarify if dimensions provided by Contractor are to centerline of pipe.

Please provide depth to centerline of the existing 10-inch HPW (AWSS) potholed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

M Squared would like to install the new 12in water line at 12ft-3in from center line of the pipe to the FOC.
This would mean the new 12in water line would be outside the parking strip and the parking strip would stay in tact.
SFWD would also prefer it outside the parking strip for maintenance purposes.

Please confirm that it is acceptable to install the new 12in water line at 12ft-3in from FOC, going from Sta 0+60 to Sta 1+90.

Contractor's proposed location at 12ft-3in from FOC is in conflict with proposed Beale St. sewer main.

Following receipt of information requested, AECOM will evaluate if water line can be moved west of parking strip.

U-0084.1 **Water Main Alignment on Beale Street** **Closed** **02/18/2011** **02/28/2011** **02/24/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Service Eric Zagol

Co-Author:

REQUEST:

Reference Sheet U-3124 and RFI #U-0084

In response to the Engineer's questions, M Square has noted the following:
- Yes, the dimensions provided are to centerline of the pipe
- Depth to centerline of existing 10-inch AWSS is 72-inches

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

In reference RFI U-0084, it is not acceptable to install the new 12in water line at 12ft-3in from FOC, going from Sta 0+60 to Sta 1+90. As discussed during a site meeting with Noel M. (M2) and Mario S. (Webcor) on 2/11/11, construct 12-inch water line as shown on U-3124. Restore parking strip per Contract Documents.

U-0085 **AT&T Duct Bank on Beale at STA 6+00** **Closed** **01/21/2011** **01/31/2011** **01/27/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Service Eric Zagol

Co-Author:

REQUEST:

Reference Sheet U-3125 and attached sketch

The existing 4no. 4in AT&T lines on Beale Street at Sta 6+10 are not as shown on the contract drawings. See

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please proceed as per AT&T's suggestion.

Please coordinate with AT&T's representative Huan Hunynh and field representative Dave Olson for an

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

attached sketch.
Contract drawings show the conduit crossing M Squared's trench for 6 or 7 feet, however the duct bank is in the trench for 37 feet due to the alignment and width of the duct bank. The conduits are covered with a 2 foot wide concrete cap and appear in the trench for the new 12in water main at Sta 6+12 before leaving the trench at Sta 5+75. M Sqaured cannot lay the pipe on top of the concrete cap as the pipe will not have the required coverage.
Due to this M Squared is unable to install the new 12in water as shown. Juan with AT&T advised that M Squared remove the concrete cap from the conduits to allow for excavation of this portion of trench. With the cap removed it is more likely that the pipe will have the necessary minimum coverage.

Please confirm that this is how M Squared is to proceed. An expedited reponse is requested.

onsite inspection by AT&T of the affected AT&T conduits prior to backfill.

Confirm minimum cover of 30-inches or 18-inches below concrete pavement base which ever is greater, is maintained.

Provide distance between top of water main and bottom of AT&T conduits for review.

U-0086 **Concrete Slab & Rail Ties at Howard STA 13+60** **Closed** **01/24/2011** **02/03/2011** **01/25/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Reference Sheet U-3117 and attached sketch

M Squared potholed at Howard Sta 13+60. The pothole revealed a 15in thick concrete slab which is in conflict with the proposed alignment of the new 12in water line.
M Squared broke out a cross section of the slab and found nothing in it. There was also nothing underneath the slab for 5.5 feet. The southern edge of the slab is 4 feet north of the Howard Street center line. M Squared also discovered 6inch x 8inch x 4foot-6inch wooden rail ties.

If M Squared has to remove the concrete slab to install the water line at the alignment shown there is a danger that the MFS (fiber optic) conduits will be damaged as these conduits sit on top of the slab.

Breaking off an 18in section of the concrete slab and also

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

As discussed during a site visit on 1/25/11 with Noel (M Squared) and Mario S. (W/O) the Contractor's proposed alignment of 18-inches south of alignment per Plans is in conflict with the existing sewer (limited separation).

As discussed, pothole along Howard St. between Fremont St. and First St. to determine if 15-inch concrete slab is a local condition at the intersection of Howard and Fremont streets or if the slab extends to First St.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

a section of the rail ties would allow M Squared to excavate and install the new water pipe, while keeping away from the MFS conduits and not damaging them. However this will be time consuming.

An alternative option is to move the trench for the new 12in water pipe 18in south and just remove the wooden rail ties (as shown in sketch).

Mario S. from W/O and Eric Z. from AECOM were present during the discussion of this issue with M Squared in the field.

Please direct M Squared on how to proceed with the water line installation. An expedited response is requested

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U-0086.1 **Concrete Slab & Rail Ties at Howard STA 13+60** **Closed** **02/03/2011** **02/14/2011** **02/04/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Service Eric Zagol

Co-Author:

REQUEST:

As discussed at the meeting on Friday, 01/28/2011 between Noel (M2), Eric (AECOM) and Mario (Webcor) - due to existing utilities and the presence of the concrete slab and rail ties found in the additional potholing that was requested (Ref. Response to RFI U-0086), the new 12in water main is to be installed 5ft from the northern FOC on Howard Street Sta 12+60 to Sta 9+50.

Please confirm.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed. See attached sketches SK-U-0003 and SK-U-0004 for the revised alignment.

U-0087 **Compact Sewer Backfill Sand by Jetting** **Closed** **01/27/2011** **02/06/2011** **02/03/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Service Eric Zagol

Co-Author:

REQUEST:

Reference San Francisco Standard Specification Section 703.08, attached

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jetting in accordance with CCSF DPW Standard Specification Section 703.08 of the backfill layers

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Trinet requests authorization from the Engineer to compact the sewer trench backfill sand by jetting in accordance with the San Francisco Standard Specification Section 703.08.

The native material along Minna, which Trinet is re-using for trench backfill, is a clean well grade dune sand. Trinet believes jetting is an ideal method of compaction for this type of material. It is also an effective means of compacting the sand around the top and sides of the pipe without disturbing the pipe, and backfilling any voids left from removal of the shoring or that might have formed behind the shoring. This method of compaction is commonly utilized in San Francisco for sewer projects in similar ground conditions.

An expedited response is requested.

above the sand backfill (pipe zone) as specified in CCSF DPW Standard Specification Section 703.06 for sewer installations is acceptable.

Contractor shall determine that jetting will not result in damage to sewers, adjacent structures, or cause adjacent materials to be softened. Any resulting damage shall be repaired at the Contractors expense.

Meet compaction requirements for each horizontal lift. If compaction requirements are not met, discontinue the use of jetting.

Notify TJPA's geotechnical engineer through the TJPA representative in advance of jetting to coordinate on-site observation of jetting and compaction testing.

U-0088 **Minna St 18in Sewer Conflict with PG&E MH#1355 at STA 1+77** **Closed** **01/28/2011** **02/07/2011** **03/24/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Reference Sheet U-2007 and attached drawings

During layout for the installation of the new 18in Sewer Main on Minna St., Trinet observed that the alignment of the 18in Sewer Main is in conflict with existing PG&E MH #1355 at STA 1+77.50,
which is to remain in place. The center line of the new sewer main is 0.10ft north of the outside edge of the manhole wall, as depicted in the attached drawing. The north side wall of the manhole is constructed on top of the existing 3ft x 5ft brick sewer. The brick sewer structure extends approximately 16in into the vault along its entire length. The brick sewer therefore cannot be demolished without undermining the north wall of the electric vault. Eric Z. of AECOM was notified of this issue via phone call on 01/21/2011.

Please advise:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

==UPDATE== 3/24/11
See revised drawings Minna Street Revisions dated 3/16/11 assoicated with ASI#003.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

1. How should Trinet proceed with the installation of the new 18in VCP Sewer at this location?
2. How should Trinet proceed with the demolition ofthe existing 3ft x 5ft brick sewer?

U-0089 **TJPA/DPW Inspection of Materials** **Closed** **01/31/2011** **02/10/2011** **02/02/2011** **Potentially** ☐

From: Webcor/Obayashi Joint Venture Bob Garcia **To:** Turner Construction Compan Kevin Chiu **Answered By:** Turner Construction Comp Michelle Smith

Co-Author:

REQUEST:

Ref. response to RFI U-0082, specs 331100, 011600:

In response to RFI U-0082 stated "TJPA/DPW intends to inspect the material deliveries of each subcontractor..."

Does the TJPA/DPW or Turner have an established material inspection protocol in place to allow W/O and the trade subcontractors to verify and document that the materials have been inspected by TJPA/DPW or Turner per the above referenced specifications?

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Procedure for material inspections will be finalized as part of the QA/QC manual, to be issued by TJPA.

U-0090 **46 Minna St 6in Fire Service Connection** **Closed** **02/01/2011** **02/11/2011** **02/03/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** Turner Construction Comp Kevin Chiu

Co-Author:

REQUEST:

Reference Sheet U-3108 and attached sketch and photos

The original plan for connection of the 6in Fire Service Lateral @ 46 Minna St. was to leave the existing 6in gate valve (which is located at FOC) in place and connect the new 6in fire line to the downstream side of the old valve (See attached photo and sketch). This plan was proposed by SFWD inspectors, Tom Farhnam and Dan Helminiak, at a field meeting on 12/28/10. On Friday 1/28/11 the SFWD, plumbers when taking measurements for the tie-in, proposed a different plan. They want to extend the new 6in fire line beyond the curb and into the basement, and

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

VOID.

See RFI U-0093, 46 Minna 6in FS Water & 1in Copper Water Service Lateral at STA 5+17 Tie-In.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

connect to the homeowners fire line inside the basement (under the sidewalk).

Note: This will require coordination with building owner to put a hole through their foundation. Layout and a detail would need to be provided for the wall penetration, as well a detail to plug the hole where the existing water line is entering the basement.

Please provide direction on how to proceed.

U-0091 **SSMH #301 Located in Crosswalk at Natoma STA 0+81.72** **Closed** **02/01/2011** **02/11/2011** **02/24/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Service Eric Zagol

Co-Author:

REQUEST:

Reference Sheet U-3010

SSMH #301 is shown to be located in the crosswalk at Sta 0+81.72.

Please confirm that it is to be located in the pedestrian crosswalk.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Construct sewer manhole #301 at the location shown on U-3010. An ASI for a revised SFDPW Standard manhole cover (ADA compliant) is forthcoming.

U-0092 **AWSS Schedule Restrictions** **Closed** **02/02/2011** **02/12/2011** **02/10/2011** **Potentially** ☐

From: Webcor Construction LP Richard Buellesbach **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Service Eric Zagol

Co-Author:

REQUEST:

Webcor/Obayashi has received Bid Addendum #1 for the TG04.2R bid. As part of this addendum, note number 8 under "General Notes" on sheet U-0008 is deleted. This note had previously placed a constraint on the AWSS construction schedule that the Mission Street work must be complete prior to cutting both the Beale Street and the 1st Street lines. It was acceptable to abandon one or the other prior to the Mission Street work but not both.

Based on the deletion of this note, it is our understanding

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

02/11/2011 - Richard Buellesbach Email to Michelle Smith & Kevin Chiu - The received response to RFI U-0092 is not complete. We require a final resolution for the following language from the RFI response:
"TJPA is currently coordinating with SFPUC to determine when AWSS improvements, other than the improvements required to abandon existing AWSS mains on First and Beale streets, are required to be complete."
Please be sure that this RFI remains open in

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

that there is no schedule constraint on any of the AWSS system modifications other than the cutting & capping proceedures at 1st Street and Beale Street which are required for construction of the TTC Building. Please confirm.

Constructware.

02/10/2011 - Eric Zagol - The construction sequence constraint has been removed per GENERAL NOTE 8 on U-0008 (rev. 2 01/31/11) and as detailed in SFDPW BOE AWSS drawings (rev. 1 01/31/11) MA-0, MA-5, MA-6, MA-8, MA-10, MA-11 and MA-19.

TJPA is currently coordinating with SFPUC to determine when AWSS improvements, other than the improvements required to abandon existing AWSS mains on First and Beale streets, are required to be complete.

U-0093 **46 Minna 6in FS Water & 1in Copper Water Service Lateral at STA 5+17 Tie-In** **Closed** **02/03/2011** **02/13/2011** **02/07/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Reference Sheet U-3108, attached sketches, and material information sheets

At 11:30am on 2/2/2011, Michelle Smith (Turner), Eric Zagol (AECOM), Guy Hollins (TJPA), Rick Bowling (46 Minna Property Manager), Dan Helminiak (SFWD Inspector), SFWD water department crew, Robert Friend (Trinet), Jason Dunne (Webcor Obayashi), and Mario Saldana (Webcor Obayashi) met to discuss the 6in Fire Service Lateral and 1in Water Service Lateral for the 46 Minna building.

SFWD has proposed the new tie-in pipe configuration.
1. New 6in Fire Service Lateral Tie-in at 46 Minna St (See Attachment A)
- Old existing fire service lateral is to be cut out of the existing water main up to the gate valve as shown in the sketch, and replaced with straight pipe. A new 10in hole is to be core drilled into the existing basement wall 22in east of the existing service lateral to incorporate the new 6in fire service lateral. SFWD will run the new 6in fire service

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

AECOM has coordinated with SFPUC Engineering (Chi Yu, Division Manager) and SFPUC inspector (Eugene Shu) and the direction agreed to is as follows:

6-inch Fire Service Renewal -

1. Coordinate with SFWD for the shutdown of the existing 6-inch fire water service. Shutdown by SFWD. SFWD to coordinate shutdown with SFFD.
2. Neatly remove existing fill material between the existing pipe and wall penetration to dislodge and free the existing pipe such that it can be removed by SFWD.
3. SFWD to cut and remove existing pipe.
4. Remove excess fill material to create flat even surface for link seal type pipe sleeve.
5. SFWD to install and connect new service.
6. Restore wall per SK-U-0005 attached.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

lateral through the hole and Trinet is to provide Link Seals (see attached material information sheets) to seal the space between the new pipe and wall hole.

2. New 1in Copper Service Lateral Tie-in at STA 5+17 (See Attachment B)
- Old existing 1in plastic poly pipe is to be cut and plugged with non shrink grout. A new 2in hole is to be core drilled 4in east of the existing 1in service, to incorporate the new 1in copper service lateral. The space between the new pipe and wall hole will be sealed with non-shrink grout.

Please advise if this is acceptable. An expedited response is requested.

1-inch Water Service Renewal -

1. Coordinate with SFWD for the shutdown of the existing domestic water service. Shutdown by SFWD.

2. Neatly remove existing fill material between the existing pipe and wall penetration to dislodge and free the existing pipe such that it can be removed by SFWD.
3. SFWD to cut and remove existing pipe.
4. SFWD to install and connect new service.
5. Fill void between pipe and exposed wall penetration with non-shrink grout.

U-0093.1 **46 Minna 6in FS Water & 1in Copper Water Service Lateral at STA 5+17 Tie-In** **Closed** **02/16/2011** **02/25/2011** **02/17/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Reference Response to RFI #U-0093, Sheet U-3108, and attached sketch

The SFWD completed the 1in domestic and 6in fire water service change-overs on 02/15/2011.
Part of the detailed provided in the response to RFI #U-0093 for the 46 Minna 6in Fire Service water lateral could not be installed due to the angle of the pipe installed by the SFWD.

Per discussion with E. Zagol of AECOM, please confirm the direction is to fill the void on the property side with 2-5 inches of non-shrink grout, finishing grout flush with the inside wall.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Confirmed. Fill the void on the property side with 2-5 inches of non-shrink grout, finishing grout flush with the inside wall.

U-0094 **Joint Trench Alignment Conflict With (E) Steam MH at Minna St. STA 0+85** **Closed** **02/03/2011** **02/13/2011** **02/04/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference Sheet U-3107 revised 12/27/10

The revised drawings show the Joint Trench alignment crossing through an existing old steam MH (Sta 0+85). The vault is a very large structure and extends to the north face of the curb of Minna St. Trinet believes that this vault is an abandoned structure.

Trinet requests direction for abandonment and/or demolition of this structure.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Steam MH at STA 0+75 has been abandoned by NRG Energy. Demolish as indicated on U-1107 (rev. 1 12/27/10) and in accordance with the contract documents.

Coordinate with Mike Eurkus (NRG Energy) at (415) 644-9668 through the TJPA's representative for the pick up of the salvaged steam MH ring and cover.

U-0095 **Utility Company Contacts** **Closed** **02/03/2011** **02/13/2011** **02/04/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** Turner Construction Comp Kevin Chiu

Co-Author:

REQUEST:

Reference Sheet U-0002 General Notes - Existing Utilities

Sheet U-0002 - EXISTING UTILITIES lists several phone numbers for contacting various utility companies in the city. M Squared has tried to contact most of these numbers and each one has had either no answer or is currently not in service.

M Squared requests a list of active phone numbers for the utility companies listed. An expedited response is necessary due to utilty conflicts.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

"M Squared has tried to contact most of these numbers"

Please provide a list of the specific agencies that M Squared has tried to contact.

U-0096 **PG&E Conflict with Sewer Installation at Natoma STA 9+50** **Closed** **02/09/2011** **02/19/2011** **02/14/2011** **Yes** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** Turner Construction Comp Kevin Chiu

Co-Author:

REQUEST:

Reference Sheet U-3012 and attached drawing

On 02/07/2011, M Squared encountered what appeared to be a live PG&E duct bank during their sewer installation excavation on Natoma Street STA 9+50. Due to this conflict, M Squared was unable to continue excavating for

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

02/14/2011 Kevin Chiu

See CR U-006 issued on 2/14/11

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

the sewer (See attachment). On 02/09/2011, M Squared's Superintendant met with a PG&E Representative and PG&E Representative confirmed that the duct bank is live and is not due to be decommissioned for at least 3 months.

In order for M Squared to continue with the sewer installation, M Squared is proposing to:
- install MH #305 and begin installing pipe west of MH #305
- perform a temporary connection from MH#305 to the existing 3' x 5' brick sewer

M Squared can then perform the remainder of the work once PG&E has decommissioned the duct bank.

M Squared estimates that the additional cost to perform the temporary tie-in would be approximately $4,500.

Please confirm how you would like M Squared to proceed. M Squared requests an expedited response as they are currently stopped work and awaiting a response.

02/10/2011 Eric Zagol

Demolition and Construction Sequence shown on U-1112 and U-1120 lists per sequence order that the sewer work is to commence after PG&E has completed their Phase I work in Natoma and First St., all services cut over and existing duct bank is abandoned by PG&E. Given the fact that PG&E has experienced construction delays associated with their structures on First Street, the proposed sequence for sewer construction is acceptable.

Submit a temporary connection detail for review.

Coordinate with PG&E to abandon the existing 2-inch HP Gas along Natoma per U-1112 and U-1120 prior to demolition.

Coordinate with Verizon to abandon existing conduit (labeled "U" on base plans) prior to demolition per U-1112 and U-1120.

U-0096.1 **PGE Conflict with Sewer on Natoma at First Workaround** **Closed** **02/15/2011** **02/25/2011** **02/18/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Reference U-3012 and attached sketch

Per response to RFI#U-0096, M Squared has provided the attached connection detail.

Please confirm if it is acceptable to proceed

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Proceed with the temporary connection per the M Squared connection detial.

U-0097 **PG&E Conflict with Sewer Instll on Natoma at First** **Closed** **02/10/2011** **02/20/2011** **02/14/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference Sheet U-3012

Following on from M Squared's RFI #U-0096, M Squared has confirmed in the field that there is a grade conflict between the proposed sewer and the existing electrical duct bank on Natoma between STA 9+30 to 9+50. The conflict is between the bottom of the electrical duct bank and the top of the new 24'' sewer pipe.

The elevation of bottom of electrical duct bank is 11.5'
The top of the 24'' VCP sewer is 11.82'

M Squared has also confirmed with PG&E that 3 of the 4 concrete encased conduits are occupied, 2 being occupied by 12KV lines. The duct bank is to be abandoned in the future but PG&E was unable to provide a schedule for this work.

Please advise M Squared on how to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Demolition and Construction Sequence shown on U-1112 and U-1120 lists per sequence order that the sewer work is to commence after PG&E has completed their Phase I work in Natoma and First St., all services cut over and existing duct bank is abandoned by PG&E.

Proceed per response to RFI U-0096.

U-0098 **Potholing at Blackrock** **Closed** **02/10/2011** **02/20/2011** **02/10/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** Webcor Construction LP Marina Rosso

Co-Author:

REQUEST:

M Squared is planning to pothole next week at Howard STA 9+40, First St STA 1+50 and First St STA 2+10 to confirm the alignment and depths of the new 12'' water main on First St. from Howard to Natoma.

Guy Hollins from TJPA has advised M Squared that Blackrock is requesting additional potholing in the off-hours to determine locations of AT&T facilities in the area.

Please provide M Squared information regarding the locations of the addtional potholes requested, including the requested depths and sizes.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Can't find answer in Constructware

U-0099 **Returned Submittal Comments** **Closed** **02/16/2011** **02/26/2011** **03/11/2011** **Potentially** ☐

From: Webcor Construction LP David Hungerford **To:** Turner Construction Compan Michelle Smith **Answered By:** Turner Construction Comp Kevin Chiu

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Ref Spec section 01 13 10

According to the Action and Distribution (section 1.11) of the submittal specifications, Submittals shall be returned indicating one of the following:

No Exceptions Taken
Make Corrections Noted
Revise and Resubmit
Rejected

We have received submittals back as "Not Reviewed" or "For Record Only". Please confirm these responses are acceptable and should be incorporated into the specifications.

SUGGESTION:

VOID - See RFI #T-0051

ANSWER: **Accept Suggestion:** ☐

See RFI T-0051, Returned Submittal Comment, for response.

U-0100 **Minna St MH#207 Proposed Relocation** **Closed** **02/18/2011** **02/28/2011** **02/22/2011** **No** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Service Eric Zagol

Co-Author:

REQUEST:

Reference Revised Sheet U-3009 and attached sketches

The current location of MH#207 at STA 9+25.87 will place a cap on the existing water main (installed by SFWD on 02/17/2011) in Trinet's excavation. Trinet is concerned that the old water main may not be adequately restrained and could create a dangerous condition for their excavation for MH#207. Trinet proposes to move MH#207 4 feet west to STA 9+21.87 +/-, as shown in the attached sketch, so that the cap is outside of Trinet's MH excavation. The revised invert elevation for the new MH location is shown on the attached sketch.

Please confirm if this is acceptable,

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Proposed design change is acceptable.

AECOM suggests no change to contract price for this modification.

U-0101 **First St CB#501 Conflict with Existing Utilities** **Closed** **02/22/2011** **03/04/2011** **02/28/2011** **Yes** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** Turner Construction Comp Daphne Faulkner

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Reference Sheet U-3021, attached sketch, and USA ticket

During excavation for CB#501, Trinet encountered what appears to be a PG&E vault (shown in plans as EMH 7712), PG&E Duct (Shown in plans as 1- 2" & 4-6" EP), 2-2" steel conduits (not shown in plans), and a concrete shoring wall (not shown in plans).

- The 2-2" steel pipe is in conflict with Trinet's installation of CB#501, and will need to be relocated or abandoned to facilitate the installation of the catch basin. Trinet has done their due diligence (2nd and 3rd No Response follow ups) and these lines were not marked by the owner through USA (attached). Trinet requests direction on the relocation/abandonment of these utilities.

- Trinet proposes to move CB#501 two-feet north to avoid the conflict with the existing EMH 7712. Please advise if this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Pending approval by the TJPA, a deductive CR will be issued.

02/28/2011 - Eric Zagol

Following AECOM's review of the Transbay Transit Center Project 50% construction documents (rev. 12/20/10), further review of the Existing Terminal Ramps & Demolition Plans Project construction documents, and AECOM's understanding of the demolition of the existing Terminal "hump" structure and the timing of such demolition, CB#501 is no longer required.

Delete catch basin #501 and associated 10-inch sewer lateral.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0102	First St. CB#206 in Conflict with (E) Subsurface Conc. Structure / Duct Bank	Closed	02/23/2011	03/05/2011	03/04/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** Turner Construction Comp Daphne Faulkner

Co-Author:

REQUEST:

Reference Sheet U-3009 and attached sketch and photo

During Trinet's excavation for replacement of CB#206 on the northwest corner of First St. and Minna St. (at STA 9+31), they encountered a concrete subsurface structure or concrete encased duct bank not indicated on the contract drawings. The existing catch basin is approximately 30in deep and is constructed on top of the existing concrete structure/duct bank (see attached drawing).

Trinet requests direction on the demolition of the existing catch basin and the installation of the new catch basin CB#206.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Pending approval by the TJPA, a deductive CR will be issued.

03/04/2011 - Eric Zagol

As determined during a site visit on 3/3/11 with Trinet, AECOM and W/O; existing unforeseen conditions including an abandoned sub-sidewalk basement wall along Minna Street, an active sub-sidewalk basement wall for the 100 First St. property, and an abandoned telecommunications concrete duct along First Street create a situation where the installation of a new catch basin would require an extensive amount of unforeseen demotion.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

In lieu of installing a new catch basin barrel to replace existing modify the existing catch basin as follows:

Clean interior walls and bottom.
Apply 1/2-inch think uniform layer of mortar on interior walls and bottom.
Install cast iron trap.
Install pipe culvert and connect to MH#207 as shown in Plans. New culvert size and invert shall match existing culvert at catch basin. Use ductile iron pipe if depth of cover is less than 3 feet.

U-0102.1 **Catch Basin #206 redesign** **Closed** **04/01/2011** **04/11/2011** **04/13/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Please clarify the following items relating to the re-design of CB#206:

1) The only specification section addressing mortar coating is in 33 31 10 Paragraph 2.1.I, which specifies a "Wet Spray Mortar" application. This process would be cost prohibitive for coating only one catch basin. Trinet proposes the use of "SikaTop 123 Plus" mortar - product data sheets are attached. Please advise if this product is acceptable or specify an alternate material.

2) The RFI response directs Trinet to use ductile iron pipe for culvert runs with less that 3' of cover. If 22.5% DI bends are required to construct the culverts Trinet would prefer to use Mechanical Joint Fittings. Please advise if these are acceptable.

SUGGESTION:

Eric Zagol 4/12/2011: 1) SikaTop 123 Plus mortar is acceptable. 2) MJ DIP for 22.5 degree fittings is acceptable for culvert runs with less than 3 feet of cover.

ANSWER: **Accept Suggestion:** ☐

U-0103 **Natoma St. 4in Water Line Conflict with MH#306** **Closed** **02/24/2011** **03/07/2011** **02/24/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Reference Sheet U-1113 and U-3113

A 4-inch water line runs from east to west on the south side of Natoma from Sta 9+40 to Sta 10+95. At Sta 10+95, the 4-in water line 90degrees into the building at 400 Howard St. This building however, appears to be fed from the existing 8-inch line on 1st St between Howard and Natoma.

Is this 4-inch water lateral at Sta 10+95 on Natoma already abandoned? If not, can M Squared abandon it? It is currently in conflict with the proposed location of MH#306, and is also in conflict with the excavation and shoring for the new 30-inch sewer along Natoma (TG04.1).

It is AECOM's understanding that the existing 4-inch lateral is "killed" (not supplying water) however the "killed" lateral may still be pressurized up to the lateral terminal point at the gate valves located on the south side of Natoma Street at Natoma Street STA 10+95.

Demolish 4-inch water as indicated on U-1112, U-1113 and U-1120.

Prior to demolition:

1. Coordinate with SFPUC inspector to confirm 4-inch lateral is "killed".
2. Coordinate with SFPUC inspector to confirm that the lateral is not pressurized and that the 4-inch gate valve at Natoma Street STA 9+40 (intersection with existing First Street 8-inch water main) is closed.
3. Coordinate with SFPUC inspector and install cap in First Street as shown on U-1120 at Natoma STA 9+55 +/-.

U-0104 **Natoma St. Temporary Sewer Connections at Sta 9+25 and Sta 7+20** **Closed** **02/24/2011** **03/06/2011** **03/01/2011** **Yes** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Reference Sheets U-1112, U-1120, U-3012, and RFI#U-0096

In order for M Squared to install the new water main on Natoma Street between Sta 6+40 to Sta 10+00, the existing 3'x5' sewer must first be demolished. The 3'x5' sewer cannot be demolished until the new 24-inch VCP has been installed and connected to the existing sewer on First Street at Sta 9+59. Per sheets U-1112 and U-1120, the new 24-inch sewer is to be constructed after the demolition of the PG&E ducts. However, demolition of the PG&E ducts cannot be completed because PG&E has not completed their relocation work

Per RFI#U-0096 (M Squared RFI #009), as confirmed by

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Due to existing PG&E duct in conflict caused by PG&E's delay with First St. Phase I relocations, the two 12-inch temporary HDPE connections as proposed are acceptable as an interim condition until PG&E Phase I work is complete and the existing duct in conflict can be demolished per plans.

Daphne Faulkner - Pending approval by the TJPA, a CR will be issued.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

PG&E in the field on 02/09/2011, there is a live PG&E duct bank in conflict with MH#305 and the new 24-inch VCP between MH#305 and MH#306, and not due to be decommissioned for at least three months.

M Squared proposes to install a 12-inch HDPE pipe from Sta 9+25 to Sta 9+59, and perform a temporary connection to the existing 3'x5' sewer on First Street. Surveys carried out on the electric duct bank at Sta 9+30 on 02/08/11 shows that the bottom of the Duct Bank is approx. 10.8, meaning a 12-inch pipe will fit. In addition, M Squared proposes to perform a temporary connection (also 12-inch HDPE) at Sta 7+20 from the new MH#303 to the existing 3'x5' sewer. This would allow M Squared to demolish the 3'x5' sewer from Sta 7+02 to Sta 9+59, and allow M Squared to install the water from Sta 6+40 to Sta 10+00.

M Squared estimates the cost for both of these connections is $20,000.

An expedited response is required to avoid impact to the installation of the water line

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Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0105	**Natoma St Duct Bank Conflict at Sta 12+92**	**Closed**	**02/24/2011**	**03/06/2011**	**03/01/2011**	**Yes**	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Reference Sheet U-1113, U-1122, U-3013 and attached drawing

A pothole on Natoma Street at Sta 12+92 confirmed that the duct bank shown on Sheet U-3013 is in conflict with the proposed 30-inch VCP sewer (see attached drawing).

Per sheets U-1122 and U-1113, the new 30-inch sewer is to be constructed after the demolition of the PG&E ducts. However, demolition of the PG&E ducts cannot be completed because PG&E has not completed their relocation work. Per PG&E's new schedule this work is not scheduled to be completed until 06/31/2011. This would

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Due to existing PG&E duct in conflict caused by PG&E's delay with Fremont St. Phase I relocations, the12-inch temporary HDPE connection as proposed is acceptable as an interim condition until PG&E Phase I work is complete and the existing duct in conflict can be demolished per plans.

Daphne Faulkner - Pending approval by the TJPA, a CR will be issued.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

mean M Squared's work cannot start until after this.

In order for M Squared to continue with their work, M Squared proposes the use of 12-inch HDPE pipe from Sta 12+80 to existing sewer at Sta 13+15 (proposed location of MH#602). Once PG&E has completed their cutovers and the duct bank is abandoned, M Squared will demo the duct bank per specifications and complete the installation of the 30-inch VCP sewer from Sta 12+80 to MH#602.

M Squared estimates the cost for this work is $15,000.

An expedited response is required to avoid impact to the installation of the sewer and water line

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U-0106 **First St Sewer MH#502 Adjustment to Avoid Conflict w/ (E) PG&E Duct** **Closed** **02/25/2011** **03/07/2011** **02/28/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Reference Sheet U-3021 and attached sketch

In order for Trinet to avoid a conflict with the existing PG&E duct along the west wall of their excavation, Trinet adjusted the south end of the MH#502 structure by 7 inches to the east (as shown in attached sketch). MH#502 is still aligned to incorporate the connection to the existing brick sewer, and the alignment of the new 24-inch VCP run is unaffected by this change. Trinet will adjust rebar as required to maintain the required spacing and clearances.

Please confirm if the adjustment of MH#502 is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The sketch referenced above is based on CCSF DPW Standard #87,184 that shows the minimum reinforcing plan for the connection to the existing 3'x5' brick sewer. Provide reinforcing for connection to 3'x5' per CCSF DPW Standard.

Confirm that the manhole is being constructed per CCSF DPW Standard #87,182 as shown in Detail 10 on U-5001.

Provide width of west wall and location of reinforcing steel at 3'x5' brick sewer connection and 24-inch VCP sewer connection for review.

U-0107 **AWSS Cap Permit Requirements** **Closed** **02/25/2011** **03/07/2011** **02/28/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

W/O would like to confirm that other than any standard permits required for any excavation in the city of San Francisco, there is no additional permit required by any city agency in order to perform work on the AWSS caps.

Per discussions with Michael Smith SFDPW BOE, there are no additional permits required for AWSS construction beyond the standard permits for constructing utilities within the public right-of-way.

Notify CCSF SFFD and SFPUC/SFWD through the TJPA's representative in advance the work to isolate work areas.

U-0108 **FH Relocation on Beale St** **Closed** **02/25/2011** **03/07/2011** **02/28/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Reference sheet U-3124 and attached photo

See the photo attached. The proposed location for the FH on Beale St at ~Sta 2+20 is in between a driveway for a parking garage and a driveway for a loading dock. Per discussions with Eric Zagol, please confirm the FH is to be relocated to the East side of Beale St as highlighted by the green line on the attached drawing.

Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Construct FH lateral and FH on the East side of Beale Street at STA 2+04 as shown on SK-U-0008 attached.

U-0109 **First St Sewer Grade Change To Conform to Existing 3'x5' Brick Sewer** **Closed** **03/02/2011** **03/14/2011** **03/03/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Reference Sheet U-3021, U-3009, and attached sketch

This RFI confirms modification discussed in the field by Trinet and discussed with the Design Engineer, SFDPW, and W/O personnel. Trinet's field survey shows the existing 3'x5' brick sewer on First Street to be approximately 11-inches lower than the grade depicted on the drawings. Trinet also checked the elevation of the existing SSMH (10-feet north of MH#501) and confirmed

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Construct MH#502 at First St. STA 4+98 as shown on U-3021 to match the invert elevation of the existing 3'x5' brick sewer, elevation 6.77 as determined in the field by contractor.

Construct MH#501 at First St. STA 4+45 as shown on U-3021 with an invert elevation of 7.58 as determined by contractor.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

that it is approximately 11-inches lower than what is shown on the drawings. Trinet installed MH#502 with invert elevation at 6.77 to match the existing brick sewer at the connection point. The new 24-inch VCP is being installed 11-inches lower than what is shown on the drawings maintaining the design slope of 0.0062. MH#501 will be installed with the invert elevation of 7.58, as shown in the attached sketch.

Please confirm that this design is acceptable. Also, please provide a revised grade for the 24-inch VCP run from MH#207 (Minna St.) to MH#501.

Construct MH#207 per RFI-U100.

Construct the 24-inch VCP sewer from MH#207 (invert elevation 8.67 per RFI U-0100) at a continuous downward slope such that the invert elevation of the 24-inch VCP at MH#501 matches the invert elevation of MH#501 at elevation 7.58.

Based on discussions with Trinet in the field, Trinet reported 11-inches of sediment/sludge/dirt in the existing 3'x5' brick sewer. Please confirm that existing sewer in First Street was cleaned with high velocity hydro cleaning equipment per specification section 33 31 10 3.2 A prior to excavation.

U-0110 **Joint Preconstruction Survey Requirement** **Closed** **03/02/2011** **03/12/2011** **03/03/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** Transbay PMPC Derrick Cooper

Co-Author:

REQUEST:

Reference Specification Section 01 15 40, 1.5

Singer has been coordinating W/O access to the adjacent properties for W/O's subcontractors to complete their Joint Pre-Construction survey (Spec. 01 15 40, 1.5). Singer has informed W/O that they were instructed by TJPA Representatives to stop scheduling the joint surveys because TJPA will be conducting one overall survey, instead of having each individual contractor do them.

The surveys are a specification requirement for current and future subcontractors. Please clarify this specification, moving foward.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

TJPA will be conducting perconstruction surveys of adjacent property interiors. Singer will not be scheduling these surveys for W/O subcontractors.

U-0111 **Minna St. Joint Trench Conflict with (E) 8" elbow and thrust block** **Closed** **03/04/2011** **03/14/2011** **03/09/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Reference drawing sheet U-3409 and attached sketch.

During our excavation for the joint trench on the east end of Minna St. (STA 9+29) Trinet encountered the (E) 8" water main in Trinet's trench line, approximately 1 foot from our termination point. The existing alignment is different from what is shown in the contract drawings. The drawings do not show the water line crossing the joint tranch. The alignment and grade of the water main changed in Trinet's excavation to avoid the adjacent catch basin. A 22.5 degree elbow is located in the center of the joint trench excavation. The elbow is rolled up to accommodate the grade change and there is a thrust block under the footing. Trinet does not believe that it would be safe to excavate under the water main for Trinet's duct bank without having the line shutoff. Extending the PG&E ducts to FOC will also place the connection point for PG&E's extension of the duct bank directly under the water main fittings and elbows. There is adequate clearance to install the 4" gas line above the water main and extend it out to FOC per contract. The top of the water main is 49" below FG at the south side of the joint trench, at the location of the ags line.

Trinet propses to terminate the concrete encased duct bank approximately 5 ft. back from FOC. This would allow adequate room for Trinet to mandrel the ducts after the joint trench is installed without undermining the water main. PG&E could then extend their duct bank under the water main to connect to Trinet's water main. Please advise.

Per request to Jason Dunne (W/O) via email on 3/4/11 please provide the following information for review:

Horizontal (from a known point i.e. FOC along First St.) and vertical location of "top of water main".
Horizontal (from a known point i.e. FOC along First St.) and vertical location of water line at "22.5 degree elbow".
Determine if the water main is mechanically restrained with tie rods at each bend in questions.
Approximate size of existing concrete thurst block a the "22.5 degree elbow".

U-0111.1 **Minna St Joint Trench Conflict @ Existing Water Line Elbow** **Closed** **04/18/2011** **04/28/2011** **04/21/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Please find the attached as built drawing of the Joint Trench @ the intersection of Minna St. and First St. where the (E) 8" W main elbow was encountered.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 4/20/2011: Please provide the information requested in RFI U-0111 response or confirm that the existing water line referenced in RFI U-0111 is mechanically restrained.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Construct Joint Trench to limit as indicated in Plans.

Refer to ASI-005 for the Joint Trench extension into First Street.

U-0111.2 **Minna St Joint Trench Conflict @ Existing Water Line Elbow** **Closed** **04/25/2011** **05/05/2011** **04/28/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Service Eric Zagol

Co-Author:

REQUEST:

Eric Zagol 4/20/2011: Please provide the information requested in RFI U-0111 response or confirm that the existing water line referenced in RFI U-0111 is mechanically restrained.

Answer: The waterline is mechanically restrained.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 4/26/2011 Proceed pre RFI U-0111.1 response.

U-0112 **Minna St. Joint Trench, AT&T Vault and Conduit Configuration** **Closed** **03/08/2011** **03/18/2011** **03/15/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Service Eric Zagol

Co-Author:

REQUEST:

Reference Sheet U-3408

At the 02/03/2011 Joint Trench Pre-Construction meeting and field walk through, the AT&T inspector expressed concern with the configuration of the AT&T ducts connecting to the AT&T vault at Sta 3+71. The AT&T inspector was specifically concerned with the east side of the vault where all eight 4-inch ducts are shown entering the vault on the one side (north side) of the center line.

Trinet would like AT&T to review the duct configuration connection to the vault as depicted in the contract drawings and provide a revised drawing if they wish to make a change.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

AT&T has reviewed the information and has proposed revisions to the Joint Trench to accommodate the following:

1. Revised information from AT&T regarding 555 Mission St. service point of connection, and
2. AT&T preferred Minna St. AT&T vault conduit penetration locations

Attached SK-U-0009 is a markup of the AT&T Vault at STA 3+71 butterfly drawing indicating conduit penetrations and schematic diagram of conduit alignments. Revised Minna St. Joint Trench Plans are being prepared as part of ASI#3 to address these revisions as well as changes associated with RFI U-0088.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0113	AWSS Cap on First St. at Howard	Closed	03/08/2011	03/18/2011	03/10/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Reference Drawing No. AWSS MA-5

On 03/08/2011, M Squared excavated and exposed the existing AWSS line and gate valve on First St. at Howard. Upon inspection of the existing gate valve, it appears that the gate valve does not have lugs on it. This means that M Squared cannot tie back the proposed 10-inch AWSS cap on the AWSS line.

Please advise on how you would like M Squared to proceed with the cap installation. An expedited response is requested.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Michael Smith (SFDPW BOE), AWSS Engineer of record, will provide response directly to PMPC/Turner.

03/10/2011 - Daphne Faulkner

Michael Smith (SFDPW BOE), AWSS Engineer of record provided response via email dated 3/9/11. See attached email, RFI response and AWSS Standard Dwg. III.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0113.1	AWSS Strong Backs	Closed	03/17/2011	03/27/2011	03/22/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** Turner Construction Comp Kevin Chiu

Co-Author:

REQUEST:

Reference RFI #U-0113

On 3/16/2011, M Squared met with Dan Helminiak from SFWD and Michael Smith from BOE to proceed with the AWSS Cap work at First & Howard. As directed in the response to RFI#U-0013, M Squared installed the strong back provided to them. After the strong back was installed, Dan H. and Michael S. determined that the strong backs would not work due to the diameter of the existing valve bell.

M Squared requests direction on how to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See attached file, "RFI U-0113.1 1490J Phase I First Street RFI No. 113.1 BOE Response 03 22 11," dated 03/22/11 for handwritten response per Michael Smith of SFDPW/BOE/Mechanical. Response below was copied into CW:

"- Proceed with installation without strong back and tie rods.

- A minimum of 100' of out-of-service AWSS main north of cap at First/Howard streets, and south of cap at Mission/First streets shall remain-in-place.

- Additionally the specified concrete thrust block shall be increased by 3 times the volume and encompass the existing abandoned-in-place line for a distance of 4' downstream of steel plate.

- Strong backs (2) shall be returned to CCSF."

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0114	PG&E Abandonment Schedule for Natoma St. at Second St.	Closed	03/09/2011	03/19/2011	05/07/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Reference Sheet U-1110 and U-2010

On 03/04/2011, M Squared met with a PG&E representative on site at Natoma and 2nd Street. The PG&E representative confirmed that none of their utilities had been abandoned in the area, and that the PG&E representative would be unable to provide a schedule for this abandonment.

Per note 2 on sheet U-1110, the services for 77 Natoma and 83 Natoma were to be terminated by Feb 2011. To date, this work does not appear to be completed.
In PG&E's letter to the TJPA regarding their schedule, there is no reference to work on Natoma Street at 2nd St.

M Squared is unable to proceed with their sewer and water utility installation on Natoma St. west of shoring wall until PG&E has completed abandonment of their existing utilities.

Please provide M Squared with an updated schedule for all PG&E's termination/abandonment work at 2nd and Natoma St.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 3/18/2011 ***5/5/11 UPDATE***

77 Natoma and 83 Natoma services have been terminated, refer to USR Nos. 11 and 13 as executed by W/O, Turner and PG&E on 4/21/11.

As of 5/4/11, PG&E estimates that Natoma Street will be de-energized by 5/21/11. Coordinate USRs for the remaining electric ducts with Turner and PG&E.

3/18/11 RESPONSE

Per demolition and construction sequencing shown on sheet U-1110, water and sewer work shall commence after PG&E has completed their Phase I relocations in First St., Natoma St. and existing electric ducts are abandoned by PG&E.

PG&E services to 77 Natoma and 83 Natoma have been terminated as part of the Existing Terminal & Ramps Demolition Project. USRs for these services are currently being prepared by the TJPA's Representative (Turner). The USRs shall indicate the service conduits and cables that are abandoned subject to demolition as indicated in sheet U-1110.

To facilitate schedule, AECOM has requested PG&E to de-energize Natoma St. to the extent possible in an effort to re-sequence construction of the sewer. PG&E's response and schedule of abandonment is forthcoming.

As shown on U-3110 the water line could be constructed prior to PG&E abandoning their facilities. Pothole to confirm the water line can be constructed as shown on U-3110.

U-0115	AWSS Cap Work Sequence on First St	Closed	03/07/2011	03/17/2011	03/15/2011	Yes	☐

From: Webcor Construction LP Nhi Tran **To:** **Answered By:**

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Turner Construction Compan Michelle Smith — Turner Construction Comp Kevin Chiu

Co-Author:

REQUEST:

Refer to Sheets MA-5, MA-8

There are two caps that are required to be installed in order to shutdown the AWSS service on First St between Mission to Howard St. Per the construction schedule, both caps were supposed to be worked on simultaneously. Please confirm per a conversation in the field on 03/07/2011 with inspectors Michael Smith (SFDPW) and Dan Helminak (DPW), only one AWSS cap can be installed at a time.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The below response was copied into Constructware on behalf of Michael B. Smith SFDPW/BOE/Mechanical (see attached, "RFI U-0115 1490J Phase I First Street BOE Response 03 11 11")

"Installing/capping of the AWSS lines at two locations in sequence instead of simultaneously was a decision made by the SFWD/CCD together with SFFD. Please contact Dan Helminiak of SFWD/CDD at (415) 420-4821 for further information" - Michael B. Smith SFDPW/BOE/Mechanical dated 03/11/2011

03/14/2011 - Eric Zagol

Michael Smith from SFDPW BOE will respond to this RFI.

U-0116 **Abandoned 6" Fire Water Service Thru 100 First St Basement Wall** **Closed** **03/18/2011** **03/28/2011** **03/21/2011** **Potentially** ☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Refer to sheets U-1109 and U-3109

An abandoned existing 6" fire water service lateral was discovered while demolishing the old 8" water main running down Minna St. The 6" fire water service lateral was not shown on the plans and there were no existing water valve covers to indicate the existence of this line. The abandoned lateral penetrates the foundation wall entering the basement to 100 First St at Station 7+36.

Please provide direction for plugging the void that will be left after 100 First St management removes the 6" water lateral pipe. A roughly 1ft x ft x 1ft deep square opening will remain after the fire water lateral pipe is removed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Contractor had knowledge of existing abandoned 6-inch fire water service at STA ~7+35.

Existing abandoned 6-inch fire water service at STA ~7+36 was exposed and potholed by Trinet on 11/19/2010 and included in Submittal TG0405-024 Item No: UA0000-020630A01.0 as Pot Hole No. 29.

Cut and plug abandoned 6-inch fire water service in accordance with specification section 02 41 00 3.6 at face of curb along the North side of Minna St.

Please clarify why private property improvements are being requested.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0117	Natoma St. Future Hydrant Location at Sta 11+79	Closed	03/21/2011	03/31/2011	03/24/2011	Potentially	☐

From: Webcor Construction LP Nhi Tran **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Service Eric Zagol

Co-Author:

REQUEST:

Reference Sheet U-3113

Sheet U-3113 shows an 8in x 8in x 6in tee in the new 8-inch water main on Natoma at Sta 11+79. The note on the drawing makes reference to it being used as a future location for a fire hydrant. Sta 11+79 is in front of a loading dock and parking garage on Natoma Street.

Please confirm that it is intended for M Squared to install the tee in the water main line at this location.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

As discussed in the field on 3/21/11 with Noel (M Squared) and Dan Helminiack (SFWD), construct tee for future fire hydrant and lateral connection at STA 11+37 (4 ft min. west of existing street light).

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0118	Minna Street Joint Trench, PG&E Duct Routing and Termination Points	Closed	03/24/2011	04/03/2011	04/06/2011	Potentially	☐

From: Webcor/Obayashi Joint Venture Colin Azevedo **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Service Eric Zagol

Co-Author:

REQUEST:

Please provide a routing drawing or written clairification of the routing for the PG&E Duct stub-outs in the Minna St. Joint Trench, between First St. and Second St. It is not clear from the plans in all cases where all the ducts extending from stub-outs terminate. Please expedite.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please see the attached sketches clarifying where the ducts extending from stub-outs terminate (/originate).

Please note that the 2-2" conduits shown on U-3410 sections C, D, F and G terminate at "stub out reference A".

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0119	Minna St. JT_ AT&T Reconfiguration and impact on (E) trees	Closed	03/25/2011	04/04/2011	03/30/2011	Potentially	☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Service Eric Zagol

Co-Author:

REQUEST:

The revised drawings for the Joint Trench alignment dated 3/16/2011 show the reconfigured AT&T ducts running through an existing tree well on the east side of the AT&T vault at Stn. 3+71. RFI U-0112 (Minna St, Joint Trench, AT&T Vault and Conduit Configuration) also shows the reconfigured AT&T ducts running through an existing tree well on the east side of the vault. This conduit layout in consistent with discussions with the AT&T inspector in the field was reflected in the shop drawings. The revised

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per discussions on site on 3/28/11 with Jack Kelliher (Trinet), Dave Olsen (AT&T), Dave Gibbons (AT&T) and Colin Azevedo (W/O), provide a 22.5 bend at conduit penetration for the 2-4" conduits on the south side of the east to avoid direct conflict. Remove tree grate and frame as required to construct conduit. Restore tree grate, fame, sidewalk curb and gutter. Protect tree and existing irrigation pipes in place.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

drawings do not address relocation and/or removal of the impacted trees and the related irrigation changes. Please review and advise.

U-0120 **MH601 Locatio** **Closed** **03/28/2011** **04/07/2011** **04/05/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Service Eric Zagol

Co-Author:

REQUEST:

Sheet U-3022 shows MH601 @ Sta 0+70 on Fremont Street. This location is also in the middle of the crosswalk on Fremont Street. USA markings show the existing traffic signal conduits crossing thru the center of the manhole. By moving the manhole approx 8¿ north the conflict with the traffic signal conduits would be avoided and it would also avoid having a manhole cover in a crosswalk. Please advise on how you would like to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Move proposed sewer MH north to STA 77.56 to avoid existing Traffic Signal
conduit conflict as shown in SK-U-013 attached.
Construct 10-inch CB culvert lateral as shown SK-U-013 attached.

U-0121 **AWSS Caps at Beale Street** **Closed** **03/31/2011** **04/10/2011** **04/06/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Service Eric Zagol

Co-Author:

REQUEST:

1 - Current bid documents for Trade Group TG04.2R (AWSS system at Mission Street) call for capping of the AWSS system on Beale Street near the intersections with Howard Street and with Mission Street. Because of delays in the bid schedule for TG04.2R, the construction schedule dictates that these caps be completed well before the anticipated start of the TG04.2R field work. Please provide details so as to allow this capping work to be done in advance of the awarding of the TG04.2R scope of work.

2 - Please confirm whether the material required to do this work is available at the City of San Francisco.

3 - Please provide direction as to how this scope of work should proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Pothole the existing AWSS gate valve at the Beale at Mission street proposed cap location as shown on M-6 (Rev No. 1, 1/31/11) to determine if the existing gate valve has lugs. SFWD to inspect condition of gate valve once excavated, coordinate with SFWD inspector accordingly.

Details for the capping work at Beale and Mission, and Beale and Howard will be provided following gate valve inspection.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

This capping is near critical path on the current construction schedule. An expedited response is requested.

U-0121.1 **AWSS Caps at Beale Street** **Closed** **05/02/2011** **05/12/2011** **05/05/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

The AWSS valve at Mission and Beale was potholed on 4/29/2011 per response to RFI#U-0121. It was confirmed that the existing valve does not have lugs.

Please provide details for capping the AWSS line on Beale.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 5/4/2011 From Michael Smith (SFDPW BOE);

Refer to attached DWG M-6 Rev 1 with changes made on 05/04/11. Cap is to be tied back to (E) pipe with cast lugs.

Eric Zagol 4/5/2011 ***4/19/11 UPDATE***

In response to the numbered items above:

1. Refer to the attached markups of TG04.2R documents from SFDPW BOE that define the AWSS abandonment/capping scope for Beale Street; MA-6 for the work in Beale St. at Mission St., and MA-10 and MA-19 for the work in Beale St. at Howard St.

2. SFWD Inspector Daniel Helminiak has confirmed that the following materials are available at the SFFD Yard:

Beale at Mission Street

- 1 10-inch DI MJ spigot x GH spigot adapter

- 1 10-inch DI MJ flat cap

- 1 18-inch x 18-inch x 1-inch steel plate

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Beale at Howard Street

- 4 10-inch DI stop collar

- 2 10-inch DI bell collar

- 1 10-inch DI flat cap

Coordinate with SFWD Inspector for materials provided by SFWD.

3. Proceed with this work per direction from TJPA Representative. Coordinate the shutdown of existing AWSS main in Beale St. with SFWD prior to commencing the work.

4. Submit pothole data for review per RFI response provided on 4/5/11 as stated below.

****

4/5/11 Response

Pothole the existing AWSS gate valve at the Beale at Mission street proposed cap location as shown on M-6 (Rev No. 1, 1/31/11) to determine if the existing gate valve has lugs. SFWD to inspect condition of gate valve once excavated, coordinate with SFWD inspector accordingly.

Details for the capping work at Beale and Mission, and Beale and Howard will be provided following gate valve inspection.

U-0122 **M Squared Submittals for TG04 Bid Packages** **Closed** **04/01/2011** **04/11/2011** **04/11/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Michelle Smith **Answered By:** Turner Construction Comp Michelle Smith

Co-Author:

REQUEST: **SUGGESTION:** **ANSWER:** **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please confirm the following:

Per previous discussions it has been agreed between the TJPA, AECOM, Turner Webcor/Obayashi and M Squared that material submittals approved for use by M Squared in individual bid packages will be considered acceptable for all bid packages M Squared is working on (TG04.1, TG04.3, TG04.4, & TG04.6).

These submittal include:

TG0434-002 - Excavation & Backfill Samples
TG0434-003 - Excavation & Backfill Test Reports
TG0434-004 - Excavation & Backfill Compaction & Warning Tape
TG0434-005 - Shoring Plan
TG0434-006 - Backfill Material
TG0434-007 - Water Utilities Distribution Piping & Valves
TG0434-010 - Asphalt Mix Design
TG0434-013 - Noise Mitigation Plan
TG0434-015 - CQC Plan
TG0434-016 - Health and Safety Plan and MSDS
TG0434-017 - SWPPP
TG0434-018 - Debris Management Plan
TG0434-025 - Cast in Place Concrete
TG0434-030 - Labor Rates
TG0404-001 - Sewer Package
TG0404-002 - Filter Fabric
TG0404-003 - Concrete Forming
TG0404-004 - Precast Concrete
TG0404-005 - Precast Concrete Catch Basin Base

Eric Zagol, 4/4/2011: AECOM suggests that the Construction Manager Oversight (Turner) confirms this RFI.

Guy Hollins, 4/5/2011: Confirmed for all submittals listed with the understanding that no deviations from the previously-approved submittal are allowed without the submission and approval of a separate and new submittal request.

Michelle Smith, 4/11/2011: TJPA has no objection to subcontractors using submittals that were submitted by their OWN company and approved for a previous TG04 Utilities Relocation trade package, as long as the application is the same as the application in the previous trade package.

U-0123 **Unknown Fire Service @ 85 Natoma** **Closed** **04/04/2011** **04/14/2011** **04/05/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

While Excavating to install the water line on Natoma from the shoring wall to 2nd Street M Squared encountered an existing fire service going to 85 Natoma. This service is not shown on the drawings and is not in the specifications

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SFPUC Customer Service Bureau data shows an active Domestic water, an active Fire water service, and 2 "killed" Domestic water services to 85 Natoma Street.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

as one of the connections to be made to the new line.
(See attached)
Please advise on how to proceed.

Coordinate with SFWD to confirm and locate the active Fire water line to 85 Natoma Street.

Provide information on location, size, and material for review.

U-0123.1 **Fire Service @ 85 Natoma** **Closed** **04/11/2011** **04/21/2011** **04/18/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Michelle Smith **Answered By:** Webcor Construction LP Colin Azevedo

Co-Author:

REQUEST:

Please note that on RFI #U-0123 the location of the fire service was incorrectly drawn. The fire service is actually located around Sta 2+35.

M Squared potholed at Sta 2+35 and discovered a 4¿ ductile iron pipe which is believe to be the active fire service for 85 Natoma Street.

Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 4/15/2011: Per response to RFI U-0123, coordinate with SFWD Inspector to confirm the 4" DIP is the active fire water service to 85 Natoma Street.

Once confirmed, provide and install 8"x8"x4" tee and 4" gate valve.

Connection to existing 4" DIP fire service by SFWD. Excavate and shore for connection in accordance with the contract documents. Coordinate with SFWD Inspector for connection by SFWD.

U-0124 **Conflict Between New 24" Sewer and existing AWSS Line on Beale** **Closed** **04/07/2011** **04/17/2011** **04/28/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

M Squared has confirmed that the 14" AWSS Line shown on sheet U-3024 is in conflict with the proposed 24" VCP on Beale Street. The AWSS line is shown on the plan view but not on the elevation view on sheet U-3024.
M Squared also shot the elevation of the existing sewer manhole. The elevation is 4.60, and not 4.70 as shown on the plans. The invert of the 14" AWSS is 6.2. (See attached)
Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 4/26/2011: Construct temporary 2-10" VCP and new SMH as shown on revised U-3024 (rev 2 4/26/11) and SK-U-0018. Construct SMH #701 to allow for future 24" VCP connection as indicated.

Relocate AWSS line in Howard St., not included in package. Design forthcoming potentially to be included in TG04.2R.

Following relocation of the AWSS line, construct 24" VCP sewer per contract documents.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

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U-0124.1 **Conflict Between 24" Sewer and AWSS Line on Beale** **Closed** **07/07/2011** **07/17/2011** **03/27/2012** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

Per the response to RFI#U-0124 a design to relocate the AWSS line @ Howard and Beale is forthcoming. Please advise the status of this design.

SUGGESTION:

Eric Zagol 7/20/2011 Design is being performed by SFDPW BOE and will be tracked and issued via a forthcoming ASI. Schedule will be discussed with SFDPW BOE on 7/22/11. An update will be provided in the RUP OAC on 7/26/11.

ANSWER: **Accept Suggestion:** ☐

RFIs U-128.2 and U-124.1 were responded to in July of 2011 and provided temporary solutions to utility conflicts with a full resolution planned to come via future ASI. ASI 21, which addresses these issues, was uploaded to Constructware on 3/21/12 by Eric Zagol for design approval. A CR for this work will be issued in the near future.

U-0125 **Precast Catch Basin Bases** **Closed** **04/08/2011** **04/18/2011** **04/13/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Service Eric Zagol

Co-Author:

REQUEST:

In lieu of a cast in place base per CCSF DPW Standards, M Squared would like to propose the use of a precast catch basin. The catch basin barrel is attached to the precast base and it comes as one single unit. Before installing the precast catch basin base with barrel, M Squared will place a minimum 6" compacted level layer of crushed rock as the sub base. The proposed material specifications are attached.
Please confirm if this method is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 4/12/2011 Precast catchbasin base is approved with conditions specified.
The 5 foot catchbasin barrel shall be attached to the base section to form a monolith structure with the same dimensions, compressive strength and reinforcement as the CCSF DPW Standard cast in place base.
Provide a minimum 6" level layer of uniform compacted crushed rock as the sub base.

U-0126 **Existing Brick Man Hole @ Second and Natoma In Conflict With Joint Trench** **Closed** **04/11/2011** **04/11/2011** **04/13/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Service Eric Zagol

Co-Author:

REQUEST:

While potholing the Second St. Joint Trench crossing

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 4/12/2011: Confirm existing abandoned

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Trinet encountered an existing brick sewer man hole which is in conflict with the joint trench alignment. The manhole is not shown on the plans and had been paved over. The manhole also appears to have been previously abandoned. See the attached sketch and photograph detailing the location of the manhole.

Please advise on how to proceed.

sewer manhole is filled with slurry grout to 4 feet below rim elevation.
Demolish and remove existing abandoned sewer manhole as required to construct the Joint Trench to an elevation 1-foot below bottom of Joint Trench.
Backfill and restore in accordance with contract documents.

U-0127 **Minna Street Sewer Manhole #201 in Crosswalk** **Closed** **04/11/2011** **04/21/2011** **04/13/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Plan Sheet U-3007 shows MH#201 to be installed in the center of the crosswalk @ Minna and Second Street. The City of San Francisco typically avoids locating manholes in crosswalks, whenever possible, for ADA considerations. Please advise if MH#201 should be installed outside of the crosswalk.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 4/13/2011: Sewer manhole location can not be adjusted due to an existing 8-inch Water and 4-inch HP Gas main. Construct manhole at the location per Plans.
In lieu of CCSF DPW Standard MH cover, provide an ADA complainant cover that meets the following specifications:
1. MATERIAL - The cast iron shall be in accordance with ASTM "Standard Specifications for Gray Cast Iron Castings" Designation A 48, Class 30. The tinsel strength shall be considered the primary test for qualification.
2. FINISH- STANDARD FINISH SHALL BE RAW, AS CAST, AND YIELD A MINIMUM COEFFICIENT FOR FRICTION OF .6 OR BETTER IN WET OR DRY CONDITIONS.
3. CASTINGS - SHALL BE FREE OF BLOW HOLES, FLASHING, GRIND MARKS, AND OTHER SURFACE BLEMISHES.
4. Cover shall incorporate a "pic-hole" for lifting purposes.
5. ADA COMPLIANCY- CASTINGS SHALL HAVE HOLES NO GREATER THAN ½" IN THE DOMINANT DIRECTION OF MOTION, NO VERTICAL RISE OF GREATER THAN ¼", IF THE RISE IS GREATER THAN ¼" THE RISE/RUN RATIO NEEDS TO BE 1;2 AND THE MAXIMUM HEIGHT SHALL BE 1/2".
6. Cover shall BE MADE TO FIT EXISTNG FRAMES

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

OR be MACHINED to FIT EXITING FRAMES PER SFDPW STANDARD PLAN 87,190.
7. Cover should be MADE of quality EQUAL TO OR GREATER then THE PRODUCTS MADE BY D&L Foundry or Equal, see attached product data sheet.

U-0128 **AWSS Conflict with Sewer on Fremont** **Closed** **04/11/2011** **04/21/2011** **04/19/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

A pothole at Sta 0+52 has confirmed that the existing AWSS line is in direct conflict with the proposed sewer on Fremont Street. The drawings show a 4" HPW line at invert elevation 13.0. Measurements taken in the pothole reveal a 14" HPW line at invert elevation 8.4. At this elevation the HPW line is in direct conflict with the proposed VCP sewer.
Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 4/19/2011 A temporary connection between MH #601 and (E) MH in Howard Street is being considered as an option. Please confirm the invert elevation of the (E) MH at Howard St. (Fremont St. STA 0+29.5) is EL 6.4 as shown on U-3022.

U-0128.1 **AWSS Conflict with Sewer on Fremont** **Closed** **04/11/2011** **04/21/2011** **04/26/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

M Squared has confirmed the invert elevation for the existing manhole at station 0+29.5 Fremont St. is EL 6.4 as shown on U-3022.

Please adivse.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 4/25/2011: In reference to RFI U-0128 and U-0128.1, construct temporary 15" VCP from SMH #601 to existing SMH at STA 0+29.50 as shown on attached SK-U-0016 and SK-U-0017. Construct SMH #601 to allow for future 30" VCP connection as indicated in SK-U-0016.

Relocate AWSS line in Howard St., not included in package. Design forthcoming potentially to be included in TG04.2R.

Following relocation of the AWSS line, construct 30" VCP sewer per contract documents.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0128.2	AWSS Conflict with Sewer on Fremont	Closed	07/07/2011	07/17/2011	03/27/2012	Potentially	☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

Per the response to RFI#U-0128.1 a design to relocate the AWSS line @ Howard and Fremont is forthcoming.
Please advise the status of this design.

SUGGESTION:

Eric Zagol 7/20/2011 Design is being performed by SFDPW BOE and will be tracked and issued via a forthcoming ASI. Schedule will be discussed with SFDPW BOE on 7/22/11. An update will be provided in the RUP OAC on 7/26/11.

ANSWER: **Accept Suggestion:** ☐

RFIs U-128.2 and U-124.1 were responded to in July of 2011 and provided temporary solutions to utility conflicts with a full resolution planned to come via future ASI. ASI 21, which addresses these issues, was uploaded to Constructware on 3/21/12 by Eric Zagol for design approval. A CR for this work will be issued in the near future.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0129	Sewer Conflicts @ Second and Natoma	Closed	04/13/2011	04/25/2011	04/28/2011	Potentially	☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

M Squared is unable to excavate/shore/install the 18" VCP from the existing manhole at Sta 0+45 to MH#301 at Sta 0+81 as shown on sheet U-3010.
While excavating for the sewer installation M Squared encountered several unknown utilities which were unmarked and not shown on the contract drawings. Also, some of the known utilities are at different locations and elevations than indicated on the drawings. Due to the quantity and proximity of these utilities it is not possible excavate and shore between MH#301 and the existing MH at Sta 0+45.
Additionally PGE have yet to relocate their gas and electric utilities out of the area of the proposed MH#301.
See attached drawings illustrating M Squared's pothole findings.
Please advise on how to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 4/27/2011: AECOM has reivewed the information provided and requests a meeting with W/O and M Squared to review the data, review the demolition and construction sequencing shown in AECOM plans, and further understand why excavation and shoring is not possible.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0129.1	Sewer Conflicts @ Second and Natoma	Closed	05/02/2011	05/12/2011	06/03/2011	Potentially	☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Per response to RFI#U-0129 Webcor/Obayashi, M Squared and AECOM met on 4/29/2011 and discussed why the sewer line between MH#301 and the existing manhole at Sta 0+45 could not be installed with normal

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 6/2/2011 Revised contract documents will be provided via ASI 011 to address conflicts between MH#301 and STA 0+45.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

means and methods. M Squared remove the plates from their investigative pot hole trench on 5/2/2011 for AECOM to further review and understand the existing conflicts.

Please provide AECOM's findings from these meetings and provide direction on how to proceed with the sewer installation in this location.

Between MH #301 and MH #302:

1. Continue to perform subsurface investigations and submit location and elevation information for existing sewer laterals at the proposed connection to new sewer in accordance with Key Note 1 prior to construction.
2. Verify via pre construction TV inspection in accordance with Specification Section 33 31 10 that all active sewer laterals are shown on U-3010 and have been located in the field.

U-0130 **Sewer Removal On First Street** **Closed** **04/15/2011** **04/25/2011** **04/21/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Michelle Smith **Answered By:** Turner Construction Comp Kevin Chiu

Co-Author:

REQUEST:

During the weekly Utility Relocation OAC meeting on 04/12/2011 Eric Zagol with AECOM informed Webcor/Obayashi that new drawings for the removal of the existing sewer on First street had been issued on 04/08/2011. To date Webcor/Obayashi has not received these drawings.

Please advise the status of these drawings.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Kevin Chiu 4/21/2011: See CR U-022 transmitted on 4/18/2011 to W/O's document control email for ASI No. U-006 which contains the requested information.

U-0131 **Minna St PG&E Duct Bank Termination Points** **Closed** **04/19/2011** **04/29/2011** **04/22/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Michelle Smith **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

PG&E has confirmed Trinet is to terminate the PG&E duct back 3' outside the east and west walls of manhole 1319. Please confirm that the termination points of the PG&E duct bank as described will fulfill Trinet's scope of work and the future completion of the duct bank will be performed by PG&E.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 4/21/201:1 Joint Trench termination points at EMH 1319 and 1318 are as follows:

1319 East wall; PG&E would like the conduit capped and left 3 feet short of the vault with concrete encasement 15 feet short of the vault.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please note terminating the duct bank 3' outside the west wall of MH 1319 will leave the end of the ducts directly under the 24" high pressure water main. This may create an issue with future access for complete the duct bank by PG&E.

Please advise.

1319 West wall; PG&E would like the conduit capped and left 6 feet short (or 1-foot clear of existing 24-inch water, whichever is greater) of the vault with concrete encasement 15 feet short of the vault.

1318 North wall; PG&E would like the conduit capped and left 3 feet short of the vault with concrete encasement 15 feet short of the vault.

The new termination points shall be considered as the limit of new conduit installation at EMH 1319 and 1318.

U-0132 **Minna St Sewer Pressure Test** **Closed** **04/20/2011** **04/30/2011** **04/27/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Service Eric Zagol

Co-Author:

REQUEST:

The SFDPW inspector Jason Chin has advised Trinet that he will be requesting a pressure test of the newly installed 18" and 24" VCP sewer main. The contract specification and drawings to do not specify any form of testing for the sewer mains.

Please advise if pressure testing of the sewer main will be required.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 4/26/2011: Test sewers in accordance with the contract documents. See specification sections:

034010 3.1 E

CCSF DPW Standard Section 319 Low Pressure Testing per 333110 1.2 A.

333110 1.4 C

333110 3.7

333110 3.8 B

333110 3.9

Provide TJPA Representative and SFDPW inspector 72 hours of advanced notice prior to testing.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0132.1	Sewer Main Pressure Test	Closed	05/07/2011	05/17/2011	05/11/2011	Potentially	☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Service Eric Zagol

Co-Author:

REQUEST:

Trinet has been advised by Mission Clay (the VCP manufacture) that the hydrostatic test described in the SF Standard Specification Section 319.02 is primarily for cast iron or ductile iron pipe and is not recommended for clay pipe. The National Institute of Clay Pipe and Mission Clay recommend a low pressure air test in accordance with ASTM C 828. See attached copy of ASTM C 828. Trinet proposes using this low pressure air test in lieu of the 10psi hydrostatic test called for in the standard specifications. The low pressure air test will allow test on pipe runs with no service laterals ie: MH501-502, 206-207, 203-204, 202-201. Please advise if this is acceptable.

With regards to the three remaining pipe runs that have lateral connections, please provide direction of how to plug the laterals if required to test the main lines.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

=======UPDATE 5/23/2011========

Kevin Chiu 5/23/2011 Below are links to devices for testing newly installed sewer pipes, specifically for main lines with active lateral connections that have been suggested within conversations between SFDPW, SFPUC and AECOM

http://newsite.cherneind.com/pneumatic/Long_Test_Ball_MS2_Test_Ball/

http://www.munipipe.com/chemical_grouting.html

http://veoliaes-is.com/Services/Environmental-and-Waste-Management/Total-Sewer-Management/Chemical-Grouting

Whether or not the contractors decide to utilize these devices is still up to them, as these are suggestions, not specifically required devices to be used for testing. It is the contractor's responsibility to perform testing on newly installed main lines, laterals, and manholes with their own means and methods while still protecting new and existing utilities.

==========

Eric Zagol 5/10/2011 ASTM C828 air test is an acceptable method to test sewer pipe in lieu of hydrostatic testing.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0133	Minna St Joint Trench Configuration and Alignment, Sta 2+24 to 1+62	Closed	04/20/2011	04/30/2011	04/26/2011	Potentially	☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Service Eric Zagol

Co-Author:

REQUEST:

During the installation of the AT&T ducts between Sta 2+24 and 1+62 the AT&T inspector, Juan, instructed Trinet to remove two bends from the duct bank. AECOM

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 4/21/2011 Please provide the referenced "attached...revised AT&T duct routing" for review.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

was contacted and approved the layout in the field prior to Trinet proceeding. Attached is the revised AT&T duct routing required by the inspector.

Please confirm the revised joint trench alignment is acceptable.

U-0133.1 **Minna St Joint Trench Configuration and Alignment, Sta 2+24** **Closed** **04/26/2011** **05/10/2011** **05/02/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

During the installation of the AT&T ducts between Sta 2+24 and 1+62 the AT&T inspector, Juan, instructed Trinet to remove two bends from the duct bank. AECOM was contacted and approved the layout in the field prior to Trinet proceeding. Attached is the revised AT&T duct routing required by the inspector.

Please confirm the revised joint trench alignment is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 5/2/2011 Alignment of the AT&T ducts is acceptable as shown in the sketch provided.

U-0134 **Water Depatment Tie In Conflict at Howard and Beale** **Closed** **04/26/2011** **05/06/2011** **05/02/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

The SF Water Department has determined they are unable to perform the water tie in at the south west corner of Howard and Beale because of a conflict with the existing sewer sludge force main. M Squared has pothole the line and confirmed it is the existing 10" concrete encased sewer sludge force main.

Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 4/29/2011: Cut and remove a section of the existing 10-inch sludge line to allow SFWD to perform the water main connection. Coordinate with SFWD to determine the extent of the existing sludge line to be removed.

Plug the ends of the existing 10-inch sludge line with concrete per 02 41 00 3.6 A.

The existing sludge line to the north will be demolished per TG04.6.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

The connection of the new sludge line to the existing sludge line (south) per TG04.6, shall be made south of the plug.

U-0135 **4" Water Service @ 1st and Natoma** **Closed** **04/27/2011** **05/07/2011** **05/05/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Service Eric Zagol

Co-Author:

REQUEST:

While excavating for the 6" service connection to the new water line on First Street at Sta2+25 M Squared located an additional 4" ductile iron service that is connected to the existing water main. This 4" line is not shown in the contract documents.

SFWD records show this to be a live service and would like for this to be tied into the new main.

There is now no point of connection on the new water line to receive this 4" service.

Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 5/2/2011 Retap the existing 4" service to 500 Howard St. Coordinate service location with SFWD inspector. Submit piping plan showing the 4", 6" and 1" services for review.

Kevin Chiu 5/4/2011 Pending approval by the TJPA, a CR will be issued.

U-0135.1 **4" Water Service at First and Natoma** **Closed** **05/09/2011** **05/19/2011** **05/10/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Service Eric Zagol

Co-Author:

REQUEST:

In response to RFI #U-0135, see attached piping plan, as requested in RFI response.

Once approved M Squared will coordinate with SFWD to perform the work.

An expedited response is required as this is holding up all other water work on Natoma Street

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 5/10/2011 With the understanding that the 12" main, 12" GV, 6" service and 1" service are already installed, furnish and install 4" GV and DIP service and connect to 12" main per piping plan.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0136	Existing Water Bypass @ Howard and Fremont	Closed	05/03/2011	05/13/2011	05/05/2011	Potentially	☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Service Eric Zagol

Co-Author:

REQUEST:

While planning for the water tie in at Howard and Beale the Water Department discovered that there is an existing bypass line that will connect the existing water system (which is to be abandoned) to the new water system. This bypass is not shown on the plans. The Water department has requested that the existing bypass be excavated and plated so it can be cut and capped while they have the line shut down for the tie in on the new system at Howard and Beale the night of 05/04/2011.

Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 5/4/2011 RFI is not accruate and locations are incorrect.

Based on a field meeting with W/O ,SFWD Inspector and AECOM on 5/3/11, SFWD identified an unforeseen existing bypass pipe and gate valve that connects the existing 8-inch main in Fremont Street (to remain) to the existing 8-inch main in Howard Street (to be abandoned). The existing 8-inch main in Howard Street will be abandoned once the new 12-inch main is Howard is active.

Once the new 12-inch main in Howard Street is placed into service and the existing main is abandoned, the existing bypass and gate valve from the existing 8-inch active Fremont main will be connected to the abandoned Howard Street main. To mitigate the situation the SFWD proposes to cut and cap the existing bypass such that the existing Fremont main is not connected the abandoned main in Howard Street.

Coordinate with SFWD to locate existing bypass and define the limits of excavation required to cap the existing bypass.

Excavate to expose bypass. Shore and plate per specifications. Restore per specifications.

Cutting and capping of the existing bypass will be by SFWD.

Kevin Chiu 5/4/2011 Pending approval by the TJPA, a CR will be issued.

U-0137	Verizon Ductbank conflict w/MH 701	Closed	05/03/2011	05/13/2011	05/10/2011	Potentially	☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Service Eric Zagol

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

M Squared's sewer potholing on Beale (Sta 0+30) has indicated a conflict between an existing Verizon duct bank and MH# 701 on Howard Street. See attached drawing. The ductbank is approximately 18" wide x 18" deep. It is 2'4" to the top and it is slurry encased.
Verizon underground locators have confirmed that this is live and serves Charles Schwabb building south of Howard on Beale Street.
Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 5/10/2011 Unforeseen condition, Verizon utility not shown in existing utility survey.

As suggested by Noel of (M Squared) during a site visit on 5/3/11 with W/O and AECOM, based on Noel's discussions with Mike Roybal (Verizon Field Engineer) and confirmed by AECOM based on follow up discussions with Mike Roybal (Verizon) and Pam Brown (Verizon), coordinate with Verizon and remove existing concrete encasement from existing duct to expose conduit in area of conflict. As directed in the field by Verizon, remove concrete encasement around duct from area in conflict to adjacent Verizon manhole. Move and support exposed Verizon conduit as required and directed by Verizon to construct manhole.

Coordinate with Mike Roybal (Verizon) at (415) 716-6736 such that a Verizon representative is present during the Verizon duct concrete encasement removal, moving and support install.

Restore Verizon duct to match existing concrete encasement following completion of sewer manhole.

U-0138 **Temporary Telecom Pole Layout in Lot N and N'** **Closed** **05/09/2011** **05/19/2011** **05/10/2011** **Potentially** ☐

From: Webcor Construction LP Joanne Filipas **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Service Eric Zagol

Co-Author:

REQUEST:

Reference attached layout and submittal package#TG0406-014:

Due to the future use of lot N and N' prime, the temporary telecom poles must be relocated. The attached sketch indicates the proposed layout of these poles which has been coordinated with AECOM. Submittal Package#TG0406-014 has been submitted for formal approval of the pole locations.

Please confirm relocating the poles is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 5/10/2011 The pole alignment changes requested by CMGC along with additional requests from Telecommunications companies has required a pole and pole placement redesign. An ASI has been generated for the redesign with a CR forthcoming.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0139	Existing Water Line on Beale in Conflict with New Sewer	Closed	05/09/2011	05/09/2011	05/10/2011	Potentially	☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Today while trying to execute the USAR for the existing 12" water line on Beale Dan Helminiak with SFWD informed Webcor/Obayashi and M Squared that the existing water line will remain active until the water tie in at First and Natoma is completed and the existing 8" is capped at First and Howard as shown on sheet U-3116.

The water tie in and capping of the existing line on First Street is currently being delayed by separate issues and it is unclear when this work will be completed.

Dan Helminiak suggested that the existing 8" water line running down Howard could be capped by the water department at one of the existing tees which would allow the decommissioning of the existing line on Beale.

Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 5/10/2011 Please clarify the question(s).

Subject states "Existing Water Line on Beale in Conflict with New Sewer". Per U-1124 Demolition and Construction Sequence order, Beale Street sewer is to commence after existing water main in Beale Street is abandoned. Please clarify where and what the conflict is.

Also, please confirm the following:

1. Is the new 12" main along Howard Street between First and Main streets active?
2. Is the new 12" main along Beale Street north of Howard Street active?
3. Is the new 12" main along Beale Street south of Mission Street active?

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0139.1	Cap (E) Water on Howard @ Beale	Closed	05/16/2011	05/26/2011	05/24/2011	Potentially	☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

-New 12" water main along Howard between First and Main is active.
-New 12" water main along Beale Street North of Howard is active.
-New 12" water main along Beale Street South of Mission is active.

Per U-1124 Demolition and Construction Sequence order, Beale Street sewer is to commence after existing water main on Beale is abandoned.
- The old water line on Howard Streets and Beale Streets is currently not active because the valves on the line at First and Howard are currently shutdown. Dan from the water department has expressed his concern that anyone can just open these valves and fill the old line along Howard Street. He is also concerned that the valve is not 100% closed and that the SFWD cannot get a complete shutdown on the old line. This means when M Squared

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 5/23/2011 Coordinate construction of the cap on the old Howard St. main at the intersection of Main St. with SFWD as shown on U-3119.

Coordinate construction of the cap on the old Howard St. main at the intersection of First St. with SFWD as shown on U-3116 (latest rev per SK-U-0003 1/28/11).

Per discussions with SFWD inspector, the old Howard St. main has been capped at Main St, Beale St. (south of the cross) and at the Fremont St. by-pass connection by SFWD. Additionally, the two line gates at First and Fremont streets are closed and have been filled with concrete.

The caps at Main, Beale, Fremont in combination with the closed line gates at First St. will allow sewer installation on Beale St. to proceed.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

removes the old water line on Beale Street in order to install the new sewer, it is possible that there will be a constant flow of water in the old line.

The suggestion from Dan is to cap the old water line on Howard Street so that When M Squared removes the old line on Beale Street there will be no possibility of water flow. A cap on the line at Howard would also confirm for definite that the old line on Howard and Beale Street is "abandoned".

Please provide direction for capping the existing water line on Howard so the sewer installation on Beale can proceed.

U-0140 **Proposed Changes by BLHP to S/L Conduit Run @ 2nd & Minna** **Closed** **05/11/2011** **05/21/2011** **05/20/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

During a field meeting on 5/10/2011 with Eric Zagol, AECOM and Robert Kawano, BLHP to discuss the alignment of the conduit run from 2nd St to the relocated S/L pole @ Stn 2+89, Robert Kawano asked that a splice box be installed in the sidewalk downstream from the connection point to PG&E¿s manhole. The box would serve as the connection point for BLHP to PG&E¿s power supply from 2nd St for the street light. Because of an existing sidewalk basement, which is located along the north side of Minna, east of 2nd St., it was agreed in the field that the splice box should be placed in the sidewalk just west of the new fire hydrant located @ Stn 0+93. There is already a pocket constructed in the sidewalk basement to accommodate the fire hydrant and Trinet will locate the splice box within this pocket structure. A sketch is attached depicting the proposed alignment of the conduit run and the additional splice box as discussed in the field. Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 5/19/2011 Per BLHP's request, furnish and install a CCSF DPW precast pullbox, cover, and lid per CCSF DPW Standard Plans and Specifications between the PG&E supply point and the relocated street light pullbox along Minna Street east of Second Street.

Location; confirm that a sidewalk pullbox will fit in the knock out space above the 121-123 Second St. sidewalk basement adjacent to the newly installed fire hydrant prior to construction.

Maintain minimum bends in conduit run per Specification 33 71 00.

U-0141 **Street Light Connection Point at Second and Minna** **Closed** **05/16/2011** **05/26/2011** **05/20/2011** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

In the response to our RFI # U-0016, Trinet was directed to connect the street lighting conduit on the west end of Minna into PG&E MH #1319 on 2nd St. At a field meeting on 5/10/1 with Eric Zagol and Robert Kawano, to discuss the alignment of the street lighting run for the relocated light on the west end of Minna, Eric advised that PG&E was contemplating a change in the connection point for this conduit run from MH 1319 to MH 1320. MH #1320 is located to the south of 1319 and further west towards the middle of 2nd St. Please confirm the connection point on 2nd St for the street lighting conduit.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

5/26/11 UPDATE

Supply point has been confirmed as PG&E EMH 1320. Coordinate connection location with PG&E Field Engineer.

Eric Zagol 5/19/2011 Related to Joint Trench changes and PG&E's de-energization of Minna Street after the response to RFI U-0016 was provided, PG&E has revised their electrical plans with respect to EMH 1319 and has indicated that the preferred location for new street light power would be EMH 1320.

In accordance with U-3201 Note 7, AECOM considers this RFI as the request to coordinate connections with BLHP and PG&E through the TJPA representative for new street light circuit connections. AECOM and the TJPA Representative are in the process of coordinating Street Light Service Orders with BLHP and PG&E. Once the Service Order is processed the final connection point will be provided.

U-0142 **Concrete Specifications for Sidewalk Replacement @ 555 Mission** **Closed** **05/16/2011** **05/26/2011** **05/18/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Kevin Chiu

Co-Author:

REQUEST:

The sidewalk concrete @ 555 Mission (on Minna) is not the typical San Francisco sidewalk mix design. It is a colored concrete with what appears to be a sandblasted finish. Please provide the concrete specifications for repair and/or replacement of the sidewalk in this area.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Kevin Chiu 5/18/2011 Sidewalks shall be constructed of a dark gray, Hi-con @ 5 lbs. per cubic yard carbon black based concrete finish, with 25 to 30 lbs. per 100 square feet of silicon carbide sparkle grains. The surface of the concrete shall be washed and rinsed using a stiff brush, and if necessary shall be sandblasted to remove the concrete surrounding the aggregate to minimum depth of 1/8 inch.

U-0143 **Demolition of PG&E Duct Bank Alongside (N) 18" Sewer Main on Minna** **Closed** **05/16/2011** **05/26/2011** **05/20/2011** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

During excavation and shoring for installation of the 18" Sewer main along Minna St., between the (E) electrical vault @ Stn 1+80 (demolished) and (N) manhole # 201, Trinet was unable to save the entire length of the existing PG&E duct bank (currently abandoned), which runs along the south side of the sewer trench. Between stations Stn 0+95 and 1+25 (approx.) the duct bank had veered into the sewer trench and had to be demolished - see attached sketch. Please review and advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 5/19/2011 U-1107 (rev 2 3/16/11) indicates that the existing 6-4" PG&E duct is to be protected in place.

2 of the 6 existing 4" conduits will be utilized by PG&E to provide temporary construction power to W/O Skids 1 and 2 along Minna Street.

Mandrel existing conduits east of STA 1+25 to STA 1+70 (where new conduit caps were to be installed per contract) to confirm that the existing conduits that were to be protected in place have no blockages.

Coordinate with PG&E as STA 0+95 is exposed to determine which 2 of existing 4" conduits will be utilized for temporary construction power.

Furnish and install 2-4" conduits concrete encased to replace those that were removed during sewer construction. Connect new conduits to existing that will remain to provide temporary construction power.

U-0143.1 **(E) PG&E Duct Bank from EMH #1320 to Demolished EMH #1355** **Closed** **06/14/2011** **06/24/2011** **06/14/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

After further investigation of the existing PG&E duct bank between EMH #1320 and demolished EMH # 1355 (@ Anchor & Hope), Trinet found that there is only one unobstructed conduit between the two manholes. The unobstructed conduit is the one that already had a pull rope in place. Trinet had demolished a section of this conduit during excavation for sewer MH # 201 because it was in conflict with the shoring. Trinet replaced the damaged section (approx. 8 LF) on Saturday 6/1, and reconnected the pull rope in the conduit run. A sketch of the conduit run, depicting the section replaced, is attached. Please review and advise if one 4" conduit will be adequate from EMH #1320 to the west end of

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 6/14/2011 PG&E plans to use the existing conduit package to provide temp power to Skids 1 and 2. Mike Balmy of PG&E was notified and has confirmed that only 1-4" unobstructed conduit is required between EMH1320 and the cap at demolished EMH1355 for future temp power service.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

demolished EMH #1355.

U-0144 **PGE Vault conflict with 24" VCP on Beale** **Closed** **05/17/2011** **05/27/2011** **05/20/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

PG&E confirmed the location of the inside of the east wall of PG&E manhole 1702 at Howard and Beale Street. Allowing for a 12" thick wall, the vault will be in conflict with the proposed alignment of the future 24" VCP, even with moving the alignment 1' further east as directed in RFI U-0124. The conflict could be avoided by moving the alignment another 6" further east. However this will cause a conflict between manhole #701 and the existing 14" AWSS. Additionally the Verizon duct bank conflict increases(RFI#U-0137).
Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 5/19/2011 As discussed in the field on 5/18/11 with Jason Dunne (W/O) and Noel McCarthy (MSquared) the exact location of the existing PG&E MH outside wall and the existing AWSS is currently unknown.

Adjust locations of MH#701, MH#702, MH#704 and sewer alignment east as required (~6" as mentioned) for the 24" VCP installation (new and future) to avoid the existing PG&E MH however not in conflict in conflict with the existing 14" AWSS line.

Note, the existing AWSS line will be abandoned North of Beale Street STA 1+10.

Confirm alignment (2-10" VCP and future 24" VCP) will clear existing AWSS valve at STA 0+70.

U-0144.1 **PG&E Vault conflict with 24" VCP on Beale** **Closed** **06/30/2011** **07/10/2011** **07/01/2011** **Potentially** ☐

From: Webcor Construction LP Jonathan Flaming **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Kevin Chiu

Co-Author:

REQUEST:

In response to RFI U-0144, please note that M Squared confirms the following:

2-10inch VCP and future 24inch VCP will clear existing AWSS Valve at Sta 0+70.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Kevin Chiu 7/1/2011 RFI does not request additional information.

Webcor/Obayashi Joint Venture

PROJECT MANAGEMENT - REQUEST AND ANSWERS LOG

30100 - Transbay Transit Center Project

Number	*Subject*	*Status*	*Date Created*	*Date Required*	*Date Answered*	*Cost Impact*	*Proceed*
U-0145	**Sludge Main Conflicts with Existing Utilities**	**Closed**	**05/17/2011**	**05/27/2011**	**05/18/2011**	**Potentially**	☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Please see attached pothole results for the new sludge main on Mission Street. Due to the quantity and location of existing utilities, and utility vaults/manholes it will not be possible to install the new 12" sludge main on Mission Street as shown on the contract drawings.

Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 5/18/2011 Please indicate which utilities were marked via the USA ticket and or those identified by other means.

U-0145.1	**Sludge Main Conflicts with existing utilities**	**Closed**	**05/18/2011**	**05/28/2011**	**06/07/2011**	**Potentially**	☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

In response to RFI# U-0145, see attached with notes. M Squared has marked what utilities were located via USA markings and what ones have been located via the contract drawings. There are also several unknowns that could not be identified.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 6/7/2011 Revised contract documents will be provided via ASI 012 to address sludge line conflicts in Mission St.

U-0146	**Proposed Pavement Reconstruction Plan for Minna Street**	**Closed**	**05/17/2011**	**05/27/2011**	**05/23/2011**	**Potentially**	☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Please find the attached sketch detailing Trinet's proposed pavement reconstruction plan for Minna St., between 1St to 2nd Streets. Please review and advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 5/23/2011 AECOM has reviewed the sketch provided and has the following comments in accordance with Contract requirements:

Confirm existing utilities to be demolished as shown on Demolition Plans have been demolished per Plans prior to final street restoration.
Provide FULL street restoration, curb to curb, in Minna St. West of the CDSM shoring wall (~STA 2+25) to Second Street in accordance with Contract requirements (DPW ORDER NO. 178,940 [superseding DPW ORDER 176,707] per specification SECTION 32 12 17)
Construct Curbs in accordance with DPW Stnd. Plan 87,169

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Construct Driveways in accordance with DPW Stnd. Plan 87,171
Construct Joints for Concrete Pavement Base in accordance with DPW Stnd. Plan 87,174
Per Contract specification SECTION 32 12 17, reconstruct curb returns at Second and Minna Per DPW ORDER NO. 178,940 (superseding DPW ORDER 176,707) Regulations for Excavating and Restoring Streets in San Francisco Section 9.4 B. Excavation affecting curb returns, stated as follows:

1. Any excavation (including trenchless technology) encroaching upon any part of an angular corner requires the installation or reconstruction of curb ramp(s) at the affected corner to current standards by the Permittee. Permittee's are encouraged to contact BSM Inspection Division to determine if curb ramps within a project are compliant or must be replaced at least 45 days prior to the commencement of any work.

2. Curb ramps must be constructed in accordance with current City standards (Drawing Nos. 55,017 Rev. 3; 55,017.1, 55,018 Rev.3; 55,018.1; 55,018.2; 55,018.3 "Exception to Standard Curb Ramps") (Appendix 5).

U-0146.1	**Proposed Pavement Reconstruction**	**Plan for Minna Street**	**Closed**	**05/27/2011**	**06/06/2011**	**05/27/2011**	**Potentially** ☐

From: Webcor Construction LP Colin Azevedo
To: Turner Construction Compan Gary Krutsch
Answered By: AECOM Technical Servic Eric Zagol
Co-Author:

REQUEST:

Attached, please find a sketch detailing Trinet's revised pavement reconstruction plan for Minna St., between 1St to 2nd Streets, which incorporates Balfour Beatty's request that Trinet stop the new pavement section 5' north of centerline of the CDSM shoring wall (2' north of demarcation line).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

*** 5/31/11 Revision ***

Restore entire width of Minna street using concrete road base and ACWS curb to curb in accordance with Contract drawings and DPW Order No. 176,707 (and latest revision 178,940) Section 11.

5/27/11 Response:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please provide BBIIs traffic control plan and construction logistics plan for Minna St. during pre-trenching and CDSM shoring wall construction.

AECOM's specific questions are as follows:

1. What portion of Minna St. will be maintained for vehicular traffic during pre-trenching and CDSM wall construction? Please provide dimensions from face of north curb along Minna St.
2. Is a traffic barrier (k-rail or other) planned to be installed along Minna St. during pre-trenching and CDSM wall construction? Provide location, dimension from face of north cur along Minna St.
3. If a traffic barrier is planned, what is the schedule for the installation?
4. Once pre-trenching is complete will any of the pretrenching trench area be restored and used for vehicular traffic?
5. Once the CDSM shoring wall is constructed will the traffic barrier move south and the vehicular area be widened? If so by how much? Please provide a dimension from the face of north curb along Minna St.

This information is critical in order to provide a responses to this RFI as well as RFI U-147 and U-148 in an effort to determine how RUP will restore Minna St.; crowned or sloped, and how the Minna St. restoration conforms to the future Transit Center Minna St. design.

U-0146.2 **Pavement Reconstruction Plan for Minna Rev 2** **Closed** **06/02/2011** **06/12/2011** **06/07/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Please find attached a revised (Rev2) pavement Reconstruction Cross Section drawing for Minna St., which details Trinets understanding of the Engineer's latest response to RFI#U-0146.1 and RFI#U-0147. Please

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 6/7/2011 Street restoration detail is acceptable with the following corrections:

1. The southern extent (limit) of concrete base and

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

confirm pavement reconstruction can proceed per the attached detail..

ACWS between STA 2+30 and First Street shall be based on U-5101 Detail 6 and the limit of excavation required to do perform the Demolition and New utilities work in Minna Street. Conform to final saw cut lines as indicated in Detail 6.

U-0147 **Existing Top-Of-Curb Grades @ Minna Driveways for 575 Mission Building** **Closed** **05/27/2011** **06/06/2011** **06/01/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

The existing driveways entering the 575 Mission St building, are depressed between 2 ½" to 3" below the adjacent top-of-curb and sidewalk grades - see attached drawing depicting the driveways. This condition seems to be a consequence of repeated overlaying of Minna street, which has resulted in a curb height in many areas far less than the City standard of 6 inches. The street grade along the north side of Minna along the 575 Mission building ranges from 3 ½ to 4 ½ inches below top-of-curb grade.

Trinet has been directed in the field by Jason Chin, and by the Engineer in RFI #U-0146, to construct the new roadway with finish grade at curb line 6" below top-of-curb grade. This is consistent with City standard plan # 87,169. The new roadway grades will result in 3" to 3 ½" of exposed curb height at the driveways to 575 Mission, which is considerably deeper than the 1" called for in the San Francisco standard plans for driveway construction (plan # 87,171). It will also not be possible to raise the street grade at the driveways without impeding road runoff drainage and causing ponding.

Please review and advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 5/31/2011 Restore pavement along existing curbs and driveways along the north side of Minna St. in accordance with Contract drawings and DPW Order No. 176,707 (and latest revision 178,940) Section 12 to match existing flow line elevations at curbs and driveways shown on U-1001. 6-inch curb and driveways along Minna St. will be reconstructed at a later date as part of the Transit Center Project.

U-0148 **Pavement Reconstruction Plan for West End of Minna Street - Stn 2+15 to 2nd St** **Closed** **05/27/2011** **06/06/2011** **06/07/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

Please provide a pavement reconstruction drawing, or typical cross section detail, for the west end of Minna St from Stn 2+15 to 2nd St. Trinet had planned to reconstruct the street in this area from curb to curb. We find however, that there is a grade difference of approximately 6 inches between top-of-curb on the north side of the street and the south side, with the south side being at the higher grade. The construction detail approved in RFI #U-0146 (Trinet #094) cannot be utilized in this area, because the street already has a cross slope of approx. 2% from south to north.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 6/7/2011 See response to RFI 146.2

U-0149 **MH#701 Conflicts with existing utilities** **Closed** **05/27/2011** **06/06/2011** **06/09/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

The 14" AWSS line west of MH#701 was found to be constructed thru the roof of the existing 3x5 sewer. Several bends were used in the AWSS line construction and these bends included lugs and tie rods. As a result of the presence of these tie rods and fittings we can now not move MH#701 any further west.
To install the new 24" VCP in a straight line (perpendicular to MH wall), and in order to get by the existing PGE MH we will have to pour the pipe wall and 2" of the internal diameter of the pipe into the west wall of MH 701.
Please advise on how to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 6/8/2011 Deflect VCP pipe joints in accordance with ASTM C425 (max 1.8 degrees per joint) to allow for 6" of deflection to avoid the existing PG&E MH and connect to MH#701 as shown in the attached SK-U-0019.

Confirm in the field that 6" deflection will allow the 24" VCP to be clear of the MH wall.

U-0149.1 **MH#701 Conflicts with existing utilities** **Closed** **06/30/2011** **07/10/2011** **07/01/2011** **Potentially** ☐

From: Webcor Construction LP Jonathan Flaming **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Kevin Chiu

Co-Author:

REQUEST:

In response to RFI U-0149, please note the following:

M Squared confirms that 6inch deflection of the VCP will allow the 24inch pipe to be clear of the manhole wall.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Kevin Chiu 7/1/2011 RFI does not request additional information.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0150	Proposed Correction to Field Condition Report 40C	Closed	05/31/2011	06/10/2011	06/01/2011	Potentially	☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Please see the attached detail from Trinet Construction Inc for their proposed solution to mitigate the incorrect installation of CB203 identified in Field Condition Report 40C.

Please advise if the proposed solution is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 6/1/2011 The proposed solution has been reviewed and approved by SFDPW BOE and is acceptable. Construct catch basin as shown in the Trinet proposed construction detail attached to CR40C. Construct the clean out on the cast iron trap such that it is accessible from above for maintenance via removal of the grate . Coordinate inspection during installation with DPW BCM inspector through the TJPA's Representative.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0151	Additional Sewer Lateral Connection for 100 1st Street	Closed	06/02/2011	06/12/2011	06/08/2011	Potentially	☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Trinet has discovered an additional sewer lateral for the 100 1st Street building which was not connected to the new 24" sewer main - see attached sketch. The lateral is located at sta. 7+09 and services a single toilet and the rear of the building. This lateral was not shown on the plans and there was no vent in the sidewalk to indicate the existence of a lateral. Trient potholed the lateral in the sidewalk and a 4" cast iron lateral, a 4" cast iron trap and a 4" cast iron vent pipe capped 2' below grade. Please confirm Trinet is to tie the lateral into the new 24" sewer main on Minna. Also, please advise what is to be done with existing cast iron trap and vent pipe assembly which are not up to current DPW standards.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 6/8/2011 In accordance with U-3000 General Note 12, contractor was to verify that there are no active sewer lateral connections to the existing sewer prior to sewer demolition.

Please provide the elevation of the existing sewer lateral and the location of existing 4" cast iron vent pipe for review.

Renewal of this lateral will be discussed with TJPA and 100 First St. property owner, final direction forthcoming.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0151.1	Additional Sewer Lateral Connection	Closed	06/29/2011	07/09/2011	07/05/2011	Potentially	☐

From: Webcor Construction LP Jonathan Flaming **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

This is a follow-up to the request by the Engineer in his response to W/O RFI #U-0151 (Trinet RFI #097) for

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 7/5/2011 In reference to RFI-151 and 151.1:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

additional information relating to the 2nd sewer lateral connection for the 100 1st St building. Trinet also clarifies the issue of the existing 4" trap on the line, which was raised in the original RFI.

The sewer lateral is located @ Stn. 7+09 and the invert elevation of the 4" cast iron sewer lateral pipe at face-of-curb is 14.6'. The elevation for the top of the new concrete encased ductbank @ Stn 7+09 is 13.85'. The sewer lateral was therefore not in conflict with the new joint trench utilities.

With regards to the existing 4" trap on the line, Trinet checked with the SF Plumbing department which adviced that a 4" cast iron trap was adequate for a 4" sewer lateral. The existing trap was therefore in compliance with the SF plumbing code. Trinet advised Jason Chin of this in the field and he agreed that the trap did not need to be replaced.

The 4" cast iron vent pipe for the trap did not extend to street level but was capped-off approximately 18" below grade. Per field discussions with Jason Chin, Trinet extended the trap vent piping to grade and installed a street vent frame & cover in the sidewalk.

1. Reconnect existing lateral to new 24" Minna St. sewer in accordance with SFDPW Standard Plan 87,196.
2. Extend fresh air inlet and air inlet cover to existing sidewalk grade.

U-0152 **Alternate Manhole Testing Method** **Closed** **06/02/2011** **06/12/2011** **06/07/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Spec section 03 40 10 3.1 E directs the contractor to test all manholes hydraulically by exfiltration testing.
M Squared proposes the use of the vacuum method of testing manhole sections instead of the above method (See attached)
This vacuum method is in accordance with ASTM C1244.

Please advise if this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 6/7/2011 Vacuum method in accordance with ASTM C1244 is acceptable for testing of sewer manholes.

Webcor/Obayashi Joint Venture

PROJECT MANAGEMENT - REQUEST AND ANSWERS LOG

30100 - Transbay Transit Center Project

Number	*Subject*	*Status*	*Date Created*	*Date Required*	*Date Answered*	*Cost Impact*	*Proceed*
U-0153	**Concrete Slab and Rail Ties Conflict with Sludge Line on Howard**	**Closed**	**06/03/2011**	**06/13/2011**	**06/21/2011**	**Potentially**	☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

While potholing for the sludge line alignment along Howard Street between Beale and Main at Sta 18+00 and Sta 19+42 M Squared discovered the presence of wooden rail ties and concrete slab (see attached photos).
These are possibly the same ties and slab that M Squared encountered while installing the water line on TG04.3.
They are in direct conflict with the proposed location of the new sludge line along Howard Street.
Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 6/21/2011

*** 6/21/11 Update ***

Based on follow up discussions with W/O and M2, and further understanding of the extents of the concrete slab and wooden rails ties found further West (Howard and Fremont streets TG04.3), remove and dispose of concrete and wooden rail ties as required to construct 12" sludge line.

Eric Zagol 6/8/2011 Pothole at STA 18+00 to determine the extents (southern and northern) of the concrete slab and wooden rail ties. Submit pothole data for review.

U-0154	**Electrical Service for Street Lights on Natoma**	**Closed**	**06/08/2011**	**06/18/2011**	**09/01/2011**	**Potentially**	☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Chris Lotti

Co-Author:

REQUEST:

Per Sheet U-1120 the electrical service feeding the street lights on Natoma is to be demolished, see attached. This conduit has been exposed through the investigative trenching process on First, confirmed dead and remove. As a result the existing street lights on Natoma are without power. There are no details provided in the plans for reestablishing power to these street lights now that the demo is complete.

Please advise.

SUGGESTION:

Eric Zagol 6/20/2011 Natoma Street street light power renewal to be addressed via ASI 014 forthcoming.

ANSWER: **Accept Suggestion:** ☐

Change Request No. U-043R1 -Renew Natoma Street Light Power Supply (ASI No. 014) [30100.03] - Force Account issued 9/13/2011.

U-0155	**AWSS Cast In Place Concrete Testing**	**Closed**	**06/20/2011**	**06/30/2011**	**06/28/2011**	**Potentially**	☐

From: Webcor Construction LP Jonathan Flaming **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Kevin Chiu

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

The AWSS Specification section 03300-2, Cast-In-Place Concrete 1.5 C (Quality Assurance) states that the concrete testing will be performed by an agency employed by the TJPA.

However, 03300-10, 3.9 B (Field Quality Control) states that the concrete testing will be performed by the City Testing and Inspection Agency.

Please advise who will be preforming the cast in pace concrete testing.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Kevin Chiu 6/28/2011 The TJPA employed testing agency will provide concrete testing per 03300-2, 1.5C.

Michael Smith's (SFDPW) response, "TJPA can have testing performed or set funding in place for testing by SFDPW's testing lab," dated and signed on 6/27/11 (see attached).

U-0156 **Sink Hole under road base at MH#701** **Closed** **06/21/2011** **07/01/2011** **06/22/2011** **Potentially** ☐

From: Webcor Construction LP Jonathan Flaming **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

While excavating for MH#701 M Squared discovered what appears to be a large void under the street base adjacent to the west wall of the MH#701. We estimate the void to be approximately 3' wide and 12' long. This may be a hazard as the street base may collapse at some point in the future.

Please advise how you would like to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 6/22/2011 Unforeseen existing condition not clear if directly related to the Relocation of Utilities Project work.

AECOM suggests that the existing pavement be removed over the area of the sink hole and conditions be evaluated.

Once existing utilities are determined to be secure, backfill with a sand cement slurry and restore pavement in accordance with SFDPW Standard Plans and Specifications.

Kevin Chiu 6/22/2011 Coordinate repair of sink hole with TJPA representative. Repair work to be paid under CR U-039

U-0157 **Pressure Testing for Sewer Manhole #'s 501 & 502 on 1st St.** **Closed** **06/28/2011** **07/08/2011** **07/08/2011** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Jonathan Flaming **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

This RFI is a follow-up to discussions in the field with AECOM and the SFDPW Inspector and Trinet, regarding Trinet's inability to perform a pressure test on sewer manholes 501 & 502 on 1st St. due to field conditions. MH #502 is constructed around the existing 3x5 brick sewer on one side (per SF Standard Plan #87,184) and Trinet has no means of plugging the brick sewer effectively to withstand a pressure test.

In the case of sewer MH #501, the original design was similar to MH #502 and a pressure test would not have been possible. The revised design (see attached drawing) includes a temporary 24" corrugated PVC pipe stub extending south from the manhole and connecting to the existing 3x5 brick sewer. The inside of the temporary 24" pipe stub is also corrugated, and therefore cannot be sealed with an inflatable pipe plug, as would be required to perform a pressure test of the manhole structure.

Please confirm that a pressure test will not be required for sewer manholes 501 & 502 on 1st St.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 7/8/2011 Confirmed. Pressure tests for sewer manholes #501 and #502 are not required due to the restrictive conditions.

U-0158 **MH #301 Location** **Closed** **07/15/2011** **07/25/2011** **07/20/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

During our sewer work at 2nd and Natoma M Squared discovered that the Telecom Vault shown on the drawings is in fact significantly larger in the field than is shown on the plans. In order to be able to shore for MH#301 construction M Squared has had to move the location of MH four (4) feet east along Natoma. As a result the jack and bore alignment is now a few inches south of what is shown on the plans.

Please confirm that these adjustments are acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 7/20/2011 Adjustments proposed are acceptable.

Since the adjustment pushes the MH and cover into the crosswalk path of travel, in lieu of CCSF DPW Standard MH cover, provide an ADA complainant cover that meets the following specifications:

1. MATERIAL - The cast iron shall be in accordance with ASTM "Standard Specifications for Gray Cast Iron Castings" Designation A 48, Class 30. The tinsel strength shall be considered the primary test for qualification.
2. FINISH- STANDARD FINISH SHALL BE RAW, AS

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

CAST, AND YIELD A MINIMUM COEFFICIENT FOR FRICTION OF .6 OR BETTER IN WET OR DRY CONDITIONS.
3. CASTINGS - SHALL BE FREE OF BLOW HOLES, FLASHING, GRIND MARKS, AND OTHER SURFACE BLEMISHES.
4. Cover shall incorporate a "pic-hole" for lifting purposes.
5. ADA COMPLIANCY- CASTINGS SHALL HAVE HOLES NO GREATER THAN ½" IN THE DOMINANT DIRECTION OF MOTION, NO VERTICAL RISE OF GREATER THAN ¼", IF THE RISE IS GREATER THAN ¼" THE RISE/RUN RATIO NEEDS TO BE 1;2 AND THE MAXIMUM HEIGHT SHALL BE 1/2".
6. Cover shall BE MADE TO FIT EXISTNG FRAMES OR be MACHINED to FIT EXITING FRAMES PER SFDPW STANDARD PLAN 87,190.
7. Cover should be MADE of quality EQUAL TO OR GREATER then THE PRODUCTS MADE BY D&L Foundry or Equal, see attached product data sheet.

U-0159 **Unknown Concrete Structure In Conflict with Sludge Line on Mission** **Closed** **07/28/2011** **08/07/2011** **08/16/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

While potholing at the locations shown on the attached drawing M Squared discovered what appears to be a concrete wall under the parking strip. M Squared excavated both potholes 7' deep and at that depth the wall appeared to be continuing deeper. This concrete structure is in direct conflict with the proposed location of the new sludge main on Mission Street. The concrete curb on the north side of Mission St also extends 7' deep.

See attached pothole findings.

Please advise on how you would like to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 8/16/2011 In accordance with specification sections 000810 and 020630, please submit for review locations and findings for all potholes performed along Mission Street associated with the Sludge FM.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0159.1	Conflict with Sludge Line Conflict on Mission	Closed	08/26/2011	09/05/2011	09/13/2011	Potentially	☐

From: Webcor Construction LP Jacob Giannandrea **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Service Eric Zagol

Co-Author:

REQUEST:

In response to RFI U-159. See attached pothole findings from remaining potholes on Mission street. Also included is pothole data for Sta 17+28 and Sta 17+50.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

In response to RFI U-159 and 159.1:

For 12"Sludge FM on Mission at Beale St., information provided shows an existing unforeseen concrete wall 23" from the face of curb, the proposed 12" Sludge FM is shown 1' from the curb. Construct 12" Sludge FM between face of curb and existing concrete wall.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0159.2	Unknown Concrete Structure Sludge Line Conflict	Closed	09/15/2011	09/15/2011	09/21/2011	Yes	☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** AECOM Technical Service Eric Zagol

Co-Author:

REQUEST:

In response to RFI U-159.1
There is not adequate space between the face of curb and the unknown concrete structure in order for a welder to be able to weld the bells of each piece of pipe.
Please advise on how to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 9/18/2011 Demolish existing unknown concrete structure south of proposed alignment between STAs 17+25 to 17+75 as required at joints to facilitate welding. Expose unknown structure at joints, identify sections to be demolished and coordinate with TJPA Representative prior to structure demolition.

Jeff Thiel 9/21/2011 Pending approval by the TJPA, a CR will be issued.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0160	Location of Existing Sludge Force Main on Beale Street	Closed	07/29/2011	08/08/2011	08/02/2011	Potentially	☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Service Eric Zagol

Co-Author:

REQUEST:

M Squared has potholed for the sludge line on Mission Street at Beale at the location shown on the attached drawing. They have been unable to locate the existing 10" FM that they are to tie the new 12" sludge main into. The (E) Force Main is not in the location shown on the contract

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 8/2/2011 The existing 10" sludge FM in the vicinity bends down (~45+) to get under the existing 3'x5' sewer in Mission St. Record drawings show the depth of the 10" sludge FM where potholed at around 5', north of the 45 degree vertical bend.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

drawings.
See attached pothole findings.
Please advise on how you would like to proceed.

However, record drawings may not be reliable as was the case at Howard and Beale St. when excavating for the Beale St. water main connection where the 10" sludge FM was found at a location different than shown on the drawings.

Pothole for the existing 10" sludge FM at Beale St. STA 7+08 (10' north of current location) to ensure connection location is north of the vertical bend. Submit pothole data for review.

U-0160.1 **Location of FM on Beale Street** **Closed** **08/05/2011** **08/05/2011** **08/09/2011** **Potentially** ☐

From: Webcor Construction LP Jonathan Flaming **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Service Eric Zagol

Co-Author:

REQUEST:

Per response to RFI U-0160 M Squared continued its potholing at Sta 7+08 on Beale Street.
M Squared potholed 7' long x 4' wide and 8' deep and M Squared was still unable to determine the location of the existing FM.

See attached pothole findings.

Please advise how M Squared should proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 8/9/2011 Unforeseen mismarked existing utility via the USA process. Pothole for existing sludge FM at the location shown in the attached sketch.

U-0160.2 **Location of FM on Beale Street** **Closed** **08/11/2011** **08/21/2011** **08/24/2011** **Potentially** ☐

From: Webcor Construction LP Jonathan Flaming **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Service Eric Zagol

Co-Author:

REQUEST:

M Squared potholed the location of the existing FM to the limits in the drawing provided in the response to RFI U-0160.1. M Squared located the FM within this pothole.

See attached pothole findings.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Unforeseen condition, location of existing Sludge FM in the field varied from that shown on the drawings. Refer to SK-U-0021 and SK-U-0022 attached showing the revised horizontal and vertical alignment to accommodate connection to Sludge FM as located in the field.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please direct M Squared how to proceed.

U-0161 **Unknown Concrete Structure in Investigative Trench** **Closed** **07/29/2011** **08/08/2011** **08/01/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

M Squared discovered an obstruction in the Beale Street investigative trench on station 2+55 approximately 25' west of centerline. The obstruction appears to be a 2'-3' thick concrete wall starting directly below the street base and extending down to an unknown depth. M Squared began demoing the obstruction yesterday believing it was part of a concrete encased PG&E trench. It is now known it is not part of any duct package.
Please advise on how you would like to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 8/1/2011 Unknown non utility structure. A similar structure was found in AECOM's subsurface investigation trench at Beale Street Station 2+80.52 as shown in Specification Section 020630 Appendix A.

Protect in place. Non utility structures (i.e. walls) within zone of CDSM shoring wall and Transit Center footprint are to be removed by Buttress/Shoring/Excavation (BSE) contractor.

U-0162 **Manhole #602 Orientation** **Closed** **08/03/2011** **08/13/2011** **08/09/2011** **Potentially** ☐

From: Webcor Construction LP Jonathan Flaming **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

The PG&E manhole at Station 2+55 is actually further south than is shown on the drawings. As a result of this the new water main on Natoma Street was installed in a different alignment than shown on the drawings. In order to excavate and shore for the new Manhole #602, without damaging the new water main M Squared will have to install the manhole at a different alignment than what is shown on the plans. M Squared will maintain the correct internal manhole dimensions per DPW standard drawings.

Please confirm this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 8/9/2011 Construct sewer MH #602 to avoid existing water main as shown in the sketch provided. Maintain internal manhole dimensions, wall thickness, and steel reinforcement per DPW Standard Plans #87,182.

U-0163 **Utilities Demolition Plan** **Closed** **08/04/2011** **08/14/2011** **08/24/2011** **Potentially** ☐

From: Webcor Construction LP Jonathan Flaming **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

The submittal TG04.4 - UG1020-024100B01 Utilities Demolition Plan was returned to M Squared marked "Revise & Resubmit".
The review note was: Please provide demo and sequencing plan per specification 02 41 00 Part 1.3A.

M Squared is unable to acquire the necessary utility abandonment schedules from the utility companies concerned.
Please provide us with a schedule showing when each of the utilities is to be abandoned by the relevant agencies. Once this has been provided M Squared will be able to provide the sequencing plan per the specifications.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The intent of the submittal comment was to reference specification section 024100 1.3A requiring the contractor to submit a utilities demolition and construction sequencing plan showing commencement, order, sequence and completion dates for approval prior to commencing with the demolition of existing utilities. The schedule submitted didn't include sequencing of the new work.

U-0164 **Beale Investigative Trench Limits** **Closed** **08/09/2011** **08/19/2011** **08/10/2011** **Potentially** ☐

From: Webcor Construction LP Jonathan Flaming **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Jonathan Flaming

Co-Author:

REQUEST:

Sheet U-1008 shows the limits of the investigative trench on Beale Street (south of Mission St) to be 56' in total. 41.1' from center going west and 14.9' from center going east.
By going 14.9' from center with the eastern portion of the investigative trench M Squared will not encompass the existing water line and the existing AWSS line as they are outside the limits of the 14.9'.

Please direct M Squared how to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 8/9/2011 Excavate investigative trench in accordance with contract documents as shown on U-1008. Demolish, cap and plug existing 12-inch water and 10-inch HPW (AWSS) as shown on Sheet U-1125.

U-0165 **Sewer Lateral to 92 Natoma** **Closed** **08/09/2011** **08/19/2011** **08/10/2011** **Potentially** ☐

From: Webcor Construction LP Jonathan Flaming **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

While installing the new sewer on Natoma Street from 2nd to the shoring wall M Squared noticed that the sewer lateral to 92 Natoma is a new VCP lateral and has been installed in the last 12 months.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 8/10/2011 It is acceptable to protect existing lateral and provide a permanent connection to the new 24-inch VCP main in lieu of replacing the lateral as shown on Plans.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

The contract drawings show M Squared replacing all sewer laterals on Natoma from 2nd to the shoring wall, however this lateral appears like it does not require replacing.
Jason Chin (BCM) has been made aware of this issue.

Please confirm it is acceptable to leave this lateral in place and perform permanent connection to the new 24'' VCP main.

Notes
Please provide credit for contract work not completed.

U-0166 **Broken Culvert Pipe Encountered in Utility Demolition Trench on Fremont St.** **Closed** **08/19/2011** **08/29/2011** **08/24/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

During trenching for demolition of the electrical ductbank along the east side of Fremont St Trinet crossed a 10" culvert pipe (@ Stn 5+05) from the existing catch basin on the east side of the street at Stn 5+05. The section of clay pipe exposed is cracked in several places and half the bell of an exposed joint is missing. Please advise if the owner will need the broken pipe section replaced before the trench is backfilled.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Replace damaged pipe section per direction of SFPUC inspector prior to trench backfill.

U-0167 **Culvert Run to MH#306** **Closed** **08/22/2011** **09/01/2011** **08/24/2011** **Potentially** ☐

From: Webcor Construction LP Jacob Giannandrea **To:** Turner Construction Compan Gary Krutsch **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

See attached sketch.

Please confirm that it is acceptable to tie the 10" culvert run into the new MH#306 instead of running the culvert to the existing MH.

If this change is acceptable please advise if it is necessary to connect the existing 3'X5' sewer to MH 306 or if the existing sewer should be abandoned.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Connect new 10" SD culvert from CB#306 to SMH#306.

It is no longer necessary to connect existing 3'x5' brick sewer to SMH#306 as shown on U-5001 Detail 6. Abandon in place existing 3'x5' sewer and existing sewer MH at STA ~2+40 in accordance with CCSF DPW Standards.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0168	TJPA Composite Utility Drawings	Closed	08/31/2011	09/10/2011	10/05/2011	Potentially	☐

From: Webcor Construction LP Jacob Giannandrea **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Colin Azevedo

Co-Author:

REQUEST:

Sheet MA - 12, Note 4 refers to TJPA Composite Utility Drawings for that area. M Squared currently has composite utility drawings for trade packages TG04.3, TG04.4, TG04.6, and TG04.1. M Squared does not have composite utility drawings for the TG04.2 project.

Please provide these drawings.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 9/15/2011 TJPA does not have existing utility composite drawings for this area. SFDPW BOE has information and records provided by utilities in response to a notice of intent that can be provided to the TJPA for use as reference.

Jeff Thiel 10/3/2011 SFDPW BOE has provided the documents referenced in Eric Zagol's original response to this RFI.

These documents have been uploaded to Constructware and can be found in the following File Director path: Sitework & Utilities\5 Program Coord\30 Utilities\Notice of Intent\...

If the files are too large to open in Constructware they can also be found on the FTP site by following this link:

ftp://ftp.tjpa.org/Document%20Control/11011824/

Log In Instructions

1. Enter case-sensitive Username (public) and Password (PublicFTP1)

2. Select View\Open FTP Site in Windows Explorer

3. Drag file(s) to your desktop

Note: Please do not open files while logged in the FTP

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0169	CB#703 Location	Closed	09/01/2011	09/01/2011	09/07/2011	Potentially	☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

See attached photo showing conflict with location of new CB#703 and unknown underground concrete structures. They appear to be the same structures discovered in the investigative trenches on Beale Street.

Please confirm that it is acceptable to put the new CB in the same location as the existing CB which has been removed.

It is acceptable to construct CB#703 in the same location as existing.

Please coordinate the depth of the sewer culvert with proposed PG&E Phase II work as shown on U-2037. Submit proposed culvert profile with elevations of the existing PG&E electrical ducts as pot holed that are to be capped in Phase I (U-1125) and connected to in Phase II (U-2037).

U-0169.1 **CB#703 Location** **Closed** **11/15/2011** **11/25/2011** **11/23/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

- CB#703 was constructed in the location of the existing catch basin.
- See attached profile with culvert elevations. Culvert was installed deeper as several utilities were lower than shown on the drawings.
- Per M Squared¡¦s response to comments made in the RFI #U-0181, one of the duct banks shown on the drawings could not be located and was not as shown on the drawings. The alignment of the other duct bank is also different than what is shown on the drawings. (See attached) The depth of this duct bank at the point where M Squared capped it (3' south of the unknown concrete structure) was 6' 8" to the top. Its location/alignment beyond that point are unknown.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please provide the invert elevation of constructed 10" culvert at CB#703. Based on the sketch provided in the RFI169.1, the 10" culvert was reversed slope. A culvert with reversed slope is not acceptable.

U-0170 **Duct bank Demo on Natoma** **Closed** **09/15/2011** **09/25/2011** **09/23/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

M Squared has determined in the field that the duct bank highlighted which is to be demolished, is in fact

SUGGESTION:

Eric Zagol 9/18/2011 U-1110 indicates removal of existing PG&E duct to facilitate construction of the 8-

ANSWER: **Accept Suggestion:** ☐

U-1110 indicates removal of existing PG&E duct to facilitate construction of the 8-inch Water and Sewer

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

underneath the curb and gutter. In order to demolish it per the plans M Squared will have to remove the curb and gutter and possibly a portion of sidewalk. See attached.

Please confirm whether you would like the duct bank removed and repour the curb and gutter after demo, or leave the duct bank in place and repair the portion of curb and gutter damaged while locating the duct bank.

inch Water and Sewer MH #301 . If existing duct as highlighted is not in conflict with new utilities then the existing duct may be abandoned in place.

Cap existing duct at RUP/BSE demarcation line per ASI 15.

Provide photos showing location of duct, duct, and curb and gutter damaged at the area indicated for repair for review.

Jeff Thiel 9/19/2011 Pending approval by the TJPA, a CR will be issued.

MH #301 . If existing duct as highlighted is not in conflict with new utilities then the existing duct may be abandoned in place.

Cap existing duct at RUP/BSE demarcation line per ASI 15.

Provide photos showing location of duct, duct, and curb and gutter damaged at the area indicated for repair for review.

U-0170.1 **Duct Bank Demo on Natoma** **Closed** **09/21/2011** **10/01/2011** **10/05/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

In response to RFI #U-0170, see attached photos. Approx 20' of curb and gutter to be repaired. Sidewalk remained undamaged and does not require repair. Please advise if M Squared is to repair this portion of curb and gutter.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 9/27/2011 Per response to RFI 170, please provide data (i.e. photos, survey and etc.) that supports the statement that the existing duct bank was found beneath the existing curb and gutter.

Contract plans show the existing duct south of the curb and gutter. The curb and gutter should have been protected in place during excavation. If curb and gutter to be protected in place was damage during the course of work please restore to match existing per 01 15 40 and contract documents.

U-0170.2 **Duct bank Demo on Natoma** **Closed** **11/18/2011** **11/28/2011** **12/01/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Turner Construction Comp Jeff Thiel

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

M Squard has reviewed their photo logs and were unbale to locate any photos showing the ducktbank running under the curb and gutter. M Squared will proceed with providing a credit per CR U-027.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

12/1/11 UPDATED RESPONSE

Corresponding CR for this work is CR U-050. Proceed with providing credit per CR U-050.

11/22/11 ORIGINAL RESPONSE

RFI does not pose a question and will be considered closed. M Squared shall proceed with providing a credit per CR U-027.

U-0171 **AWSS Ductile Iron Pipe** **Closed** **09/15/2011** **09/25/2011** **09/19/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

Please confirm that it is acceptable to use non-gauged ductile iron pipe for the AWSS system.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 9/19/2011 Michael Smith's (SFDPW) response, "Use at contractor's discretion. Contractor will be responsible for pipe being inserted into pipe bell ends, AWSS fittings, etc. and passing hydrostatic tests," dated and signed on 9/19/11 (see attached).

U-0172 **City Furnished Gate Valves** **Closed** **09/20/2011** **09/30/2011** **10/05/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

Specifications direct the contractor to provide a clear distance between the pipe flanges that consists of the gate valves laying length plus ½" not including the thickness of the gaskets to be installed.
In order to do this M Squared will need the dimensions of all City furnished gate valves.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 10/4/2011 Michael Smith's (SFDPW) response,

"Please refer to attached manufacturer's drawings for laying lengths of gate valves. These laying length dimensions were confirmed on 10/04/2011."

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please provide cut sheets for all valves provided by SFWD for this project.

dated and signed on 10/04/11 (see attached).

U-0173 **Valve control panel pick-up** **Closed** **09/24/2011** **10/04/2011** **10/05/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

M Squared's supplier, Control Systems West, have been coordinating with SFWD regarding which of the City's panels will be used for the TG04.2 project.
Tom Reid with SFWD has designated 3 panels to be used for this project.
These panels are to be picked up at SFWD, transported to Control Systems West for testing, programming etc and then returned to the job for use at 3 of the valve locations.
As the panels have been selected M Squared would like to begin the process of getting the panels to their supplier so they can begin the work.

Please provide the name and contact information for the person with whom M Squared can coordinate the pick up of the 3 units.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 9/26/2011 Contact Bill Gunn at (415) 706 0688 or WGunn@sfwater.org

Per Section 01 10 40, Coordination, Article 1.6 C, this RFI does not fall under the acceptable uses for an RFI as it is not being used for an interpretation of the Contract Documents.

RFIs used for questions regarding coordination will be rejected in the future.

U-0174 **AWSS Antenna location at Location 1** **Closed** **09/27/2011** **10/07/2011** **10/11/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

On drawing MA-20 regarding location 1 the antenna is shown to be mounted on a street light. However, on drawing MA-29 the same antenna is shown to be mounted on the enclosure.
Early conversations between Dick Borders (Control Systems West) and Kenny Chin (DPW) confirm that mounting the antenna on the enclosure is the preferred option.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 10/11/2011 Michael Smith's (SFDPW) response:

"The antenna shall be mounted on the controller cabinet for location No. 1. Disregard any reference to the mounting of the antenna on the (E) light post as shown on drawing MA-20. Mounting of antenna on to the controller cabinet shall be performed by the

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please confirm the antenna mounting location.

controller cabinet manufacturer."

Dated and signed on 10/11/11 (see attached).

U-0175 **Sludge line layout** **Closed** **09/27/2011** **10/07/2011** **11/08/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

The 12" sludge line cannot be installed along Mission Street as shown on the revised drawings due to the elevation and location of existing utilities and other unknown subsurface obstacles. Please see attached pothole information.
Please advise how you would like to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 11/7/2011 Modifications to the 12" Sludge FM are currently being evaluated under ASI-018. Revised plans and specifications forthcoming following redesign and execution of ASI-018.

U-0176 **AWSS Conflict @ Location 7** **Closed** **09/28/2011** **09/28/2011** **10/17/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** City and County of San Fr Michael Smith

Co-Author:

REQUEST:

Due to the location of existing utilities it will not be possible to install the AWSS valve vault at the location shown on sheet MA 18 of the AWSS drawings. See attached pothole drawings from 09/26/11 and
09/27/11.
Please advise how you would like to proceed.

SUGGESTION:

Follow up responce recieved 10-19-2011:
****10/19/11 UPDATE****

Michael Smith's (SFDPW) response,

"Meeting with M Squared, SFWD, and SFDPW on 10/18/11. Contractor to have area from intersection of First/Howard Streets to 100 feet West on Howard Street marked for utilities (USA). We will then meet at site to determine clear area over AWSS main to pot hole for valve vault."

Dated 10/19/11 (see attached)

initial response received 10-17-2011:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

SFDPW to meet in the field with contractor and SFWD inspector to determine method to proceed. Will provide response with direction at this time.

NOTE: RB issued email 10-18-2011 requesting meeting.

U-0176.1 **AWSS Conflicts at Location #7** **Closed** **11/18/2011** **11/28/2011** **11/21/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Webcor Construction LP Daniel Foudy

Co-Author:

REQUEST:

Per the response to RFI #U-0176 a field meeting was attended by Michael Smith and M Squared.
M Squared received direction to perform additional potholes further west of First St on Howard St.
Please see attached pothole findings.
Please advise how you would like to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Michael Smith's (SFDPW) response,
"Please refer to commnets on attached sheet.
SFDPW Response:
This conflict between the existing AWSS line and utilities at the original
design location are unforeseen field conditions due to incorrect information
being furnished to the City. Thus the motorized gate valve vault is being
relocated west of the original location. The contractor shall pothole 10-feet
west of Pothole No. 1B and 10-feet east of Pothole No. 1A to verify that there
is adequate clearance for installing a horizontal offset and motorized gate
valve vault the approximate location of Pothole No. 1A. Please notify the
engineer of the potholing schedule in order that we can request the majorutilities toattempt to identify the 4-inch steel pipe running parallel on Howard Street."
Signed and Dated 11/18/11 (see attached)

U-0176.2 **AWSS Conflicts @ Location 7** **Closed** **01/18/2012** **01/28/2012** **02/16/2012** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Per response to RFI#U-0176.1 M Squared performed additional potholing at Location 7.

Please see the attached pothole findings.

Please advise how you would like to proceed.

Note: The 4" Unknown Utility was confirmed to be an abandoned PG&E gas main. On 1/10/12 PG&E drilled the line and confirmed it to be abandoned.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 2/15/2012 Michael Smith's (SFDPW) Response.

"Furnish and install horizontal offset as shown on the attached drawing in order to locate the proposed concrete valve vault with minimum 6-inches clearance to the existing electrical duct bank running on the North side of Howard Street. Adjust nipple lengths as required between elbows and to connect into the ends of the existing cast iron pipes. Concrete valve vault and placement of motorized gate valve shall otherwise be shown on drawings MA-22 and MA-25.

Work for installation of new concrete valve vault and gate as show on Drawing MA-18 shall be deleted from the scope pending installation of the new valve vault as shown on the attached drawing."

Signed and dated 2/13/12.

Christina Young 2/15/2012 Pending TJPA approval, a CR will be issued.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0177	Ductbank Demo on Fremont St	Closed	10/04/2011	10/14/2011	10/10/2011	Potentially	☐

From: Webcor Construction LP Colin Azevedo

To: Turner Construction Compan Steve Cunningham

Answered By: AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

See attached sketch.
The duct bank shown on Fremont Street to be demolished is in fact underneath the curb and gutter and portion of the sidewalk on Fremont St.
In order for M Squared to remove this duct bank it will require us to close the west sidewalk on Fremont St, demo and remove the sidewalk, remove the ductbank and then replace the sidewalk.
Currently the east sidewalk is closed also due to BBI activity.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 10/6/2011 Coordinate with PG&E to confirm the duct indicated in the M2 sketch is PG&E's 6-6" duct from PG&E's EMH 7605.

Demolish and remove the 6-6" duct segment between STA ~2+40 (at the gutter) and the demarcation line south of shoring wall. The intent is to remove the segment within Natoma Street. The segment south of STA 2+40 (STA 2+40 to STA 1+85) can be abandoned in place.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please advise how you would like to proceed.

Provide cap at STA 2+40 instead of STA 1+85 shown in the plans.

PG&E will break in and connect to the existing 6-6" duct at STA 1+85 as part of PG&E's Phase II relocations.

U-0178 **Sludge line layout on Mission between Beale and Main** **Closed** **10/04/2011** **10/04/2011** **11/08/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

Continued potholing on Mission Street between Beale and Main has revealed additional grade conflicts on the proposed alignment for the new 12" steel sludge line. Some of the utilities are not as shown on the drawings nor marked in the field by USAN. See attached sketches.

Please advise if M Sqaured is to continue potholing on Mission Street as it may be necessary to excavate the entire length of the trench between Beale and Main to locate and map all conflicts.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 11/7/2011 Modifications to the 12" Sludge FM are currently being evaluated under ASI-018. Revised plans and specifications forthcoming following redesign and execution of ASI-018.

U-0179 **AWSS Main line conflicts at Location 7** **Closed** **10/05/2011** **10/15/2011** **11/21/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

Some of the existing utilities are not shown on the drawings and have been installed on top of the existing 12" AWSS line. Due to the proximity and volume of these utilities it is not possible to even hand excavate down to the existing AWSS line to verify its location and depth. Please see attached pothole information.
Please adivse.

SUGGESTION:

the following response received 10-17-2011 does provide direction in this matter:
It shall be the contractor's responsibility per the Contract Documents to perform the required potholing in order to identify the existing AWSS facilitieis prior to actual excavation.
Background utility information was provided by

ANSWER: **Accept Suggestion:** ☐

UPDATED RESPONSE (11/18/11)
Michael Smith's (SFDPW) response,
Refer to comments on attached sheet. These comments supercede
response provided on 10/17/11.
SFDPW Response:
This conflict between the existing AWSS line and

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

TJPA/consultatns and shall be verified in the field by contacting Underground Service Alert (USA). Direct conflicts oted during potholing shall be directed to the utility owner(s) for relocation/removal as required to perform the contract work.
NOTE: email from Rick Buellesbach 10-18-2011 requests an answer to the question.

utilities are unforeseen field conditions due to incorrect information being furnished to the City.
There are no design alternates at this location due to the necessity of removing the existing cross that was capped on the First Street side outlet to accommodate the utility relocation work for the proposed transit center.
The engineer will contact the owners of the utilities in conflict with the AWSS facility for resolution." Dated 11/18/11 (see attached)

U-0180 **Conflict with CB 305** **Closed** **10/10/2011** **10/20/2011** **10/17/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Webcor Construction LP Richard Buellesbach

Co-Author:

REQUEST:

While excavating to install CB305 M Squared encountered a large unknown concrete structure. The concrete structure is in conflict with CB305. CB305 cannot be installed as planned. See attached photo.

Tsu-Ling with AECOM and Alberto with SFDPW reviewed the situation in the field and agreed the solution was to salvage the existing CB where CB 305 was to be installed. This work was performed on 10/7/2011 under the inspection of SFDPW.

Please confirm.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

As determined during a site visit on 10/7/11 with M Squared, AECOM, SFDPW and W/O; the existing unforeseen condition, a large concrete structure, is in conflict with CB 305 and the installation of a new catch basin would require an extensive amount of unforeseen demotion.

In lieu of installing a new catch basin barrel to replace existing, modify the existing catch basin as follows:

1. Clean interior walls and bottom.
2. Apply 1/2" think uniform layer of mortar on interior walls and bottom.
3. Install cast iron trap.
4. Install pipe culvert and connect to MH#305 as shown in Plans.

New culvert size and invert shall match existing culvert at catch basin. Use ductile iron pipe if depth of cover is less than 3 feet.

U-0181 **Unknown subsurface structure on Beale** **Closed** **10/13/2011** **10/23/2011** **10/24/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** AECOM Technical Servic Eric Zagol

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author:

REQUEST:

During M Squared's demo work on the West side of Beale Street at Sta 4+70 they uncovered an unknown subsurface structure. This structure appears to be an abandoned vault that has been filled with concrete. Please see attached photo.
M Squared ceased work on the removal of the six 6" electric duct banks 6' south of this structure. If they are to continue with the removal of this abandoned duct bank per sheet U-1125 of the contract drawings they will be forced to remove the subsurface structure.
Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 10/24/2011 Please provide a plan showing the location and extent of unknown structure identified. Also indicate what portions of the existing PG&E electrical duct has been demolished to date.

U-0181.1 **Unknown subsurface structure at 301 Mission** **Closed** **11/18/2011** **11/28/2011** **11/23/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** AECOM Technical Servic Eric Zagol

Co-Author:

REQUEST:

See attached information as requested in response to RFI #U-0181.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Subsurface structure to remain. Cap locations as shown are acceptable. Please mark on as-built drawing as required by the contract documents.

U-0182 **AWSS Conflict with AT&T Vault at Location 2** **Closed** **10/24/2011** **11/03/2011** **11/21/2011** **Potentially** ☐

From: Webcor/Obayashi Joint Venture Jason Dunne **To:** Turner Construction Compan Steve Cunningham **Answered By:** Webcor Construction LP Daniel Foudy

Co-Author:

REQUEST:

On the north east side of the Mission Street and 2nd intersection the existing AWSS line is running through the floor of the AT&T vault. The removal of the existing 12" pipe and installation of the new 16" AWSS pipe will require the floor vault to be demolished and re-poured.

Please provide a detail for this work or a new alignment for the AWSS line so as to avoid this vault.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Michael Smith's (SFDPW) response,

"SFDPW Response:

This conflict between the existing AWSS line and utility vault are unforeseen field conditions due to incorrect information being furnished to the City.

The contractor shall pothole the alternate pipe alignment as shown on the attached sketch due to the existing conflict with the AT&T vault over/within the

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

present alignment of the AWSS pipe.

Notify engineer of pothole results for the proposed alternate pipe alignment."

Signed and Dated 11/18/11 (see attached)

U-0182.1 **AWSS Conflict with AT&T Vault at Location 2** **Closed** **03/28/2012** **04/07/2012** **05/16/2012** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

The sketch provided in response to RFI U-0182 does not provide adequate information to perform additional potholing. Please provide additional information.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 3/29/2012 Michael Smith's (SFDPW) response,

"Please refer to the attached sketch dated 3/16/12 for potholing the location shown in order to verify the existing AWSS main and that there there are no utility conflicts in the proposed vault location. The original loaction for the vault is impacted by utilites."

Signed and Dated (3/29/12)

U-0182.2 **AWSS - Conflict with AT&T Vault at Location 2** **Closed** **07/31/2012** **07/31/2012** **08/14/2012** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

Per the response to U-0182.1, M Squared potholed the locations shown. See attached pothole data.
- The pothole 24' north of Mission appears to have a substructure underneath PGE duct banks.
- The pothole 12' north of Mission St had several utilities in them that have since been confirmed abandoned.

SUGGESTION:

Relocate the street light/ traffic signal conduits and shift the vault location 3 feet north away from the 12inch gas main. In doing so, this could potentially be the location for a cast in place concrete valve vault.

ANSWER: **Accept Suggestion:** ☐

Michael Smith's (SFDPW) response,

- Proceed as per Contractor's recommendation for locating motorized gate valve vault.

- Contractor shall field verify alignment of pipe North/South of proposed vault location for connection

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

into (E) lines.

Signed and dated 8/9/12. (See attached)

Per discussions between TCCo/PMPC/SFDPW, Contractor to trench the Second Street AWSS alignment per the attached sketch. Upon completion of trenching advise TJPA if there will need to be a change in material/fittings required to complete the AWSS installation work.

U-0182.3 **AWSS - Design Route at 2nd Street Intersection** **Closed** **02/06/2013** **02/16/2013** **02/28/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

Per the response to RFI U-0182.2, M Squared has field verified a new alignment for the 16" AWSS at 2nd & Mission St. (See attached drawing).

Due to several PG&E conflicts this is the only available route capable of accepting a 16" pipe; M Squared is unable to locate an alignment per the sketch attached to the response to RFI U-0182.2. By proceeding with this alignment M Squared will again return the AWSS pipe through the structure of an AT&T vault and a PG&E Vault. It does not appear from our field work that there are other options for a workaround.

Based on information M Squared currently have attained from the trenching; restraining each joint, per the original contract will require the following:
- 4 additional 16-inch 45deg bends
- 2 additional 16-inch 90deg bends
- 1 additional 16-inch bell collar
- 15 additional stop collars
- 4 additional kickers/thrust blocks.

Please confirm the proposed route and additional fittings

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 2/12/2013 Response per Michael Smith, (SFDPW)
"Proceed as stated above due to existing conflicting utilities impacting original vault location."
Signed and dated 2/8/13 (See Attached). Contractor to verify material quantities required for the revised alignment once the proposed route is fully exposed. Pending TJPA approval, a CR will be issued for this work.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

and restraints are acceptable.

U-0182.4 **AWSS - Final Design Route and Additional Fittings List at 2nd Street Intersection** **Closed** **03/14/2013** **03/24/2013** **03/21/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor/Obayashi Joint Ve Jackson Tukuafu

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

Refer to drawing MA-3 and MA-13

Please refer to previous RFI 182 series for history.

As M Squared must connect to an existing 16" line at 2nd & Mission Street, M Squared performed additional trenching which has now opened up the possibility of a different and more straight forward alignment for 2nd Street piping.

This new alignment shall replace the alignment sent in the previous RFI-0182.3.

1. Please confirm the new alignment shown in the attached M Squared sketch SK-008.3 is acceptable.
2. Please confirm where the 16" to 12" reducer is to be located. The location of this reducer will decide whether M Squared will need to purchase two (2) more 16" 45-deg elbows or 12" 45-deg elbows.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Michael Smith's (SFDPW) Response,

"The suggested pipe layout based on recent excavations is acceptable.

-Locate the 16" x 12" reducer North of the 16" tee and as close as possible to the tee."

Signed and Dated 3/18/13. (See Attached)

U-0183 **AWSS Valve Vault Conflict at Location 1** **Closed** **10/24/2011** **11/03/2011** **10/26/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** City and County of San Fr Michael Smith

Co-Author:

REQUEST:

The proposed valve vault at location 1 cannot be installed as per the plans due to utility conflicts encountered during potholing. See attached pothole info. These utilities are not shown on the contract drawings.
Please advise.

SUGGESTION:

Jeff Thiel 10/27/2011 Michael Smith's (SFDPW) response,

"Per your preliminary excavation results, please schedule a site visit with SFDPW and SFWD at site. At site visit, we will provide direction for vault

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

installation."

Signed and Dated 10/26/11 (see attached)

Kevin Chiu 10/27/2011 When final direction is provided via on site meeting per the RFI response, please submit a follow up RFI to confirm direction provided in the meeting.

U-0183.1 **AWSS Valve Vault Conflict at Location 1** **Closed** **11/16/2011** **11/26/2011** **11/18/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Webcor Construction LP Daniel Foudy

Co-Author:

REQUEST:

Per the response to RFI#U-0183 a site visit was held with SFDPW and SFWD on 11/2/2011 to review the conflicts at location 1. Please provide direction based on this meeting.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Michael Smith's (SFDPW) response,

"Refer to comments on attached sheets. These comments supercede comments provided on 10/26/11 for RFI U-0183.

SFDPW Response:

Motorized gate valve vault: Per the preliminary excavation at Pothole No. 2 and the provided information, verify 2 1/2-inch steel for ownership and request owner should there not be adequate space to install vault due to the existing electrical duct bank shown in Pothole No. 3 drawing. Notify engineer to provide revised drawing(s) for AWSS fittings should vault need to be moved west. Notify engineer should vault interior dimensions need to be reduced after providing a minimum of 3-inches clearance with other utilities and the vault constructed with 12-inch thick walls.

Controller cabinet: Per the preliminary excavation at Pothole No. 7 and the provided information, install the controller cabinet concrete foundation at this site.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Notify MCI that either their conduit can remain with the controller foundation installed over the conduit with 4-inches clearance or that they can relocate their conduit as required. Modify bottom of controller foundation to accommodate a clearance of 4-inches should the conduit not be relocated.

Battery vault: Per the preliminary excavation at Pothole No.6 and the provided information, field verify the installation of the battery vault by locating the northern edge of the vault 2-feet towards the curb."

Signed and Dated 11/15/11 (see attached)

U-0183.2 **AWSS Valve Vault Location 1** **Closed** **12/02/2011** **12/12/2011** **12/15/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

Please see the attached letter regarding the response to RFI#U-0183.1.

Please provide direction.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Michael Smith's (SFDPW) response,

"Please see attached for revised response - U-183.2.

SFDPW Response:

Motorized Gate Valve Vault: Per the preliminary excavation at Pothole No. 2 and the provided information, verify 2 ½ inch steel for ownership and request owner to relocate the line outside of the valve vault footprint with 12-inches clearance. Should the valve vault still be in conflict with the existing electrical duct bank shown in Pothole No. 3, move vault location West along Market Street until valve vault has a minimum 12-inches clearance with the existing electrical duct bank.

Notify engineer to provide revised drawing(s) for AWSS fittings should valve vault need to be moved West.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Notify engineer should vault interior dimensions need to be reduced after providing a minimum of 3 inches clearance with other utilities and the vault constructed with 12-inch thick walls."

Signed and dated 12/14/11 (see attached)

Turner will verify 2 1/2 steel for ownership.

U-0183.3 **Valve Vault Conflict at Location 1** **Closed** **01/23/2012** **02/02/2012** **02/08/2012** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

Per the response to RFI #U-0183.2, M Squared Construction performed further potholing on the valve vault location on Market Street.
Please see attached findings of these potholes.
Please advise on how you would like M Squared to proceed with the vault construction/installation.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 2/6/2012
Michael Smith's (SFDPW) response,
"-Install concrete valve vault in locations as show on pothole No. 3A. Relocate 1 1/4" copper pipe as necessary during vault placement.
-Resubmit concrete vault drawings with dimensions to suite location and 9" thick walls for walls adjacent to other utilities. Provide minimum 6" clearance to water line and 4" to ductbank."
Signed and dated 02/06/12 (see attached)

U-0183.4 **AWSS - Valve Vault Conflict at Location 1 for Trade Package** **Closed** **07/05/2012** **07/15/2012** **07/19/2012** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

While excavating for the MGV at location 1 it was discovered that the existing 16" water main has restraints installed
on it. These restraints are in conflict with the excavation and shoring for the removal of the existing valve vault and the
installation of the new cast in place vault at this location.
Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 7/19/2012 Installation of shoring is considered the contractor's means and methods.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0184	AWSS Connection Point at Location 2.	Closed	10/24/2011	11/03/2011	11/01/2011	Potentially	☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

The existing AWSS line at the connection point on 2nd Street north of Mission is a 10" pipe not a 12" as shown on drawing MA-13.
Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 10/27/2011 Michael Smith's (SFDPW) response,
"The line on Second Street North of Mission Street is a 10" CI line. Please update drawings. Drawing MA-21 in the contract package indicates the line as a 10" line."
Signed and Dated 10/26/11 (see attached)

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0184.1	AWSS Connection Point at Location #2	Closed	12/02/2011	12/12/2011	12/14/2011	Potentially	☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

Please see the attached letter regarding the response to RFI#U-0184.

Please provide direction.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per Michael Smith's response to RFI U-0188 SFDPW is preparing revised AWSS drawings to include stationing information provided by AECOM. These revised drawings will address the issue raised in RFI U-0184 and provide clear direction. The drawings will be issued in the near future packaged with other revisions.

Jeff Thiel 3/22/2012 - RFI U-184.1: The response on 12/14/11 indicated that resolution would be provided via a revised AWSS drawing. This change was included on the stationed drawings provided under ASI 19.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0185	Existing Lateral to CB701	Closed	10/28/2011	11/07/2011	11/01/2011	Potentially	☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Webcor Construction LP Colin Azevedo

Co-Author:

REQUEST:

Sheet U-3024 shows and existing storm drain lateral connecting the back side of the existing catch basin which was replaced by CB #701. The details for CB #701, C/U-3033, do not show this existing lateral to be connected to CB #701. CB #701 has been installed per plan and the existing lateral was abandoned in place. It has been discovered that the abandon lateral in servicing an active

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 10/31/2011 Lateral connections to CCSF catch basin barrels from property outside of the public right of way are prohibited . Owner/occupant of Parcel shall manage runoff in parcel and discharge to main sewer in accordance with CCSF regulations.

Coordinate with TJPA's field representative and

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

catch basin in Lot N. See attached sketch.

Please advise.

occupant of Parcel.

U-0186 **AWSS Conflict with Elec. Duct Banks & Vault @ Location 2** **Closed** **11/01/2011** **11/01/2011** **11/18/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Webcor Construction LP Daniel Foudy

Co-Author:

REQUEST:

Due to the proximity of the electrical vault and the electrical concrete duct banks it is not possible to remove the existing 18" AWSS line and reconnect to the existing tee as shown on drawings MA-3 and MA-13. Please see attached pothole drawing. The restraining lugs on the east side of the tee are cast into the base of the electrical vault. The concrete duct bank on top of the AWSS line at the connection point combined with the electrical vault will not allow enough room for the plumber to burn out the old lead joint and cast the new one.
Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Michael Smith's (SFDPW) response,
"SFDPW Response:
This conflict between the existing AWSS line and utility vault/duct bank are unforeseen field conditions due to incorrect information being furnished to the City.
There are no design alternates at this location due to the necessity of removing theexisting 18"x10" reducer at this location in order to install the 16" fittings to maintain the proposed 16" pipe size upgrade on Mission Street. The engineer will contact the owner of the utility in conflict with the AWSS facility for resolution."
Signed and Dated 11/18/11 (see attached)

U-0187 **Conflicts with Controller Cabinet Foundation & Battery Enclosure at Location 1** **Closed** **11/18/2011** **11/28/2011** **11/21/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Webcor Construction LP Daniel Foudy

Co-Author:

REQUEST:

Please confirm that M Squared it to install the control cabinet enclosure foundation (3'W x 3'L x 2'D) on top of the existing 10" and 8" steel lines shown on the attached sketch of pothole #6.
Please confirm that M Squared is to install the fiberglass battery enclosure on top of the utilities shown on the attached sketch of pothole #7. It will be necessary to hand dig around the existing utilities to install drain rock beneath the enclosure per the specifications.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Michael Smith's (SFDPW) response,
"Refer to SFDPW response provided on 11/16/11 to RFI U-0183.(1)."
Signed and Dated 11/18/11 (see attached)
RFI U-0183.1 Response included below-
"SFDPW Response:
Motorized gate valve vault: Per the preliminary excavation at Pothole No. 2 and the provided information, verify 2 1/2-inch steel for ownership and request owner should there not be adequate space to

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

install vault due to the existing electrical duct bank shown in Pothole No. 3 drawing. Notify engineer to provide revised drawing(s) for AWSS fittings should vault need to be moved west. Notify engineer should vault interior dimensions need to be reduced after providing a minimum of 3-inches clearance with other utilities and the vault constructed with 12-inch thick walls.
Controller cabinet: Per the preliminary excavation at Pothole No. 7 and the provided information, install the controller cabinet concrete foundation at this site. Notify MCI that either their conduit can remain with the controller foundation installed over the conduit with 4-inches clearance or that they can relocate their conduit as required. Modify bottom of controller foundation to accommodate a clearance of 4-inches should the conduit not be relocated.
Battery vault: Per the preliminary excavation at Pothole No.6 and the provided information, field verify the installation of the battery vault by locating the northern edge of the vault 2-feet towards the curb."

U-0187.1 **Conflicts with Controller Cabinet Foundation and Battery Enclousure at Location # Closed** **12/02/2011** **12/12/2011** **12/15/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

Please see the attached letter regarding the response to RFI#U-0187.

Please provide direction.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Michael Smith's (SFDPW) response,

"Please see attached for revised response - U-187.1.

SFDPW Response:

Controller Cabinet: Per the preliminary excavation at Pothole No. 7 and the provided information, install the controller cabinet and the concrete foundation at this site instead of the battery vault assembly that was shown here originally in the Contract Documents.

Notify MCI that either their conduit can remain with the controller foundation installed over the conduit or MCI

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

has the option to relocate their conduits away from the concrete foundation footprint. Should MCI not want to relocate, reduce thickness of concrete foundation over MCI conduit to provide a minimum of 4-inches clearance between the conduit outside diameter and the bottom of the foundation.

Battery Vault: Per the preliminary excavation at Pothole No. 6 and the provided information, install the battery vault at this site instead of the controller cabinet that was shown here originally in the Contract Documents.

Field verify (pothole) 2-feet from face of existing curb to determine if the Northern edge of the battery vault can be installed approximately 2-feet from curb instead of 5-feet from curb in order to provide clearance with 8-inch steel line. Notify engineer of pothole results prior to installation."

Signed and Dated 12/14/11 (see attached)

Turner will notify MCI.

U-0187.2 **Conflicts with Controller Cabinet and Battery @ Location 1** **Closed** **01/23/2012** **02/02/2012** **03/21/2012** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Turner Construction Comp Steve Cunningham

Co-Author:

REQUEST:

In response to RFI # U-0187.1 (Revised Response to RFI# U-0187 ON 12/14/11)
- See attached pothole data from additional potholing at this location.
- During initial discussions with MCI/Verizon M Squared informed them of the intent to install units on their utility. They requested a letter from the owner highlighting the intent. Please confirm if it is acceptable to install a unit on their utility.
Please provide direction on the locations of the battery vault and controller cabinet taking into consideration all

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 3/16/2012 Michael Smith's (SFDPW) response,

"Please see attached wording for letter to owner of utility.

Locate North most edge of battery vault cover 24" from face of curb or back from face of curb to remain in "brick" area."

Signed and Dated 2/14/12 (Letter Wording) and

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

current utilities in place.

3/15/12 (Battery Placement)

The attached letter addressed to MCI/Verizon was sent to Pam Brown on 3/14/12.

U-0188 **Control Stations on AWSS Drawings** **Closed** **11/18/2011** **11/28/2011** **11/21/2011** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Turner Construction Comp Kevin Chiu

Co-Author:

REQUEST:

At present M Squared has set up control points along Mission Street. These stations were based on a continuation of survey points used on Mission Street for the TG04.6-Sludge Line Project.
The City designed AWSS Drawings do not have these stations on them. Please provide an updated set of AWSS Drawings with the project stations marked on them so it will allow M Squared to accurately document field conditions and as built the necessary information.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Michael Smith's (SFDPW) response,
"SFDPW is currently preparing revised AWSS DWGS with stationing information as provided by AECOM. We anticipate the final set of stamped/signed DWGS prior to the end of November 2011."
Signed and Dated 11/18/11 (see attached)

Jeff Thiel 3/22/2012: RFI U-188 included a request for stationed drawings. It was responded to on 11/18/11 and resolved by ASI 19 when the stationed drawings were provided.

U-0189 **First & Howard Utility Conflicts, Location 7 Complete Pothole Data** **Closed** **12/02/2011** **12/12/2011** **07/03/2012** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

While potholes #2 & #3 have been addressed in a previous RFI (RFI#U-0176), other potholes carried out in Location 7 exposed various utilities that are not shown on the contract documents. Other utilities were not in the locations indicated on the contract documents.

See attached pothole data from potholes #1 through #11 at location 7.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The issues outlined in the attached pothole data have been addressed and resolved via coordination meetings, CRs, and other RFI responses.

The CRs include U-080R1, U-088, and U-088A as well as RFIs U-0176, U-0176.1, U-0176.2, U-0179, U-0197, U-0197.1, U-0197.2, U-0199, U-0200, and U-0200.1.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please clarify if the utilities will be removed, protected in place or relocated.

U-0190 **Fire Hydrant Location on Mission @ First** **Closed** **01/10/2012** **01/20/2012** **01/19/2012** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

While potholing for the new Hydrant and associated piping in the sidewalk on Mission Street (see attached), M Squared's crews damaged the roof of the basement to Portico Restaurant, 88 First Street (see attached photos). This basement structure was not noted on the plans and is a differing site condition.

The roof of the basement will now need to be repaired. Please provide direction and repair details for this work.

It is not possible to locate the fire hydrant in this area due to the presence of the basement. The existing hydrant has a column poured into the structure of the basement (see attached).

Please advise on how you would like to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Michael Smith's (SFDPW) response,

-Repair of sidewalk at pothole location: Refer to attached directions from William Liang- SFPDW/EST for repair method.

-New Hydrant lateral shall be located in the (E) hydrant alignment. (E) Hydrant is located in an areaway. Refer to AWSS standard drawings for details. SFDPW will provide revised drawing for (N) lateral prior to construction.

Signed and Dated 01/18/12

Response for Concrete Repair per William Liang (SFDPW) .

Chip out concrete inside of saw-cut area; do not damage (E) rebars.
If (E) rebars are found to have been cut during the saw-cutting process, chip out enough concrete around the cut rebars for installation of Lenton Quick-Wedge Splicing system at both ends; splice new rebars with size to match (E). If (E) rebars are found to be intact, proceed to Step 3.
Install keyway around perimeter of opening (keyway shall be a minimum 1.5 (below top of slab), install swellable water stop (Greenstreak Hydrotite CJ -0725) in keyway.
Form and pour with Emaco S66 CI by BASF. Perform surface preparation and provide curing in accordance with manufacturers recommendations. Note:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

continuous special inspection shall be provided for the concrete pour."

U-0190.1 **Fire Hydrant Location on Mission @ First** **Closed** **01/25/2012** **02/04/2012** **01/26/2012** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

On 1/24/2012 M Squared began repairing the basement roof per the response to RFI U-0190. SFDPW engineer William Liang came out and review the progress that day and provided alternate direction in the field. Please provide this direction in writing so work may resume.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

No alternate direction was given at 1/24/12 site visit by SFDPW engineer. SFDPW provided information and direction to supplement the direction given in response to RFI U-0190 based on his observations in the field. Existing rebar was found to be uncut but lacking sufficient concrete cover. Please see supplementary instruction below.

Per William Liang of SFDPW,

1. Chip out concrete inside of saw-cut area; do not damage (E) rebars,

2. (E) main rebars are found to be intact but have insufficient bottom concrete cover; (E) wire-mesh above the main rebars are found to have been cut during the sawcut process. Install 3-#4 dowels @ 12"o.c. max set in epoxy along three sides w/ 6" embedment into (E) concrete (see attached photo), maintain 6" max from corners, epoxy shall be SIMPSON SET-XP or HILTI HIT-RE500-SD.

3. Install swellable waterstop (Greenstreak Hydrotite CJ-0725) above installed dowels, provide min 1.5" concrete cover.

4. Form and pour w/ Emaco S66 CI by BASF (see attached cut sheets). Perform surface preparation and provide curing in accordance w/ manufacturer's recommendations.
Note continuous special inspection shall be provided

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

for the dowel installation and concrete pour.

ORIGINAL RFI U-0190 RESPONSE FOR REFERENCE

1. Chip out concrete inside of saw-cut area; do not damage (E) rebars.
2. If (E) rebars are found to have been cut during the saw-cutting process, chip out enough concrete around the cut rebars for installation of Lenton Quick-Wedge Splicing system at both ends; splice new rebars with size to match (E). If (E) rebars are found to be intact, proceed to Step 3.
3. Install keyway around perimeter of opening (keyway shall be a minimum 1.5" below top of slab), install swellable water stop (Greenstreak Hydrotite CJ -0725) in keyway.
4. Form and pour with Emaco S66 CI by BASF. Perform surface preparation and provide curing in accordance with manufacturers recommendations. Note: continuous special inspection shall be provided for the concrete pour."

U-0190.2 **AWSS - High Pressure Fire Hydrant Location on Mission @ First Street** **Closed** **11/21/2012** **12/01/2012** **11/26/2012** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

Please refer to drawing MA-15 and response to RFI U-0190.

As a result of differing site conditions between Sta 8+50 and 9+00, the new location of the HP fire hydrant shown on drawing MA-15 is to remain in the existing location per response to RFI U-0190.

Please provide a detail drawing showing the new hydrant

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 11/21/2012 Response per Michael Smith (SFDPW),

"Please find attached a sketch for changing the design for replacing the existing HP hydrant at the above location.

The existing hydrant is in an "areaway" since the property at this location has a basement that extends

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

lateral with all SFDPW requirements for HP hydrants in an areaway.

under the sidewalk.

The proposed new hydrant off the proposed 16" DI main will be replaced in this "areaway" structure. Please see attached sketch. The originally proposed hydrant lateral that bends 90-degrees as shown in the contract documents drawing MA-15 will be deleted from the work scope. There is no change in work for drawing MA-5. The attached drawing HPL-5142.1 is also shown on the AWSS standard drawings which are part of the contract work.

The contractor is cautioned to use extreme care in this area due to the basement below and to prevent issues with water leakage from the street/sidewalk."

See attached.

U-0191 **Power Source at Location #1, #2 & #7** **Closed** **01/16/2012** **01/26/2012** **02/27/2012** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Webcor Construction LP Jeff Heath

Co-Author:

REQUEST:

In order for the controller enclosures for the motorized gate valves at Location #1, #2 and #7 to be operational a power source will need to be provided at each enclosure location.

Please confirm that the owner has applied to PG&E for the power sources at these locations and advise on the status of these connections.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Revised Responce 2/27/2012

Jeff Thiel 2/23/2012 The TJPA has completed its application to SFPUC for power to AWSS facilities. The SFPUC has requested a minimum of four (4) weeks to make these connections. Sub contractor to coordinate meeting with SFPUC and PG&E prior to start of work.

Below is the MOP for coordinating power source connection as confirmed by Mathew Ho of the SFPUC.

1. Contractor to schedule coordination meeting with PG&E, PUC (Mathew Ho or Michael Mack) and Turner. Contractor to provide a construction schedule and set up Pre-con with PG&E (Per SFPUC request to inform them when Contractor expects to trench for

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

electrical service and have the power pedestals installed)
2. Contractor to schedule PG&E trench inspection which is needed after contractor installs conduit but before closing the trench so that PG&E can prove the conduit via mandrel test (30days notice needed, Call PG&E inspection # 415-695-7519 and provide PM# located on drawing and provide PG&E job owner contact as Matt Herron)
3. PG&E to pull cables
4. Schedule a DBI inspection of the meter pedestal (Dave Green DBI 415-558-6654, forward PG&E a copy of the DBI green tag)
5. Once green tag is applied, PG&E to set up meter and then energize.
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Origanal Response 1/26/2012

The TJPA has completed its application to SFPUC for power to AWSS facilities.
The SFPUC has requested a minimum of four (4) weeks to make these
connections. Sub contractor to coordinate meeting with SFPUC and PG&E prior
to start of work.

U-0191.1 **Power Source at Location #1, #2 & #7** **Closed** **03/21/2012** **03/31/2012** **05/01/2012** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Transbay PMPC Cory Traylor

Co-Author:

REQUEST:

Recent meeting on the AWSS project resulted in the response to RFI#U-0191 being revised to include a procedure to be followed once the controller cabinets were ready to accept power. However, what was sent in the revised response was a new scope of work followed by the mentioned procedure.

The contract drawings show M Squared's work beginning at pull boxes and going to the controllers. M Squared's interpretation of the drawings sent in the revised response

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Cory Traylor 5/1/2012 In accordance with PG&E Greenbook standards and practices, power connections for motorized gate valve equipment shall be installed at the referenced locations per the attached PG&E sketches, directions and requested equipment requirements. Work not outlined in the attached documents shall take place per contract drawings.

Final coordination for connections shall take place in

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

to RFI#U-0191 is the scope of work that goes from the pull boxes to PG&E manholes. This is unclear because the PG&E drawings are not comparable with the contract drawings.

Please clarify the intent and scope of the PG&E drawings. Please clarify how the PG&E drawings correlate with the contract drawings.

the field per note 7 on drawings MA-29 and MA-31.

Connecting for power per the attached PG&E sketches/direction has been approved by SFDPW-Bureau of Engineering.

U-0191.2 **Amperes Interrupting Capacity (AIC) at AWSS Location #1 (Market St.)** **Closed** **05/23/2012** **06/02/2012** **06/21/2012** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Steve Cunningham **Answered By:** Transbay PMPC Cory Traylor

Co-Author:

REQUEST:

Please refer to RFI U0191.1 and the attached drawings MA-1, MA-29 and MA-31.

1. As per response to RFI U-0191.1, the SFDPW-Bureau of Engineering sketches and letter for the AIC only addresses the motorized gate valve number 21 at Location #7. As new power service will be required at gate valve number 2, Location 1, please provide an AIC letter for this location.

2. Please provide a conformed drawing of the the PG&E clarification sketches provided in RFI U-0191.1 by revising the drawing sheet MA-29 and MA-31, respectively. It is unclear from the PG&E sketches whether the scope from the original contract drawings (MA-29 and MA-31) have changed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Request 1. - Please see attached file for Location 1 labeled "555 Market St. AIC.pdf" letter.
Request 2. - Please see attached PDF file "comments_transbay.pdf" containing comments from Matt Herron of PG&E clarifiying the scope of work for the PG&E power connection points at locations #1 and #7.
Also, please see information on location of manhole #5414 below per PG&E Matt Herron below;"The Vault 5414 is in the South Side, sidewalk of Market St. about 10' East of the West Property of 555 Market St. There are large vaults IFO 555 Market St. identified as 7300-P/7301-P/7302-P, Vault 5414 is roughly 30' West of those vaults."

Please contact Matt Herron of PG&E when sub-contractor is ready for a PG&E crew to mark the location for the core. Also, Please give Matt Herron two weeks notice when sub-contractor would like to core drill into the vault. This two weeks notice is to allow PG&E to set up and schedule a crew to standby for the core.

U-0191.3 **Amperes Interrupting Capacity (AIC) at AWSS Location #1 (Market St.)** **Closed** **06/28/2012** **07/08/2012** **07/16/2012** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Jackson Tukuafu

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

The response to RFI #U-0191.2 does not answer the question posed in the RFI.

As mentioned in the previous RFI there appears to be a difference in the PG&E drawings provided in the original response and the contract drawings.

See attached M Squared's interpretation of these PG&E drawings. Please confirm if this interpretation is correct.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

7/16/2012 Kenny Chin's (SFDPW) response,

"The interpretation of MA-31 is correct. The contractor shall route the conduit from the meter enclosure to vault 1813. The interpretation of MA-29 is correct. The contractor shall route the conduit from meter enclosure to vault 5414 but the contractor shall find out with PG&E which one is the exact vault 5414."

U-0192 **AWSS Strong Backs** **Closed** **01/18/2012** **01/28/2012** **02/08/2012** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

Current project drawings show that this project requires two (2) 14¿ Strong Backs and two (2) 10¿ Strong Backs to be used at different locations.
Olympic Foundry does not produce strong backs and were unable to include them in the order to M Squared. M Squared has contacted several sources trying to locate the strong backs but have yet to find a supplier.
Please advise if it is possible to purchase these from the City stock.
If this is not possible M Squared will have no other option but to have them manufactured at a steel mill and this may take a considerably long time due to the lead time in the specialized steel.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 2/3/2012 Response per Michael Smith (SFDPW),

-"We have been advised that the SFWD does not have the requested strong backs in their inventory.

-Typically strong backs were torch cut at local machine shops that handle larger fittings. Suggest contacting other contractors who have performed AWSS work for sources."

Signed and dated 02/01/12

U-0193 **2nd to 1st St - Various Conflicts** **Closed** **03/08/2012** **03/18/2012** **03/21/2012** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Turner Construction Comp Steve Cunningham

Co-Author:

REQUEST:

See attached sheet which details the conditions discovered in the potholing operations between 2nd Street

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 3/20/2012 Michael Smith's (SFDPW) response,

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

and 1st Street.
Please use Submittal TG04.2-024.1 for reference.
Please provide direction on how to proceed at each location.

"Please see response on attached sheets for conflicts at particular station numbers as listed in this RFI."

Signed and Dated (3/20/12)

U-0194 **AWSS Strong Back Dimensions** **Closed** **03/13/2012** **03/23/2012** **03/21/2012** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Turner Construction Comp Steve Cunningham

Co-Author:

REQUEST:

On the detail for the strong backs on the San Francisco Standard AWSS Plans M Squared has discovered an error in the dimensions for the 14" strong back. Dimension C (outside diameter) is smaller than dimension B (inside diameter). See attached.

M Squared believes the OD should be 27.37". Please confirm.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 3/14/2012 Michael Smith's (SFDPW) response,

"M Squared is correct. Thank you for pointing this out. We will update our drawing."

Signed and dated 3/14/12. (See Attached)

U-0195 **Parking Sensors on Mission** **Closed** **03/13/2012** **03/23/2012** **04/16/2012** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

M Squared has discovered that either SF Park or MUNI have installed what appear to be sensors in the street surface along Mission Street. See photo attached.

They existing between Fremont and Beale in particular.

As the AWSS line is installed along Mission St from 2nd to Main these sensors will be in conflict. Please confirm these sensors will be removed prior to trenching.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 4/12/2012 Per email conversation with Alex Demisch of the SFpark Project (SFMTA), any parking sensors found on Mission Street from 2nd Street to Main Street are inactive. SFPark's vendor plans to remove these parking sensors late April or early May of this year 2012. SFPark realizes TJPA plans to conduct AWSS construction work in the upcoming months and has asked if it was possible to for the TJPA sub-contractor, once AWSS construction begins, to separate the parking sensor equipment

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

from other construction debris so that SFPark may dispose electronic waste properly if there are any parking sensors still remaining. However, if the parking sensors cannot be separated then SFPark understands they will end up being demolished from TJPA AWSS construction work.

U-0196 **AWSS Pipe Bedding Material** **Closed** **04/02/2012** **04/12/2012** **04/09/2012** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

Section 02225-2 2.2 specifies that the bedding material for the new AWSS piping shall be crushed rock, however section 02723-18 2.12 contradicts this by specifying the bedding shall be pea gravel.
Please clarify.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 4/9/2012 Refer to submittal package TG0402-029 - Pipe Bedding Pea Gravel for approved AWSS pipe bedding material.

U-0197 **AWSS/PG&E Phase 2 Duct Conflict** **Closed** **04/05/2012** **04/16/2012** **04/16/2012** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

See attached photo. M Squared discovered a conflict on 4/4/12 at 11.10am while excavating to remove the existing AWSS Main at Howard and First.

PGE's new Phase 2 duct package is sitting directly on top of the existing AWSS main at First and Howard intersection. The top and sides of the duct bank are encased in concrete however the PVC conduits are not encased on the bottom and the PVC Conduits are currently touching the AWSS Main at this location.

As a result M Squared is unable to remove the existing AWSS main from this point east.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 4/12/2012

Please confirm that the Phase 2 PG&E duct package that is in conflict with the AWSS main was installed at the correct elevation per the approved Phase 2 Utility plans.

Number	*Subject*	*Status*	*Date Created*	*Date Required*	*Date Answered*	*Cost Impact*	*Proceed*

Please advise on how you would like to proceed.

U-0197.1 **AWSS/PG&E Phase 2 Duct Conflict Location 7** **Closed** **04/16/2012** **04/26/2012** **04/17/2012** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

The Phase 2 PG&E plans only provide minimum depths and clearances. It appears the Phase 2 ducts were installed in accordance with the minimum depth requirement but not the minimum clearance requirement. Please confirm this with PG&E.

Regardless, the AWSS main can not be reinstalled per plan and maintain minimum clearance required in the AWSS specification. Please advise how M Squared is to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Michael Smith's (SFDPW) response,

"Per a site inspection this morning with SFWD, M2, Turner, and Webcor/Obayashi, the clearance conflict between the recently installed PG&E duct bank and the existing 12-inch cast iron AWSS main was confirmed. The duct bank conduits are in direct contact with the existing AWSS pipe.

The two options to rectify this situation include:

1.) Request that PG&E or their contractor vertically relocate the recently installed duct bank in order that there is the required 12-inch clearance between the two utilities.

2.) Realign the proposed replacement AWSS main either over or under the PG&E duct bank by the installation of a vertical offset.

Should option No. 2 be selected, please advise as soon as possible since revision drawing(s) for the vertical offset will need to be prepared prior to the installation of the vertical offset."

Signed and Dated 4/11/12.

The phase two duct bank was not installed per PG&E Green Book requirements for minimum clearance between utility services, and the contractor failed to

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properly coordinate utility installation.

Work related to this RFI response shall be performed at no additional cost to the owner.

U-0197.2 **AWSS-PG&E Phase 2 Duct Conflict** **Closed** **04/23/2012** **05/03/2012** **05/02/2012** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

Through detailed analysis and discussions with PG&E during the weekly AWSS coordination meetings it has been determined that it would be infeasible to relocate the PG&E duct bank as requested in option one in the response to RFI#U-0197.1.

Please provide details for realigning the AWSS main referenced in option two in the response to RFI#U-0197.1.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 4/23/2012 Michael Smith¿s (SFDPW) response,

"The contractor shall install a vertical offset under the PG&E duct bank using four (4) 22 ½ - degree elbows as required to maintain a minimum 16-inches vertical clearance between the new 12-inch ductile iron AWSS main and the recently installed PG&E duct bank. Please refer to the attached sketch."

Signed and dated 4/16/12

This work shall be performed at no additional cost to the TJPA.

U-0198 **Vault Drainage** **Closed** **04/09/2012** **04/09/2012** **04/16/2012** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

1. On sheet MA-26 the 1" discharge piping inside the manhole is labeled as stainless steel in the detail drawings

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 4/11/2012 Michael Smith's (SFDPW) response,

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

but is described as type K copper tube in the manhole construction note #7. Please confirm what type of material is required.
2. Spec Section 02728-23 Paragraph E. calls for the use of ball float valves as shown on the construction drawings. However the float valves are not shown on the drawings. Please confirm if these ball float valves are required.

1.) The piping within the sewer manhole shall be Type 304 stainless steel.

2.) The contractor shall disregard the installation of the ball float valves for the three (3) concrete motorized gate valve vaults in this contract due to the installation of electrical sump pumps to be installed at all three (3) locations.

Signed and Dated 4/10/12

U-0199 **PG&E Vault Conflict with North East Tie In @ Location 7** **Closed** **04/16/2012** **04/26/2012** **04/23/2012** **Potentially** ☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

Today while setting up to remove and cast the new lead joint at the North East tie in at location 7 it was discovered that the existing PG&E vault adjacent to the tie in is too close and E. Mitchell would not be able to properly caulk the lead joint.
Please advise how M Squared is to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 4/20/2012 Michael Smith's (SFDPW) repsonse,

"The contractor shall request PG&E to relocate their facilities in order that there is the required 12-inches minimum clearance between the AWSS main and the PG&E electrical vault.

Should PG&E not be able to relocate their facilities, the contractor shall excavate approximately 12-feet east on Howard Street to the next existing pipe joint (GHB joint from the 12"x10" cast iron GHBxGH spigot reducing adaptor for the 10-inch gate valve) in order to connect the new ductile iron AWSS main to the existing cast iron main. The contractor shall locate any new bell and spigot pipe joints before after the concrete vault wall."

Signed and dated 4/16/12

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0200	AT&T Vault Conflict at Location 7	Closed	04/16/2012	04/26/2012	04/23/2012	Potentially	☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Steve Cunningham **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

It has been discovered that the AT&T vault near the North West tie in of Location 7 is in conflict with the new AWSS pipe and tie rods to be installed at this location.

Please advise how M Squared is to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 4/20/2012 Michael Smith's (SFDPW) response,

"The contractor shall request ATT to relocate their electrical vault or remove portion of the vault wall as required in order that there is the required 12-inches minimum clearance between the AWSS main and the ATT electrical vault. "

Signed and dated 4/16/12 (see attached)

Contractor to document all coordination with AT&T regarding this conflict.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0200.1	AT&T Vault Conflict at Location 7	Closed	04/24/2012	05/04/2012	04/24/2012	Potentially	☐

From: Webcor Construction LP Colin Azevedo **To:** Turner Construction Compan Jeff Thiel **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

The response to RFI#U-0200 did not properly document the coordination efforts and course of action. Please provide a revised response.

See attached email chain for additional information.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 4/24/2012 Michael Smith's (SFDPW) original response to RFI U-0200,

"The contractor shall request ATT to relocate their electrical vault or remove a portion of the vault wall as required in order that there is the required 12-inches minimum clearance between the AWSS main and the ATT electrical vault"

Signed and Dated 4/16/12 (See attached)

A Coordination meeting was held on 4/18/12 with ATT, MSquared, W/O and Turner. It was agreed that M Squared would attempt to deal directly with the utility company. If an agreement could not be made the TJPA would be notified.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

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U-0201 **AWSS - Countersunk Bolts in 14-Inch Ductile Iron Pipe Strong Back Plate** **Closed** **05/04/2012** **05/14/2012** **05/08/2012** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Steve Cunningham **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

Please reference attached excerpt from the AWSS STANDARD DRAWING III, drawing No. AWSS 3.

The sizing chart for 14" diameter pipe require the use of Strong Back Type B. The Type B Strong Back configuration requires the use of a countersunk bolt and nut to adjoin connecting DI pipe. The countersunk bolts are a special order product and will have to be fabricated specifically for each piece.

Please confirm it is acceptable to use the typical 316 Stainless Steel bolt and nut without the countersink, similar to what is used and shown in Type A for all 14" diameter DI pipe.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 5/7/2012 Michael Smith's (SFDPW) response,

"-The proposed change is acceptable.
-The Contractor shall field verify the actual pipe outside diameter at each location prior to having strong back fabricated due to differing pipe diameters in use."

Signed and date 5/7/12 (See Attached)

U-0202 **SLUDGE LINE - Unknown Subsurface Structure at 301 Mission** **Closed** **06/07/2012** **06/17/2012** **06/12/2012** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Steve Cunningham **Answered By:** AECOM Technical Service Eric Zagol

Co-Author:

REQUEST:

Please refer to attached detail 3/U-5001.

Detail 3 on sheet U-5001 which shows the connection detail for 12" HDPE to existing 10" steel, uses a 10" steel to 12" sleet reducer and then using a 12" steel to 12" HDPE Coupling in order to connect new sludge main to existing sludge main.

Our preference is to use a 10" steel to 10" HDPE coupling and then install a 10" HDPE to 12" HDPE Reducer. As the O.D of the existing sludge is unknown it will cause significant delay in the ordering of the 10" steel to 12" steel

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Proposed modification is acceptable.

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reducer as we will have to get the OD at the connection point and then order the material. Even with this piece of material, it will be extremely difficult to get a welder into the trench to weld the reducer on to the exiting pipe as a result of the amount of utilities which were discovered in potholing.

The use of the 12" HDPE to 10" HDPE reducer eliminates the need for a welder in the trench.

U-0203 **AWSS - Compaction Method for Trade Package TG04.2** **Closed** **06/08/2012** **06/18/2012** **06/11/2012** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Steve Cunningham **Answered By:** City and County of San Fr Michael Smith

Co-Author:

REQUEST:

Specification section 02225 Section 3.7 C forbids the use of flooding or jetting in order to gain the necessary levels of compaction in the AWSS pipe trench.

However due to the amount of utilities and duct packages in the trenches it will not be possible to gain the necessary levels of compaction under and around these utilities by utilizing the methods referenced in the specifications. By not gaining the necessary compaction around utilities it is possible that voids will occur over time causing the utility to be come unsupported and the street surface to sink.

We are requesting the use of jetting (as described in Section 703.08 of the City and County of San Francisco Standard Specifications) as a method to gain the necessary levels of compaction for the AWSS trenches. Jetting has previously been utilized as a successful method of gaining compaction levels on several other Transit Center Utility Relocation packages.

Please confirm that this proposed method is acceptable for use on this trade package. If not, please provide an alternative method for gaining the necessary compaction.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

6/11/2012 Michael Smith's (SFDPW) response:

"Water jetting to compact soil will be approved for locations where there are adjacent utilities that prevent compaction by vibratory methods. Use vibratory compaction once the backfill is clear of utilities and up to finish grade under road base/paving."

U-0204 **SLUDGE LINE - Compaction Method for Trade Package TG04.66** **Closed** **06/22/2012** **07/02/2012** **06/22/2012** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author:

REQUEST:

Specification section 33 34 10 (3.1, C¿]7) forbids the use of flooding or jetting in order to gain the necessary levels of compaction in the HDPE pipe trench. However due to the amount of utilities and duct packages in the trenches it will not be possible to gain the necessary levels of compaction under and around these utilities by utilizing the methods referenced in the specifications. By not gaining the necessary compaction around utilities it is possible that voids will occur over time causing the utility to be come unsupported and the street surface to sink.

M Squared is requesting the use of jetting (as described in Section 703.08 of the City and County of San Francisco Standard Specifications) as a method to gain the necessary levels of compaction for the AWSS trenches.

Jetting has previously been utilized as a successful method of gaining compaction levels on several other Transit Center Utility Relocation packages (see RFI0203).

Please confirm that this proposed method is acceptable for use on this trade package. If not, please provide an alternative method for gaining the necessary compaction.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Void. See RFI U-0206 for response.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0205	SLUDGE LINE - HDPE Hydrostatic Testing	Closed	06/22/2012	07/02/2012	07/05/2012	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

Please refer to spec section 33 34 10-3.1 H

The method of HDPE pipe testing listed in the contract documents differ from the testing methods provided by the pipe manufacturer: The specifications call for the pipe to be filled 24hrs in advance and then the pipe pressurized to 115psi for a duration of 4hrs, The manufacturer's method involved filling the line with pressure for 3 hrs to allow expansion etc. in the pipe and then adding additional water, per Table 2 of the attached document. Once this additional water has been added the pressure can hold for the duration listed. Or alternatively allowing a 5%fluctuation in the pressure target for the test over 1

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 7/3/2012 It is acceptable to perform HDPE Hydrostatic Testing per HDPE pipe manufacturer's recommendations. The test phase shall be performed based on the specified "Test Phase - Alternate 2" in manufacturer's data sheet for 3-hour test.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

hour.

Please see attached pipe manufacturer's data attached and provide direction. M Squared believe that the testing method in the specifications is not suitable for HDPE due to its flexibility and would be more suited to steel pipe.

U-0206 **SLUDGE LINE - Compaction Method for Trade Package TG04.6** **Closed** **06/22/2012** **07/02/2012** **07/05/2012** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

Specification section 33 34 10 (3.1, C-7) forbids the use of flooding or jetting in order to gain the necessary levels of compaction in the HDPE pipe trench. However due to the amount of utilities and duct packages in the trenches it will not be possible to gain the necessary levels of compaction under and around these utilities by utilizing the methods referenced in the specifications. By not gaining the necessary compaction around utilities it is possible that voids will occur over time causing the utility to be come unsupported and the street surface to sink.

M Squared is requesting the use of jetting (as described in Section 703.08 of the City and County of San Francisco Standard Specifications) as a method to gain the necessary levels of compaction for the Sludge Line trenches.

Jetting has previously been utilized as a successful method of gaining compaction levels on several other Transit Center Utility Relocation packages (see RFI0203).

Please confirm that this proposed method is acceptable for use on this trade package. If not, please provide an alternative method for gaining the necessary compaction.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Zagol 7/5/2012 Flooding or water jetting is not an acceptable method of compaction for HDPE pipe trench backfill.

In limited areas, under and around adjacent utilities, consider using a low strength, low water content concrete fill material. Submit proposed alternate backfill material and mix design for review.

U-0206.01 **SLUDGE LINE - Compaction Method for Trade Package TG04.6** **Closed** **07/05/2012** **07/15/2012** **07/17/2012** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

See attached previously approved backfill mix designs in submittal package TG0434-006.

Please clarify if either of these can be used as a backfill material mentioned in the response to RFI U-0206.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Eric Zagol 7/17/2012 Provide mix design with 28-day compressive strength no greater than 100 psi.

Jeff Thiel 7/17/2012 If a concrete fill material is to be used, submit mix design for approval.

U-0207 **AWSS - Connection on Market Street** **Closed** **07/10/2012** **07/20/2012** **07/11/2012** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Transbay Joint Powers Au Jennifer Tongson

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

While excavating to expose the existing AWSS Main on Market Street M Squared's crew discovered that a portion of the existing cast iron main had already been abandoned in place. They then discovered a ductile iron main that is running parallel to the cast iron pipe.

The ductile iron main is the portion of pipe that is live and this is the line we should now be connecting to in order to proceed with the work. See attached photos. Please note that additional costs will be incurred, as a result of this unforseen condition.

Please advise on how M Squared is to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

7/11/2012 Michael Smith's (SFDPW) response,

"-The contractor shall connect the new 14" DI pipe to the (E) 14" DI pipe on the East end of the excavation to the nearest pipe joint to the original CTEL location.

-Where possible, please deflect new pipe joints 1 degree to compensate for (E) joint deflection at CTEL joint."

Signed and dated 7/11/12. (See Attached)

Pending TJPA approval, a CR for additional cost is forthcoming.

U-0208 **AWSS - Clearance Issues with Domestic Water Line on Market Street** **Closed** **07/10/2012** **07/20/2012** **07/11/2012** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Transbay Joint Powers Au Jennifer Tongson

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

While excavating west of the gate valve vault location on Market Street M Squard's crew discovered an 8-inch cast iron water line sitting on top of the existing AWSS main to be removed. This 8-inch line also appears to be leaking slightly.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

7/11/2012 Michael Smith's (SFDPW) response,

"-The Contractor shall request the SFPUC SFWD relocate their (E) 8" low pressure water piping in order to maintain a 12" clearance between their own two

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

1. As a result of this line M Squared is unable to install the new AWSS with the necessary clearances. Aside from the clearance issues M Squared can no longer install the 14-inch reducer where it is required. M Squared will be able to relocate the reducer which will then require a longer spool piece.

Please advise how M Squared is to proceed.

2. This 8-inch line also has three concrete kickers on the pipe that make it impossible to install the pipe and fittings at this vault location. Please confirm that it is acceptable to remove these kickers temporarily, as they are already restrained with tie rods, for construction purposes. The kickers can be reinstalled once the work in this location has been completed.

utilities.

-Please coordinate with SFWD prior to removing the (E) concrete thrust blocks on the SFWD line. Support SFWD line as required to prevent movement."

Signed and Dated 7/11/12 (See Attached)

Pending TJPA approval, a CR for additional cost is forthcoming.

U-0208.01 **AWSS - Clearance Issues with Domestic Water Line on Market Street** **Closed** **07/24/2012** **08/03/2012** **08/03/2012** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

Per the response to RFI # U-]0208, M Squared met with SFWD engineers on site to discuss the relocation of the domestic 8-inch line.

As a result of this coordination, SFWD agreed that relocating the 8-inch line was the best possible resolution to this issue. M Squared has excavated and shored for SFWD crews to perform the repairs.

As of 7/23/12 no relocation work has been performed by SFWD.

Please provide M Squared with a schedule for this relocation.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 8/2/2012 Per Dan Helminiak of the SFWD, the SFWD is scheduled to relocate the 8" water line on the morning of Monday 8/6/12.

U-0209 **AWSS - Misison and Anthony Valve Vault** **Closed** **07/26/2012** **08/05/2012** **08/07/2012** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

See attached documents and photos.

M Squared has potholed this location for the AWSS valve vault. It has been confirmed that the gas line is abandoned and can be removed and that the 12" water is also abandoned.

In order for the vault to be constructed here M Squared will need to remove the abandoned 12" line; however, removing the 12" line will significantly weaken the live 8" line that runs on Anthony as the 90 degree bend on the 8" line is supported by a redwood block resting against the abandoned line.

Please advise on how M Squared is to proceed.

SUGGESTION:

Have SFWD restrain the existing 90 degree bend so that the abandoned lines and redwood plug can be removed. UPon completion of the valve vault M Squared can our a new concrete kicker if required by SFWD.

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 7/30/2012 Response per Chi Yu of SFWD,

" The redwood plug is for the abandoned line to stop any residual water in the pipe and does not serve as a kicker. The live 8" main was built quite recently using a field-lok gasket restraint joint. No kicker is required. Remove the 12" and 8" abandoned lines together with the redwood plug. Provide adequate vertical support for the live 8" main."

See attached email from Chi Yu dated 7/30/12.

U-0210 **AWSS - 12" Water Conflict at 1st and Mission Street** **Closed** **07/26/2012** **08/05/2012** **08/10/2012** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

While performing the preliminary excavation across 1st and Mission street Intersection, M Squared's crew exposed a 12" water line that is running on top of the AWSS line for approx half of the intersection. Due to other utilities being present we are unable to excavate down to the AWSS main.

M Squared met with SFWD crews on site and they have confirmed that the line is active, despite them agreeing with M Squared that the line sounded very hollow (an indication that it may be dead)

M Squared believes that despite the presence of many unknown utilities they will still be able to remove and replace the existing AWSS main if this 12" water line can be abandoned or relocated.

Please advise on how M Squared is to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 8/10/2012 Chi Yu's (SFWD) response,

"SFWD will cut and cap both ends of the 12" line that is on top of the AWSS Main and restore the 12" main at the same location after the new AWSS line is in place."

SFWD will require two weeks advance notice prior to starting this work.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0211	AWSS - Valve Vault at Sta 9+05	Closed	08/06/2012	08/16/2012	08/14/2012	Potentially	☐

From: Webcor Construction LP — Jackson Tukuafu
To: Turner Construction Compan — Gary Krutsch
Answered By: Turner Construction Comp — Jeff Thiel
Co-Author: M Squared Construction, Inc. — Aidan Foley

REQUEST:

Please refer to that attached photo and schematic of current condition.

M Squared has identified the space at Sta 9+05 as the only viable location for the gate valve in that area. However several utilities remain in conflict with this location:

- The MCI lines are plastic and the correspondence has already began with MCI to move these lines 2' south during AWSS Main installation
- The 3 x 2" Steel Electrical lines have been confirmed active by PGE representatives
- All remaining lines are unknown.

Please advise on how you would like M Squared to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Request known utilities to relocate as required to install AWSS valve vault and piping.

Request site to be remarked for assistance in determining remaining unknown lines.

Michael B. Smith SFDPW/JDC/EME - 08-13-12

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0212	AWSS - Various Conflicts - Sta 9+12 to PG&E Vault	Closed	08/07/2012	08/17/2012	08/30/2012	Potentially	☐

From: Webcor Construction LP — Jackson Tukuafu
To: Turner Construction Compan — Gary Krutsch
Answered By: Turner Construction Comp — Jeff Thiel
Co-Author: M Squared Construction, Inc. — Aidan Foley

REQUEST:

While performing preliminary trenching across 1st & Mission Street Intersection, M Squared's crew discovered many unknown and unmarked utilities. See attached photos.

The presence of these unknown utilities will greatly impact the ability to install shoring and install full pieces of pipe. Please Identify the utilities in this section and determine which can be removed in order for M Squared to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The TJPA Representatives do not have any further information on the unidentified utilities not shown on the Contract Drawings. Please proceed as follows in order to identify these utilities:

Request the list of contacts registered with USA and compare those who marked with those that didn't mark and conduct follow up calls to the utilities and agencies that didn't mark. Also, contact SFPUC BLHP to mark street lights and DTIS comm and SFMTA to mark traffic signals.

In accordance with specification 00 08 10 section 1.3 EXISTING UTILITIES NOT INDICATED and specification 020630 section 4.1 POTHOLING AND TRENCHING OPERATIONS paragraph C, please proceed with the following in order to identify all interfering utilities that are unknown after all specified procedures or other non destructive methods

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

proposed by the contractor have been exhausted

Pipe: If conductive material, perform subsurface investigation via electromagnetic detection (or other nondestructive methods) to trace utility back to nearest vault, pull box, manhole or valve to identify owner and content. If nonconductive, excavate along pipe alignment to expose coating and a joint. Inspect and provide information on coating and joint type. If content is still unknown, tap each line in order to identify contents and operating status of utility (i.e. abandoned or operational.)

Conduit and duct bank: Determine if utility is a charged electric utility utilizing a contractor that performs NETA type work. Determine if telecommunication cables are operational.

Once the utility has been identified including owner and contents, and determined inactive or de-energized, cut and cap utility at the demolition demarcation line shown in the drawings

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U-0213 **AWSS - Antenna At Location #7** **Closed** **09/11/2012** **09/21/2012** **09/12/2012** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

Sheet MA - 22 of the contract drawings shows the antenna for location #7 being mounted on the existing street light pole.

Sheet MA - 31 shows that the antenna is mounted on an antenna pole in the sidewalk.

Please clarify where the antenna pole is to be located.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 9/12/2012 Response per Kenny Chin, (SFDPW)

"What is showing on Sheet MA-31 is correct. The contractor shall provide antenna pole and atenna shall be mounted to this antenna pole."

U-0213.01 **AWSS - Antenna at Location #7** **Closed** **09/13/2012** **09/23/2012** **09/20/2012** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

Please refer to RFI U-0213 and SFDPW drawing File No. 87,208 and 87,212.

As no detail for the antenna pole foundation is provided in the contract documents, please advise if the standard detail for San Francisco Light Poles is an acceptable foundation of the antenna pole indicated on drawing MA-31.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Yes, the standard Detail for San Fransisco light pole is acceptable foundaiton of the antenna pole.

Kenny Chin 9-17-12

U-0214 **SLUDGE LINE - Air Release Valve at Sta 17+25** **Closed** **09/28/2012** **10/08/2012** **11/09/2012** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

The air release valve (ARV) installed on Mission St. at Sta 17+25 is currently only accessible via 12" ductile iron pipe with a 12" cap. M Squared is unable to construct the air release valve manhole per detail #1 on Sheet U-5001 due to the presence of the concrete wall that is in place.

1. Please advise if it is acceptable to leave the 12" ductile iron in place or install a larger diameter ductile pipe (possibly 16") and customize a cap for the ARV

2. Alternatively please provide a detail for the air release valve manhole

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Construct the ARV vault at the location shown on the attached drawing "U-3005 markup.pdf" & the sketch "proposed ARV vault in Mission St.pdf" after the new AWSS HPW constructed and existing 12" AWSS HPW ben demolished.

Coordinate with SFDPW for schedule.

U-0214.1 **SLUDGE LINE - Air Release Valve at Sta 17+25** **Open** **02/07/2014** **02/17/2014** **02/21/2014** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Turner Construction Comp Judith Long

Co-Author: M Squared Construction, Inc. Chris Wallace

REQUEST:

RFI U-0214 directs M Squared to install the modified ARV manhole after the new 16-inch AWSS has been installed. However, the AWSS main was installed further north than was shown in the plans due to utilities and tie-in to existing alignments.

1. Please advise if the ARV is to be installed directly over

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Judy Long
2/19/2014
RESPONSE:
Due to the required relocation of the (N) 16" AWSS main north of the (e) location, and the requirement to install an air valve for SFPUC's sludge line at this location, the contractor shall locate the air valve as

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

the new AWSS main.

2. In addition to this issue the new 16" Gate Valve vault location will also be in conflict with the ARV manhole. Please provide a new location for the ARV Manhole, bearing in mind that the existing concrete wall in in conflict and will require demolition. (See attached sketch)

shown. Coordinate the air valve placement with the AWSS valve vault, with the AWSS valve having first priority in location along Mission Street
Michael B. Smith SFDPW/IDC/EME on 2/19/14

U-0215 **AWSS - Hetch Hetchy Duct Bank Conflict** **Closed** **09/28/2012** **10/08/2012** **10/12/2012** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

At Sta 2+40 on Mission St (Anthony St intersection) the existing AWSS Main runs through a Hetch Hetchy duct bank. There are several concrete encased ducts on top of the AWSS Main and several concrete encased ducts under the AWSS main.

On Friday 28th September, M Squared met with MUNI Underground Services and they have requested that the AWSS be abandon 1-ft on each side of the duct bank and install the new AWSS Main over or under this Hetch Hetchy duct bank.

Please advise how you would like M Squared to proceed with this conflict.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Response per Michael Smith (SFDPW),

"-Abandon (E) 12" AWSS Main as described above.

-F/I vertical offset over HHWP Duct Bank as shown on the attached sheet."

Signed and Dated 10/11/12. (See attached)

A formal Cadd drawing is forthcoming.

Pending TJPA approval, a CR for additional cost is forthcoming.

U-0216 **AWSS - Gate Valve at Station 1+09** **Closed** **10/04/2012** **10/14/2012** **10/15/2012** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

Please refer to attached drawing MA-13.

Due to the location of existing utilities M Squared is unable to install the gate valve at Sta 0+90, as shown on sheet MA-13. Please confirm it is acceptable for M Squared to

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 10/11/2012 Response per Michael Smith (SFDPW),

"This gate valve location is acceptable per our discussion in the field last week. Please note that the

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

install the valve at Sta 1+90. M Squared has confirmed there are no conflicts at Sta 1+90.

two flanged x MJB adaptors will require stop collars/collar stops on the connecting D.I. Pipe."

Signed and Dated 10/10/12. (See attached)

U-0217 **AWSS - 16" Gate Valve at Sta 5+00** **Closed** **10/12/2012** **10/22/2012** **10/15/2012** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

Drawing Reference: MA-14

Please confirm that the 16" gate valve at Sta 5+00 can be deleted and is not required.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 10/15/2012 Response per Michael Smith (SFDPW):

"This gate valve and concrete valve vault can be deleted from the scope of work."

Signed and Dated 10/15/12. (See Attached)

Pending TJPA approval, a deductive CR may be issued.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0218	AWSS - PG&E Duct Bank Conflict at Sta.6+05 to Sta. 6+25	Closed	11/06/2012	11/06/2012	11/15/2012	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

Between Sta 6+05 and Sta 6+25 there is a PGE duct bank sitting on top of the AWSS pipe; as a result, M Squared is unable to install the new AWSS main at this location. See attached photo. The pipe cannot be lowered due to the AWSS penetrating PGE Vault #1302. In order for M Squared to be able to install the new AWSS main through PGE vault #1302, the PGE duct bank needs to be raised up.

Please advise.

SUGGESTION:

PG&E remove concrete encasement from ducts and lift the PVC conduits up so that M Squared can install the pipe at the existing alignment.

ANSWER: **Accept Suggestion:** ☐

- SFDPW accepts M Squared's suggested solution for this utility conflict.
- Coordinate with PG&E for remvoing concrete and raising conduits in order to install AWSS facilities and proivde 6-9" clearnce. Michael Smith SFDPW/IDC/EME - 11/09/12

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0219	AWSS - PG&E Vault #1313 Conflict with 4x4 Support Post	Closed	11/06/2012	11/16/2012	11/29/2012	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

On 10/26, PGE completed work on Vault #1313 on Mission Street. The existing AWSS pipe has been removed and M Squared is ready to install the new AWSS Main per the attached sketch (current condition).

In order for M Squared to install the AWSS pipe, the five 4"x4" supports installed by ARB crews require removal. As a result, a portion of the vault wall will overhanging the pipe, with no support.
.
Please advise if this is acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 11/9/2012 Response per Michael Smith (SFDPW)

"Per field meeting today, support AWSS pipe through cut in (E) PG&E vault as follows:

-Support (N) 16" AWSS pipe over vault under hang with a CDF "cradle" for the length of the vault. Pour CDF to 5 and 7 O'clock pipe positions.

- Backfill pipe with jetted sand to vault overhang.

-Fill vault concave spaces with CDF over sand backfill through (N) 8" Diameter holes chipped into the top of the vault."

Signed and dated 11/20/12. (See Attached)

Per meetings with PG&E, M Squared to perform this work.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0220	AWSS - MultiQuip Sump Pump	Closed	01/23/2013	02/02/2013	01/29/2013	Potentially	☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

Please refer to the attached excerpt from spec section 02728 AWSS Motorized Gate Valve Equipment and product data for the MultiQuip Sump Pump: ST2037.

As per coordination between Aidan Foley and Michael Smith, please confirm the attached MultiQuip Sump Pump: ST2037 is an acceptable alternate to the specified manufacturer Flygt, Model 2610 in specification section 02728- 2.13,A.

Please note the MultiQuip Sump Pump: ST2037 is being submitted for approval in WOJV submittal package TG04.2-031 - AWSS - MultiQuip Sump Pump.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per SFPUC, only the contract specified submersible pump will be accepted for installation in the AWSS motorized gate valve vaults.

Michael B. Smith SFDPQ/IDC/EME on 01/29/13

U-0221 **AWSS - Pipe Joints in Utility Vaults** **Closed** **01/31/2013** **02/10/2013** **02/06/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

Per recent field direction provided by the City inspector to M Squared Construction, where possible no joints are permitted inside utility vaults (i.e PGE, ATT)

This will require an additional restraint joint at each vault location.

Please confirm this is the intent.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 2/5/2013 Response per Michael Smith (SFDPW),

"This is the intent of both SFWD and SFDPW due to utilities constructing their facilities over/around the pre-existing AWSS lines. Please notify engineer in advance should joints be required to be placed in vaults due to the length of vaults. (16'+)"

Signed and Dated 2/1/13. (See Attached)

U-0222 **AWSS - Flanged Spools for Hydrants** **Closed** **01/31/2013** **02/10/2013** **02/06/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

Reference Drawings: MA-14 & MA-15

Hydrant at Sta 6+30

SUGGESTION:

Hydrant at Sta 6+30
Suggestion - custom fabricate a HPW flanged x flanged spool for to connect to the tee and the 45deg

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 2/5/2013 Response per Michael Smith (SFDPW),

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Contract drawings show the 45deg bend being connected directly to the rolled down tee. However the hydrant lateral is
much lower than the main and it will not be possible to connect them directly together.

Hydrant at Sta 9+00
Due to the changes per RFI U-190 M Squared are to install the new fire hydrant in the same location as the existing, in
the breezeway. As a result the new hydrant lateral will be higher than the newly installed main (the grade of the main being dictated by various utility conflicts).

Please confirm M squared's suggested mediation is how M squared is to proceed

bend.

Hydrant at Sta 9+00
Suggestion - In order to connect the tee to the 90deg bend a HPW flanged x flanged spool, custom fabricated will be
necessary.

"-Hydrant at station 6+30 - Proceed as required due to unforeseen field conditions.
-Hydrant at station 9+00 - Per field / phone conversations with M2, Pipe spool is no longer required at this location."

Signed and Dated 2/1/13. (See Attached)

U-0223 **AWSS - Electrical Sevice at 2nd Street Intersection** **Closed** **02/06/2013** **02/16/2013** **05/20/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

The contract drawings show M Squared replacing the existing 10" gate valve on Mission at 2nd St with a new 16" gate valve. Due to a PG&E conflict M Squared will have to now move the valve location north onto 2nd Street.

In moving the vault M Squared will now have to relocate the existing electrical service to the new vault location. M Squared will need the service disconnected so that all existing electrical cable and conduits can be removed.

Once the new vault has been constructed M Squared can reestablish the service to the new vault location.
These were previously thought to be street lighting conduits as mentioned in RFI U-182.2 and will need to be removed for the construction of the new vault anyway.

The service is currently the responsibility of the SFPUC and PG&E have indicated that any impact to the service needs to be handled by the SFPUC and not M Squared.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 5/20/2013 Existing PG&E service has been disconnected and removed. See attached drawing for new routing of PG&E power service connection from existing PG&E connection point to a new PG&E meter enclosure.

Please provide pricing proposal for work associated with installing a new connection from PG&E connection point to new meter enclosure as show on the attached drawing. Do not proceed with this work until pricing has been agreed to.

Reconnection for service at this location has been acknowledged from SFPUC (via PG&E) to be about 5 to 6 weeks out.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please advise on how to proceed

U-0223.1 **AWSS - Electrical Service at 2nd Street** **Closed** **07/17/2013** **07/27/2013** **07/19/2013** **Potentially** ☐

From: M Squared Construction, Inc. Aidan Foley **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

Reference: Attached Drawing

Per the response to RFI U-0223 a new electrical service, a new PGE meter pedestal, and a new drain line was to be installed at 2nd and Mission.
However the drawing provided in the response showed the old AWSS vault location. See attached drawing prepared by M Squared showing the new vault location.

We have established conduit routes for both the new electrical service to PGE vault #1316 and also the drain line to the catch basin.

Please confrim that this acceptable.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Response per Michael Smith (SFDPW),

"The proposed drain line routing is acceptable provided that the line slopes to the catch basin per the specs. The proposed electrical conduit shall be acceptable provided that it's installation shall conform to PG&Es guidelines."

Signed and Dated (see attached)

U-0224 **AWSS - Pipe Alignment between Fremont to Beale** **Closed** **02/06/2013** **02/16/2013** **02/11/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

The existing AWSS main on Mission Street between Fremont St & Beale St is running through three (3) PGE vaults.

By upsizing the AWSS main to 16" there is a possibility that the pipe will not fit back through the structures.
By having PGE move/alter their facilities M Squared believes there will be significant project delays. M Squared will also inevitably have to install the new main within PGE structures, something the SFPUC prefers to avoid.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 2/8/2013 Response per Michael Smith, (SFDPW)

"Shifting the proposed AWSS alignment North is acceptable provided that there are no utility conflicts and the gate valve frames/covers do not end up directly in the gutter due to potential flooding of the vaults."

Signed and Dated 2/8/13. (See Attached

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

M Squared believes it is possible to shift the alignment of the new 16" main further north to avoid all of these PGE vaults. See attached potholing results from potholing further north than the existing main. M Squared does not know yet if additional fittings will be needed to shift the alignment north, and then realign it back south at Beale Street. This will not be known until the trench has been excavated.

Please confirm it is acceptable for the AWSS alignment to shift north as currently coordinated to avoid the delay impacts and vault conflicts.

U-0225 **AWSS - Lead Joint Clearances at Sta 6+30** **Closed** **02/08/2013** **02/18/2013** **02/13/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu
Co-Author: M Squared Construction, Inc. Stewart Mitchell
To: Turner Construction Compan Gary Krutsch
Answered By: Turner Construction Comp Jeff Thiel

REQUEST:

Please refer to attached W/O Sketch SK-U-0225 and drawing MA-4.

The newly installed fire hydrant lateral at station 6+30 is to connect to the existing AWSS main; however, the existing main pipe is "oval" shaped and the new pipe is circular. As a result of the differing pipe shapes, the minimum clearances for inserting the "hokum" to draw the lead in when heated are not achieved. The minimum clearance around the pipe required is 1/4".

The existing fitting is part of a series of fittings needed to raise the fire hydrant lateral up in elevation to avoid a conflict with an existing sewer line. Moreover, there is a duct bank over the sewer and it was poured over the next fitting only compounding the conflict.

Please advise.

SUGGESTION:

Field condtions appear to indicate that where the existing laterals clears over the sewer, at the next joint there is a possibility of a full length pipe (12'-0") which takes you closer to the curb. There is a possibility to switch out the entire lateral to the fire hydrant.

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 2/13/2013 Response per Michael Smith (SFDPW),

"Due to the unforeseen conflict between the existing AT&T duct bank which was poured directly onto the AWSS Hydrant lateral pipe, blocking access to the next two downstream lead joints, the contractor shall locate a lead joint South of the conflicting duct bank that is readily accessible for their plumber to melt the existing lead joint. The contractor shall then furnish and install ductile iron pipe and fittings to this accessible location in order to connect to the existing cast iron line. The alternate is for AT&T to relocate their duct bank in order that there is a minimum 12" clearance between the duct bank and the existing AWSS pipe.

Should the duct bank not be relocated, and due to the fact that there will be a minimum amount of cast iron pipe remaining in the hydrant lateral run, the contractor shall provide a cost for removing the remainder of the cast iron hydrant lateral and for replacing with ductile iron pipe and fittings.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Replacing this remaining section of cast iron pipe and hydrant will be an improvement to the SFWD's facilities."

Signed and Dated (See Attached)

U-0225.1 **AWSS - Lead Joint Clearances at Sta 6+30: SFWD Decision to Replace Full Lateral** **Closed** **03/11/2013** **03/21/2013** **03/28/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

As a result of several coordination efforts to discuss potential options, AT&T has chosen not to relocate their duct bank that is in conflict with the hydrant lateral at Sta 6+30. Instead they have agreed to compensate M Squared for the costs to connect to the next most southern joint.

1. Please confirm that this is acceptable, as the response to the previous RFI U-0225 mentioned the possibility of replacing the full lateral including the hydrant.
2. Please advise whether the SFWD want to replace the full lateral. M Squared need to know so an agreement can be reached on materials etc.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 3/26/2013
Response per Michael Smith (SFDPW),

"CCSF SFWD (Dan Helminiak 420-4521) will coordinate with contractor to provide funding / materials to replace the remaining cast iron portion of the hydrant lateral."

Signed and Dated 3/19/13. (See Attached)

U-0226 **RFI#U-0226 - AWSS - PG&E Duct Bank at 1st Intersection** **Closed** **03/11/2013** **03/21/2013** **03/15/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor/Obayashi Joint Ve Jackson Tukuafu

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

Refer to drawing U-1002, U-2003, MA-15.

M Squared is unable to trench to the connection point as shown on the attached M Squared sketch SK-047.1 and SK-047.2 on First Street due to the presence of two (2) PG&E duct banks in the trench. One duct bank is deeper than the other and is sitting directly on top of the AWSS Pipe that is required to be removed.

SUGGESTION:

Suggestion #1 - Remove existing gate valve and connect to the existing pipe (see attached SK-047.1). Install an IBeam behind the 16" Tee on Mission Street as an alternative restraint system. Please note: In order to perform Suggestion #1 an AT&T duct bank will need to be moved west 2' so M Squared can drill for the I-Beam.

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 3/12/2013 Response per Michael Smith (SFDPW)

" 1.) Proceed with suggestion No. 1.

2.) Should AT&T not be able to relocate their duct bank, proceed with suggestion No. 2. Replace 22.5 degree elbows with 11.25 degree elbows if fittings are

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please provide direction to how M Squared will proceed.

Suggestion #2 - If the AT&T duct bank cannot be moved install an offset from the 16" tee using 22deg bends to get back to original alignment. (see attached sketch SK-047.2)

available."

Signed and Dated 3/12/13. (See attached)

After further investigation while this RFI was being reviewed, it was found that the duct bank previously thought to be AT&T is owned by TCG. Do not proceed with either option until TCG has been notified of potential costs and has reviewed the proposed solutions.

U-0226.1 **AWSS - TCG Duct Bank at 1st Street Intersection** **Closed** **06/25/2013** **07/05/2013** **07/08/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

Please refer to response for RFI U-0226.

As per response to RFI U-0226, M Squared is directed to "Remove the existing gate valve and connect to the existing pipe. Install an I-beam behind the 16" Tee...as an alternative restraint system" in order to avoid two PG&E duct banks in conflict with the AWSS. As a result of the I-Beam being installed at this location, a TCG duct bank would need to be moved 2-feet west.

TCG has determined that the duct bank would take several months to re-locate their duct bank. Therefore, TCG has opted to avoid the conflict by pursuing the suggested 22deg bends as an offset from the 16" tee in RFI U-0226.

Please confirm additional restraints are not required at the 22deg bends or provide all necessary restraints required to for the 10" line at this location.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Response per Michael Smith (SFDPW),

"The thrust blocks for the two (2) 10" 22.5 degree elbows shall conform to the thrust blocks for 16" pipe as shown on the AWSS standard drawings. Include "crossed" rebar with J-hook ends over the elbows.

Schedule site visit to verify lack of access to (E) line north of proposed 10" connection location."

Signed and Dated, see attached.

U-0227 **AWSS - 2nd Street AWSS Gate Valve Vault** **Closed** **04/16/2013** **04/26/2013** **04/22/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

Refer to drawing MA-13, MA-3, MA-10

Due to the presence of several PGE duct banks and the steam line that runs along 2nd Street M Squared feels it will be significantly difficult to modify a precast valve vault to fit into the area designated for the vault. As a result, M Squared proposes to construct a cast in place valve vault as has previously installed and approved on Market Street.

1. Please confirm it is acceptable to install a cast in place vault at this location.
2. Please advise if rebar detail attached is acceptable for use.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 4/22/2013 Response per Michael Smith (SFDPW),

"-Due to the existing conflicting/surrounding utilities in the proximity of the AWSS vault location, a cast-in-place concrete valve vault would be acceptable.

-The rebar drawings will need to be stamped again by the structural engineer. Please note that this valve vault is for a 16" gate valve with bypass valve (Two actuators)."

U-0228 **AWSS - Sidewalk Expansion Evaluation between First Street and Beale Street** **Closed** **05/31/2013** **06/10/2013** **10/18/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Gary Krutsch

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

Per the attached email it appears that the City's intent to is to move the curb lines south between First St & Fremont by 3' and also between Fremont & Beale Street by 4'.

First to Fremont St - In moving out the curb line by 3' the AWSS Line on this block will be pretty close to being under the new curb line, therefore making any maintenance of the AWSS line in the future very difficult. There would also be an impact to the gate valve location on the east side of the 1st and Mission intersection and the west side of Fremont & Mission due to the new curb coming south. It is possible a modified roof to the vault would be required as half of the vault would be in the street and another half would be in the sidewalk (judging from rough field measurements). The AWSS Fire hydrant would also need to be relocated as it would now be in the middle of a widened sidewalk, whereas the distance acceptable is 24" to 26" from FOC.

Fremont to Beale Street - The current alignment for the AWSS along Mission between Fremont & Beale is close to the curb on the north side (in order to avoid 3 PG&E utility

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Judy Long
10/16/2013
RESPONSE:
- TJPA has not received confirmation from the SFPUC that the new AWSS service can be installed per the contract drawings. As discussed in our weekly coordination meeting after completing the paving in the intersection at First and Mission,M2 is directed to jump to the intersection at Main and Mission and proceed westward towards Beale Street.

- Submit RFI#U-0228.1 once work is complete in the Main Street intersection and request SFPUC's approval to proceed with the original AWSS alignment per contract drawings between Beale and First streets.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

vaults). By moving the curb 4' south the AWSS line will now be underneath the sidewalk on this block. Similar to above the gate valve vaults would be partially under the sidewalk here and modifications/relocations may be required.

Please advise if M Squared is to continue with the AWSS install per plan. Alternatively please provide direction on the conflicts that moving the sidewalk creates for the main.

U-0228.1 **AWSS - Sidewalk Expansion between First Street and Beale Street** **Closed** **02/07/2014** **02/17/2014** **02/24/2014** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Turner Construction Comp Judith Long

Co-Author: M Squared Construction, Inc. Chris Wallace

REQUEST:

As per RFI response to U-0228, the "TJPA has not received confirmation from the SFPUC that the new AWSS service can be installed per the contract drawings," due to the following purpoted sidewalk expansion between First Street and Beale Street:

"Per the attached email it appears that the City's intent to is to move the curb lines south between First St & Fremont by 3' and also between Fremont & Beale Street by 4'.

First to Fremont St - In moving out the curb line by 3' the AWSS Line on this block will be pretty close to being under the new curb line, therefore making any maintenance of the AWSS line in the future very difficult. There would also be an impact to the gate valve location on the east side of the 1st and Mission intersection and the west side of Fremont & Mission due to the new curb coming south. It is possible a modified roof to the vault would be required as half of the vault would be in the street and another half would be in the sidewalk (judging from rough field measurements). The AWSS Fire hydrant would also need to be relocated as it would now be in the middle of a widened sidewalk, whereas the distance acceptable is 24" to 26" from FOC.

Fremont to Beale Street - The current alignment for the

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please see attached email from Eugene Shu of SFWD and dated 02/20/14.
The SFPUC has given their approval to install the new AWSS pipe in the original AWSS pipe alignment on Mission Street between First and Beale Streets knowing that portions of the AWSS pipe alignment will be under either the street gutter or partially under the sidewalk curb due to planned future sidewalk widening work on the north side of Mission Street. The SFPUC has required that all of the 16-inch gate valve vaults are to be located outside the planned future sidewalk boundaries.
The Contractor shall coordinate with the SFDPW EOR regarding the locations of the valve vaults prior to beginning work to install the pipe. The chosen locations will be confirmed with SFPUC for their approval.
Based on the above approval by SFPUC, the Contractor shall proceed with installing the AWSS piping as shown on drawings MA-15 and MA-16 after the gate valve vaults are located outside the sidewalk.
The AWSS hydrant lateral shown on the drawing MA-15 to be located on Mission Street west of the Fremont Street west property line has been relocated to the west side of Fremont

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

AWSS along Mission between Fremont & Beale is close to the curb on the north side (in order to avoid 3 PG&E utility vaults). By moving the curb 4' south the AWSS line will now be underneath the sidewalk on this block. Similar to above the gate valve vaults would be partially under the sidewalk here and modifications/relocations may be required.

Please confirm it is acceptable for M Squared to proceed with AWSS alignment as shown on drawings MA-15 and MA-16.

Street due to conflicts with the future sidewalk widening work. Please see our response regarding the hydrant lateral in RFI Nq. U-0241.
Michael B. Smith (415} 558-4536
SFDPW /IDC/EME
02/20/14

U-0229 **AWSS Main @ PGE Vault #1329** **Closed** **06/12/2013** **06/22/2013** **06/17/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

Reference: Attached Photo

Please confrim that the new 16" AWSS is acceptable to be in the position shown as there is not the required clearance with the PGE vault #1329

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Response per Michael Smith, (SFDPW)

"Per a site visit on 6/11/13 with M Squared, the current alignment of the AWSS pipe against the PG&E electrical vault is unacceptable. The AWSS contract documents require a minimum clearance of 12" between AWSS facilities and adjacent utilities. Exceptions shall be made by the engineer on a case-by-case basis per field conditions to decrease the clearance to 6" where required."

Signed and dated 6/17/13. (See Attached)

U-0230 **AWSS - AWSS Vault at 2nd Street** **Closed** **07/18/2013** **07/28/2013** **07/19/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

Due to the grade of the 16" AWSS gate valve, combined with the valve actuators the roof of the AWSS valve vault

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Response per Michael Smith (SFDPW),

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

at 2nd Street will not be under the surface of the street. Previous AWSS valve vaults have 2" AC/8" concrete street base on top of the roof of the vault.

If M Squared installs the vault roof and then covers it with 2" AC then there is a danger that future contractors will saw cut through the roof of the vault while cutting out their trenches.

Our suggestion is to pour the vault roof to the same grade as the current street surface on 2nd Street. There does not appear to be any room for adjustment here and we are unaware of any other options in this case.

Please confirm it is acceptable to construct the vault roof in this manner, with a concrete broom finish.

"M Squared shall proceed with constructing the valve box cover in a manner such that the portion to be located in the parking strip shall be flush with the surrounding concrete. For the portion of the cover to be located in the paved traffic lane, reduce top surface by 2". Place a sheet of 10 gauge galvanized sheet steel on recessed area of concrete cover. When repaving street, extend A/C paving over vault to provide paving flush with concrete portion of cover/manhole lid.

Signed and dated. (see attached)

U-0231 **AWSS - Concrete Sampling for Kickers** **Closed** **07/25/2013** **08/04/2013** **08/02/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

The contract specifications require concrete sampling of all cast in place concrete on the AWSS project. However in the pre-construction QC meeting the City confirmed that the SFWD Inspector - Dan Helminiak is permitted to inspect all concrete thrust blocks.

Due to the small size of the thrust blocks it is not practical for concrete samples to be provided to an inspection agency.

Please confirm that per the agreement SFWD inspector can inspect all concrete used in the AWSS thrust blocks and that no concrete sampling is required.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Response per Michael Smith (SFDPW),

"It is acceptable to the City for thrust blocks to be visually inspected by the SFWD inspector for compliance with the contract documents. No concrete sampling is required."

Signed and dated. (See attached)

(Jack Adams)
Although the contract specifications require concrete sampling and testing of all cast in place concrete on the AWSS project, the City of SF Engineer of record has allowed visual inspection only by City SFPUC (SFWD) of these concrete thrust blocks. See attached from M. Smith CCSF PUC.

U-0232 **AWSS - Schedule Change of AWSS Install** **Closed** **07/30/2013** **08/09/2013** **08/14/2013** **Potentially** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

Per our recent AWSS meetings M Squared had been directed by the owners' representative to complete the AWSS install at 1st & Mission intersection and then mobilize to Main Street intersection to begin work down there.

IF M Squared is to begin work at Main St then there will be no connection made on the east side of 1st and Mission. The new 16" line will be installed up to the 16"X10" tee and the 10" connection will be done heading North on 1st.

We can see 3 options that would allow us to proceed to Main Street.

1. Cap the new 16" Tee on the east side of the tee. This would allow the AWSS system to be in service from 2nd Street all the way to the east side of 1st Street, including 1st Street heading towards Market.

2. Perform a connection from the new 16" Tee to the existing 12" AWSS main on Mission east of 1st Street. This would allow the AWSS system to be fully operational from 2nd all the way to Main. This would be temporary as M Squared would presumably return to complete the 16" install here.

3. Leave the new and existing pipe as is. The AWSS main would be operational from 2nd Street all the way to the gate valve on Mission west of 1st Street. The main would remain shut off on the 1st and Mission intersection, and also 1st Street heading towares Market as the new 16" AWSS line would be open at the tee (not capped/connected) and the exisiting 12" would not be connected to anything.

Please provide an option to M Squared to allow us to proceed.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Response per Michael Smith, (SFDPW)

"Please proceed with Option No. 1 - Capping of the East end of the (N) 16"x16"x12" tee installed at Mission and First Streets. The concrete thrust block to be installed behind the 16" cap shall be poured with 3x the concrete as a typical thrust block for a 16" AWSS fitting. Pour thrust blocks against 12" CI pipe and 16"x16"x1" Steel plate.

Option No. 2 is not approved due to unavailability of fittings for 4-6 months and the vertical/horizontal alignments between (N) and (E) pipes.

Bill Gunn of SFWD approved option No. 1 based on the above issues for implementing option No. 2"

Signed and Dated. (See attached)

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0233	AWSS - 16" GV @ sta 9+00	Closed	08/14/2013	08/24/2013	08/14/2013	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author: M Squared Construction, Inc. Aidan Foley

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

REQUEST:

Reference: Attached Photos

Technically the 2 operating nuts should be on the same side. That way you can operate the nut on both the valve and the by pass from the 24"x24" valve cover in the street. Now that the nut on the valve is facing a different way there is no possibility that you can access both nuts from the valve cover.

SUGGESTION:

Install an 8" pipe into the roof of the vault and put an 8" valve cover in the street as an access point to the by pass. The main operating nut on the gate calve would accessible from the 24" cover in the street per plan.

ANSWER: **Accept Suggestion:** ☐

Response per Michael Smith (SFDPW),

"Our understanding is that the concrete valve vault lid has been fabricated and installed. Please provide an as-built drawing of the placement of the covers and rebar layout."

Signed and Dated. (See Attached)

U-0234 **AWSS - Valve Vault Wiring Clarification** **Closed** **10/17/2013** **10/27/2013** **11/06/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Gary Krutsch

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

Please refer to drawing sheets MA-29, MA-30 and MA-31.

The above referenced drawings show conduit and conductors required for vault wiring. The sheet note number 1on these drawings refer to Limitorque drawings. These Limitorque drawings show additional (54 #14 gauge) conductors in each of the three locations.

Please clarify the total number of conductors and corresponding conduits..

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Judy Long
11/5/2013
RESPONSE:
This wiring issue for the AWSS Motorized gate valve acruator has been addressed and resolved between Thomas Reid of SFPUC and the contractor. Please see attached email dated 11/1/13. per Michael B. Smith SFDPW/ICD/EME on 11/5/13

U-0235 **RUP - Missing Fittings at Main Street Intersection per Drawing MA-17** **Closed** **12/10/2013** **12/20/2013** **12/23/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Gary Krutsch

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

Please refer to drawing MA-17 and specification section 00 70 00, 1.05 - B4.

Per the General Conditions, 00 70 00,1.05 B4 , the parts list takes precedence over the drawing details. The attached excerpt from drawing MA-17 identifies fittings that are not shown on the material list. Please confirm the following fittings are required to complete the AWSS new install:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Judy Long
Michael Smith
12/18/2013
RESPONSE:
The three (3) 14" stop collars and one (1) 14" bell collar are required to restrain the new piping.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

1. Three (3) 14" stop collar.
2. A 14" bell collar

U-0236 **RUP - AWSS Pipe Configuration at PG&E Vault #1722** **Closed** **12/10/2013** **12/20/2013** **12/19/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Gary Krutsch

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

See attached sketches.

Due to the proximity of PGE's Vault #1722 to the new AWSS line M Squared believes the following changes are needed to keep all pipe joints and fittings outside the limits of existing utility vaults.

M Squared proposes installing the 14" x 12" reducer further east, until we are outside the limits of the vault. The pipe between the new cross piece and the new reducer will be 14-inch pipe, rather than the 12-inch shown on the plans. M Squared will be able to eliminate the need for the 12-inch sleeve here and tie 12-inch pipe into the existing main from the reducer. All joints will be restrained using stop collars.

Please confirm that this configuration is preferred to in lieu having fittings and joints within the limits of the PGE Vault. Please advise.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Judy Long
12/18/2013
RESPONSE
The proposed AWSS piping configuration is acceptable.
Please have TJPA follow up with PG&E for costs to perform additional work.
Please have SFWD inspector/SFDPW Engineer inspect PG&E vaults after modifications are made to verify clearance requirements.

U-0237 **RUP - Location of Valve Vault at Main Street Phase** **Closed** **12/13/2013** **12/23/2013** **12/19/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Gary Krutsch

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

Please refer to drawing MA-17.

Due to the location of several utilities it is not possible to install the gate valve and valve vault at Sta 19+85 as shown on sheet MA-17. The closest possible location with

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Judy Long
12/18/2013
RESPONSE
The proposed location at Station 19 = 50 for the 16" gate valve vault is acceptable.

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

adequate space for a concrete vault is at Sta 19+50. See attached M Squared sketch SK-TG04.2-059.

Please confirm that this location is acceptable as the location for the gate valve and the valve vault. If this is an acceptable location, please clarify if 2 joints west of the new valve location are required to be restrained.

All joints between the gate valve and cross, and two joints west of the gate valve, shall be restrained.

U-0238 **RUP - Catch Basin at Sta. 18+75** **Closed** **12/17/2013** **12/27/2013** **12/23/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Gary Krutsch

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

The existing catch basin at Sta 18+75, mid-block between Main and Beale on Mission Street is 3.5-inches higher than the surrounding concrete and asphalt. The catch basin itself is only 16-inches deep and does not appear to be active on account of the grate being higher than the surrounding areas.

In order for this catch basin to be utilized the grate would need to be dropped approx 5inches, leaving a catch basin less than a foot deep.

Please advise what steps are required to be taken before M Squared restores the concrete bus lane.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Judy Long
12/20/2013
RESPONSE:
Please revise request per discussion in meeting held 12/20/13

JT/WOJV 12/23/2013 - Please revise to RFI to request abandoning the catch basin.

U-0238.1 **AWSS - Abandoned Catch Basin at Sta. 18+75** **Closed** **01/07/2014** **01/17/2014** **02/04/2014** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Judith Long

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

The existing catch basin at Sta 18+75, mid block between Main and Beale on Mission Street is 3.5-inches higher than the surrounding concrete and asphalt. The catch basin itself is only 16inches deep and does not appear to be active on account of the grate being higher than the surrounding areas.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

SFDPW Response
This catch basin is to be maintained at its current location. Slope concrete bus lane to catch basin or pour concrete flat in area. The concrete at the catch basin frame casting shall be finished fluch with both surfaces.
Michael B. Smith SFDPW/IDC/EME 02/04/14

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

In order for this catch basin to be utilized the grate would need to be dropped approx. 5-inches, leaving a catch basin less than a foot deep. It is not possible to install a standard SF catch basin is this location and therefore M Squared suggest abandoning this CB. Alternatively, please provide grades for the restoration of the concrete bus lane to create necessary slopes to this catch basin.

Please advise.

U-0239 **AWSS - The Use of Sand Slurry Backfill at Mission and Main Street Phase** **Closed** **01/16/2014** **01/26/2014** **02/04/2014** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Turner Construction Comp Judith Long

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

Please refer to drawing MA-17.

Due to the high number of utility duct banks on Main Street & Mission Street Intersection M Squared's crews effectively tunneled under sections of the street in order to install the new AWSS main. Where possible M Squared removed the street base and excavated as much as we could. The remainder of the trench was tunneled under duct banks and under the street, with the street base remaining in place.

Now that all the AWSS main has been installed M Squared will shortly be faced with backfilling this intersection. There is currently only a small portion of trench that can be backfilled using conventional methods i.e ram compactor etc. The remainder of the trench will also not be suitable for backfilling using the jetting method as there will be no way to compact the area directly underneath the street base.

M Squared is requesting permission to create several small holes (approx. 6" dia) in the street base, between some of the utilities and backfill the AWSS trench using a sand cement slurry backfill. See attached submittal sheets. This mix design is effectively sand and water, with just a minor amount of cement included to allow the sand to reach 95% compaction.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is acceptable provided that the dried sand/cement mixture has a minimum density of 120 lb/ft3. Please provide test verification of this density with site test as continued from previous sheet: "witnessed by SFWD Inspector". Test can be performed at contractor's yard.
Answered by: Michael B Smith SFDPW/IDC/EME
Answered on: 1/31/14

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

If this is not acceptable please provide direction.

U-0240 **AWSS - Concrete Mix and Slump at Parking Strip Placement** **Closed** **01/16/2014** **01/26/2014** **03/05/2014** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Turner Construction Comp Judith Long

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

Prior to replacing the 6ft wide parking strip on Mission Street at 1st Street it became apparent to us that the articulated semi trucks, buses and other larger vehicles would be unable to a make the turn from southbound 1st Street onto Mission Street if the 6ft wide parking strip was barricaded in order to let the concrete set.

City standards call for the concrete to be poured with a 4inch slump, and that no traffic drive on the concrete for a period of 10 days. M Squared made the decision to add 2% calcium to the concrete mix to speed up the concrete setting process. M Squared used the same mix design as is used for the street base:
- Bode Concrete Mix Design 604 - sidewalk, curb and gutter and parking strip.
- Bode Concrete Mix Design 604CC - Street base

The only difference between the 2 concrete designs is the added 2% calcium.

The concrete was poured with an 8inch slump in order to allow the crew enough time to satisfactorily finish the concrete to the required surface. M Squared acknowledge that this is out of spec, however the concrete still reached over 4000psi, when specs required only 3000psi. M Squared believes that this will be required in the future on other portions of Mission Street on account of Mission St. being MUNI¡¦s busiest route. SFMTA have asked that M Squared minimize lane closures where possible.

Please confirm that this 8inch slump is acceptable on Bode Mix 604CC (attached).

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Michael Smith
3/3/2014
RESPONSE:
The 8" slump for the Bode Mix 604cc is acceptable.
Michael B. Smith SFDPW/IDC/EME on 3/3/14

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0241	AWSS - Proposed Fire Hydrant Re-Location on Mission and Fremont Street	Closed	01/21/2014	01/31/2014	02/13/2014	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Turner Construction Comp Judith Long

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

As per AWSS Coordination Meeting on 01/17/2014, the location of this fire hydrant near the intersection of Fremont and Mission is potentially going to need to be moved to accommodate the new sidewalk expansion. The purpose of the RFI is for Michael Smith with SFWD to analyze, consider and direct the feasibility of relocating the fire hydrant further north.

If the hydrant is to be located somewhere other than is shown on the drawing please provide a detail for this work as additional fittings may need to be ordered.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Per our site visit with M2 on 02/11/14, the proposed hydrant lateral shall be relocated to the west side of Fremont Street, north of Mission Street, barring any conlficting utilities. The hydrant shall be lcoated immediately north of the replacement 10" gate valve. M2 shall verify the availability of a 10" hydrant tee with SFWD.

Michael B. Smith SFDPW/IDC/EME 02/12/14

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0242	AWSS - Hydrant Lateral Connection Conlict at Sta. 17+20	Closed	01/21/2014	01/31/2014		Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

Sheet MA-16 shows that the hydrant tee is to be rolled down 45-degrees in order to tie in to the lateral piping. However, when M Squared excavated this section, they discovered that the hydrant lateral piping is shallow and the main is approx. 2-feet deeper.

In order to install the piping, the hydrant tee will need to be rolled UP 45 degrees. In additon to this M Squared will need to order a customized 8-inch DIP flanged spool to join the tee to the flanged 45-degree elbow.

Please confirm it is acceptable to proceed with the customized flange or provide direction.

SUGGESTION:

Roll the tee upward 45-degrees as requried to suit field conditions.
F/J pipe spool betweenTEE and flanged 45-degre elbow. Spool length shall be determine dint he field to suit existing pipe alignments

Michael B. Smith SFDPW/JDC/EME - 01/22/14.

See attache hand written response.jt/WOVJ

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed
U-0243	AWSS - Culvert at North West Corner of Beale and Mission Street	Closed	02/04/2014	02/14/2014	02/13/2014	Potentially	☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Turner Construction Comp PHIL MILITELLO

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

Please refer to attached drawing MA-16 and attached photos.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Please have M2 provide a quote to repair culvert break and to adjust pipe in order that there is a 1/4" per foot positive slope to the sewer main. The quote

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

After trenching to remove the AWSS, M Squared exposed the 12-inch VCP sewer culvert on the NW corner of Beale & Mission street spanning from the catch basin to the sewer main. The joint was open by 4-inches and was covered in cardboard and duct tape. There was also a reverse flow on the pipe by 15 degrees.

See attached photos and please advise.

will be forwarded to SFPUC.

Micahel B. Smith SFDPW/IDC/EME Answered on 02/12/14

U-0244 **AWSS - Gate Valve Vault at Sta 16+40 (West of Beale Street)** **Closed** **02/07/2014** **02/17/2014** **02/10/2014** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** City and County of San Fr Michael Smith

Co-Author: M Squared Construction, Inc. Chris Wallace

REQUEST:

See attached photos of conflicts with gate valve vault at Sta 16+40.

Due to the unforseen utilities in place, M Squared cannot install the concrete vault around the gate valve at STA 16+40. In order to avoid delays to the project M Squared reached out to the engineer of record to bring this issue to his attention. See attached email chain.

As it appears M Squared is directed to return to 1st Street and work east again; M Squared will be unable to build any structure around the gate valve at Sta 16+40. Due to the flip flop of the schedule we will not be able to tie in at this point for several months so we suggest the following:
- Install the gate valve at Sta 16+40 and direct bury the valve, leaving access to the gates with ductile risers and valve caps. FYI - these gates should not be opened anyway as the line will be out of commission during construction.
- Re-excavate this gate valve when M Squared installs the pipe from Fremont St heading east and tie in the pipe to it then. In the interim M Squared will drive a sheet pile behind the gate valve and support it with a 1.5ton concrete block. This will prevent any gate valve movement.
- As M Squared will be working their way from 1st St towards Beale Street, they should have several weeks in which to design some sort of modified manhole, custom sized vault in which to encase the valve.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

This is Acceptable.

Please coordinate site visit with Engineer and Bill Gunn CF SFWD to review valve installation for providing design for modified valave box and gate valve support.

Michael. B. Smith SFDPW/IDC/EME 02/07/14

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please advise if this is acceptable.

U-0245 **AWSS - 1st Street Fire Hydrant Lateral Conflicts at Sta. 10+05** **Closed** **03/27/2014** **04/06/2014** **04/01/2014** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Turner Construction Comp Judith Long

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

Please refer to drawing MA-15 and attached M Squared sketch SK-TG04.2-069.

According to the plans the tee is to be rolled down, however the existing tee is rolled out flat and there are 2 x 45 degree elbows installed to raise the line over the existing brick sewer.

1. Due to existing utilities, the area is congested and has very minimal access. M Squared will need SFWD to determine which water line is live and allow M Squared to remove the abandoned water main to provide more space here.

M Squared is also unable to find a lead joint to connect the new pipe. M Squared has found, what appears to be some form of a repair coupling or sleeve on the existing line. There is one either side of the existing brick sewer main.

2. Please advise how you would like M Squared to proceed. M Squared has already trenched 7-feet further south than is shown on the drawings.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

1. Please coordinate with the SFWD inspector to identify if the (e) SFWD line is abandoned. If abandoned, cut line as required.

2. Furnish/Install 45 degree elbows as required to match (e) horizontal alignment.

3. Proceed as required following lateral South to identify usable lead joint to connect to (e) line. We have forwarded RFI to SFWD for possible cost sharing to replace remaining lateral and hydrant. Will advise ASAP.

Michael B. Smith SFDPW/IDC/EME 03/28/14

U-0246 **AWSS - Gate Valve Vault Locations at 1st Street and Fremont Street** **Closed** **03/27/2014** **04/06/2014** **04/01/2014** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Turner Construction Comp Judith Long

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

Please refer to drawing MA-15, MA-16 and attached M Squared sketch SK-TG04.2-070.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

First Street:

1. M Squared is able to install the gate valve and gate valve vault at the west side of 1st Street on Mission Street without impacting the new sidewalk expansion. The valve vault will be in the street and outside any sidewalk limits. The vault can be constructed once the street light conduit has been relocated. This work has already been coordinated with the City Street Lighting Division. Please advise on when the City will remove the conflict to install the gate valve/vault.

Fremont Street (east side):

2. See attached sketch. Due to the amount and location of existing utilities M Squared will be unable to install a gate valve vault of any kind at this location. It is also looking highly unlikely that M Squared will be able to install any gate valve at this location due to the utilities in the area. Please advise as to how M Squared will proceed.

Response by Judy Long 3/28/2014

The contractor shall fiels investigate installing the 16" gate valve and reducers directly east of the tee serving Fremont Street. Install riser and 23 1/2" square AWSS manhole cover above gate valve operating nuts similar to 10" AWSS gate valve. Notify engineer of any conflicts to performing the above work, and for direction for riser and manhole support.

Michael B. Smith SFDPW/IDC/EME 03/28/14
Judy Long
3/28/2014

REVISED 4/1/2014:

Per Yesterday's coordination meeting with PG&E and Last night's site investigation by M2, there currently is no space to install a gate valve east of the main line tee at Fremont Street. In order to maintain water supply for SFFD, the contractor shall temporarily cap 16" tee on the east side until PG&E relocates conflicting duct banks. The contractor shall install 16" diam. nipple, 16" DI AWSS MJB flat cap and tie rods. Use steel spacers up against (e) 12" CI AWSS line. Have SFWD test completed line and place back into service.

Per Michael B. Smith SFDPW/IDC/EME on 04/01/2014

U-0247 **AWSS - PG&E Utility Conflicts at Fremont Intersection** **Closed** **03/27/2014** **04/06/2014** **04/18/2014** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Turner Construction Comp Judith Long

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

Please refer to drawing MA-16 and attached M Squared sketch SK-TG04.2-071.

There are 3 duct banks exiting out of PG&E Vault #1669:

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Judy Long
4/1/2014

PG&E shall remove/relocate conflicting duct bank(s) as identified by the contractor in order to obtain the

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

1. PG&E Duct bank #1 runs from 1st Street down Mission to Fremont Street and has been in our trench all that time. It has not encroached on the AWSS Main alignment and there is enough clearance from AWSS main most of that time. It has impacted excavation but should not pose too much of a problem for pipe installation.
2. PG&E Duct bank #2 sits on top of the existing 12" AWSS Main and runs directly on top of the AWSS Main for a large portion of the intersection. Due to this duct bank we are unable to excavate down to the AWSS Main, unable to remove pipe and will be unable to install new 16-inch AWSS.
3. PG&E Duct bank #3 runs underneath the existing 12" AWSS main, it is concrete encased and part of the concrete encasement encroaches onto the existing 12" AWSS Main. This duct bank appears to leave our trench after 10ft or so.

Where duct bank #2 and duct bank #3 cross each other there is only 11-inch between the two duct banks. Not enough space to install a 16inch pipe with tie rods and stop collars. The AWSS is pinched between these 2 duct banks for approx. 10ft with one duct bank on top of the 12-inch main and one touching the main from underneath. While all duct banks impede us it seems there is a higher chance of making this work with the removal of duct bank #2.

Please provide direction on how to proceed or advise when PG&E will begin to remove their duct banks.

necessary working space and clearance as required to remove the (e) AWSS pipe and install the (n) pipe. PG&E shall demo portions of their electrical vaults that were constructed on the (e) AWSS pipe.

Currently should the (e) CI AWSS be comprimised, the SFWD would not be able to even access the fire fighting line due to the three conflicting PG&E duct banks surrounding the AWSS pipe. City Standards call for a minimum 12" seraration for utilities being installed in the proximity of the AWSS line.

Michael Smith 4/1/2014

Response by Judy Long

U-0248 **AWSS - Restraints at the Intersection of Mission and Fremont St.** **Open** **06/04/2014** **06/14/2014** **Potentially** ☐

From: Webcor Construction LP Lynn Kowallis **To:** Turner Construction Compan PHIL MILITELLO **Answered By:**

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

Please refer to drawing MA-16 and M Squared Sketch-TG04.2-072.1 and TG04.2-072.2.

Question #1 - Does every joint between the new GV west of Fremont Street, and the new 16"x10" tee in Fremont

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Street intersection need to be restrained with bell & stop collars? This distance is approx. 50ft.
Question #2 - Currently there does not appear to be enough space to install the new 16" pipe WITH bell & stop collars through the utilities in the Fremont St intersection. There does appear to be space to install 16" pipe without the stop/bell collars on.

- Our suggestion would be to install the 16"x10" tee and restrain that tee on one joint heading east. Install piping across the Fremont St intersection without stop/bell collars, delete the 16" GV at that location (we believe we will not be able to fit one anyway), and tie off the last piece of pipe coming into the hydrant tee east of Fremont Street.

Please clarify if this is acceptable.

U-0249 **AWSS - Hydrant Location at Fremont St.** **Closed** **06/23/2014** **07/03/2014** **07/10/2014** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Turner Construction Comp Judith Long

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

Please refer to drawing MA-15 and attached M2 sketch SK-TG04.2-073.

1. Please confirm that it is acceptable to install the new hydrant at Fremont St. (Location #4, STA 12+50), 31" from face of concrete (FOC) at approx. STA. 7+15 on drawing MA-16. The revised location is a result of various conflict in the vacinity that prevent the hydrant from being installed as shown on MA-15.
2. Due to the 10" main being relatively deep, additional fittings will be required to install the hydrant at the revised location (STA 7+15). Please confirm it is acceptable to install the hydrant as shown in the attached sketch SK-TG04.2-073.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Judy Long
7/7/2014

Per our conversation on 7/7/14 with M2, the contractor shall investigate the use of using a hydrant riser and no elevation changes for lateral piping.

by: Michael B. Smith SFDPW/IDC/EME, dated 7/7/14

U-0249.1 **AWSS - Hydrant on Fremont Street** **Closed** **09/10/2014** **09/20/2014** **09/11/2014** **Potentially** ☐

From: Webcor Construction LP Claude Titche **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Turner Construction Comp Judith Long

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

Per response to RFI U-0249, M Squared last night investigated the use of a hydrant riser. It appears that a 24" hydrant riser will be possible in this situation.

Please confirm the use of the 24" riser.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

The installation of a 24" hydrant riser is acceptable to set the hydrant at the required elevation.

Michael B. Smith SFDPW/IDC/EME dated 9/11/14

U-0250 **AWSS - Hydrant Lateral Connection at STA 13+75 (MA-16)** **Closed** **06/23/2014** **07/03/2014** **07/08/2014** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan PHIL MILITELLO **Answered By:** Turner Construction Comp Judith Long

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

Please refer to attached excerpt drawing MA-16 and M2 sketch SK-TG04.2-074.

The piping on this lateral is partially encased in the 3x5 sewer and appears to be ductile iron from 5 ft north of the 3x5 sewer heading south to the hydrant location.

Please confirm that it is acceptable to weld lugs on the existing ductile and restrain new ductile iron pipe from this point to the new 16" AWSS Main. Note additional fittings are required as shown in the attached sketch. (8inch 45deg elbows also required and additional bell and stop collars)

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Judy Long
7/7/2014

This piping layout for the AWSS Hydrant lateral to suit field conditions is acceptable.

By: Michael B. Smith SFDPW/ICD/EME, dated 7/7/14

U-182.5 **Tie Back Requirements on 2nd Street** **Closed** **06/21/2013** **07/01/2013** **06/27/2013** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

See attached email from EOR.

M Squared has returned the 45deg bends to SFWD, and in turn we have procured 22deg bends for this location. As a result we must now replace and tie back a minimum of 18ft of new 10" Ductile Iron Pipe. As the existing 10" pipes are 12ft lengths we will have to remove 24ft (2 lengths) of pipe to expose the closest possible bell.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Response per Michael Smith (SFDPW)

"Our response followed standard design practices for restraining AWSS pipe at elbows."

Signed and Dated (see attached)

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

Please confirm this is the intention.

U-204 **AWSS - Compromised Lead Joint on Howard Street** **Closed** **06/15/2012** **06/25/2012** **06/18/2012** **Potentially** ☐

From: Webcor Construction LP Jackson Tukuafu **To:** Turner Construction Compan Gary Krutsch **Answered By:** Turner Construction Comp Jeff Thiel

Co-Author:

REQUEST:

Please reference the attached COMM0999 provided to TCCO on Friday, June 6, 2012.

As outlined in M Squared's letter dated 6/8/12, M Squared realigned the AWSS main on Howard Street and repacked the lead joints (time card attached for reference). During the Hydrostatic Test by SFWD, the lead joint leaked and failed to hold the test eventhough it was repacked.

As a result, it has become apparent that the AWSS joints have been compromised. Please provide direction on how M Squared is to proceed the with next course of action.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

Jeff Thiel 6/18/2012 Michael Smith's (SFDPW) response,

"The Contractor shall remove two (2) additional 12' sections of (E) cast iron pipe on the East end of the horizontal offset. F/I ductile iron pipe with restraints at all joints except for the MJxGH adaptor fitting. Pour new lead joint at Ctel."

Signed and Dated 6/18/12.

U-221 **AWSS - Pipe Joints in Utility Vaults** **Void** **01/31/2013** **02/10/2013** **02/06/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author: M Squared Construction, Inc. Aidan Foley

REQUEST:

Per recent field direction provided by the City inspector to M Squared Construction, where possible no joints are permitted inside utility vaults (i.e PGE, ATT)

This will require an additional restraint joint at each vault location.

Please confirm this is the intent.

SUGGESTION:

ANSWER: **Accept Suggestion:** ☐

See U-0221

U-222 **AWSS - Flanged Spools for Hydrants** **Void** **01/31/2013** **02/10/2013** **02/06/2013** **Potentially** ☐

From: Webcor Construction LP Robert Kjome **To:** Turner Construction Compan Gary Krutsch **Answered By:** Webcor Construction LP Jackson Tukuafu

Co-Author:

Number	Subject	Status	Date Created	Date Required	Date Answered	Cost Impact	Proceed

M Squared Construction, Inc. Aidan Foley

REQUEST:

Reference Drawings: MA-14 & MA-15

Hydrant at Sta 6+30
Contract drawings show the 45deg bend being connected directly to the rolled down tee. However the hydrant lateral is much lower than the main and it will not be possible to connect them directly together.

Hydrant at Sta 9+00
Due to the changes per RFI U-190 M Squared are to install the new fire hydrant in the same location as the existing, in the breezeway. As a result the new hydrant lateral will be higher than the newly installed main (the grade of the main being dictated by various utility conflicts).

Please confirm M squared's suggested mediation is how M squared is to proceed.

SUGGESTION:

Hydrant at Sta 6+30
Suggestion - custom fabricate a HPW flanged x flanged spool for to connect to the tee and the 45deg bend.

Hydrant at Sta 9+00
Suggestion - In order to connect the tee to the 90deg bend a HPW flanged x flanged spool, custom fabricated will be necessary.

ANSWER:

see U-0222

Accept Suggestion: ☐

END OF REPORT

Report Parameters

Project:	30100	Status Class:	
Sent To:		Run Date:	09/15/2014
Restrict Value of:	C	Run Time:	04:03 PM
From Date:	01/01/2011	Operator:	DKITCHEN
To Date:	09/15/2014	Report Code:	PM3012
Status:			

Transbay Transit Center – San Francisco, CA

Noise and Vibration Mitigation Management Plan

Webcor/Obayashi

September 07, 2012

GENERAL:

The Webcor/Obayashi (W/O or CM/GC) Noise and Vibration Mitigation Management policy that will be implemented on the Transbay Transportation Center Project will be an overall project policy, with each Trade Subcontractor contributing their specific plan as they come on board to the project. The primary function of this plan is to comply with Specification Section 00 08 13, 00 08 13/APB, the San Francisco Noise Control Ordinance, regulations and requirements and section 01 35 65, Specific Project mitigation measures and monitoring requirements as applicable to the various phases of work.

When required by the specifications, W/O will ensure its Trade Subcontractors comply with this plan as well as the San Francisco Noise Control Ordinance.

To expedite the project or minimize impacts, W/O will ensure that its Trade Subcontractors apply for written waivers of some of the noise requirements by application to the TJPA in accordance with Section 00 08 13 Specific Project Requirements when required by the specifications or contract. Written waivers shall be uploaded to Constructware by CM/GC. It is anticipated that some Work may require multiple shifts or for other reasons need to be performed outside of typical weekday daytime construction hours. Trade Subcontractors shall minimize construction activities during evening, nighttime, weekend, and holiday periods and shall obtain specific permits before performing construction in noise sensitive areas during these periods.

Night noise permits requests shall be submitted to the TJPA at least 7 days in advance of work. Noise permit request shall include:

1. Name of person in charge of work and phone number
2. Hours to be worked
3. Narrative of scope of work including necessity of doing work at night, maps, and truck routes
4. List of noise/vibration/light making equipment including make and model
5. Mitigation and monitoring methods being used

W/O will ensure that its Trade Subcontractors provide noise inspections and testing of equipment to ensure that all equipment onsite is in good condition and effectively muffled per manufacturer's recommendation. If inspection or testing documents are requested by the TJPA, or any of its representatives, W/O will require its Trade Subcontractors to provide requested documentation in a timely manner. Trade Subcontractors shall provide inspection and testing documents to CM/GC prior to start of work and as the equipment is replaced. CM/GC shall upload documents to a file location within Constructware.

W/O will ensure that its Trade Subcontractors minimize use of vehicle backup alarms and demonstrate how backup alarms will be minimized by using mitigation measures such as designing the construction site with a circular flow pattern that minimizes backing up of trucks and other heavy equipment. Trade Subcontractors shall submit quarterly reports of measures to reduce back up alarms. W/O shall upload these reports to a specific location within Constructware.

W/O will ensure that all its Trade Subcontractors' equipment onsite is equipped with broadband back-up alarms that will automatically adjust based on the ambient noise during nighttime hours (between 8 p.m. and 7 a.m.) when ambient noise is low. If safety considerations and applicable regulations will not allow use of broadband back-up alarms, Contractor shall request an exemption in writing to the TJPA

Representive including the applicable safety regulations (Cal/OSHA, OSHA). Trade Subcontractors shall comply with the TJPA's request for broadband back-up alarms for all work between 8 p.m. and 7 a.m. If requested by the TJPA or its representative, Trade Subcontractors shall provide W/O with equipment specifications showing broadband back-up alarms for submission via Constructware.

Through W/O's requirement of the submittals outlined in this noise and vibration plan, W/O will verify Trade Subcontractors' construction operations are performed in such a manner to minimize noise.

W/O will verify that its Trade Subcontractors perform noise monitoring to demonstrate compliance with noise limits and endeavor to minimize construction activities during off hours except for those required and deemed acceptable per the Contract Documents. Trade Subcontractors shall submit monthly monitoring reports to W/O for submission via Constructware.

W/O will verify Trade Subcontractors haul routes to ensure that they minimize noise intrusion into residential areas, and control noise during nighttime hours.

W/O will require all Trade Subcontractors to use procedures and equipment, when it would be effective, that produce lower noise levels than normal when required by the specifications or contract. W/O will require the Trade Subcontractor to submit manufacturer special noise control kit information. If none is available, then the Trade Subcontractor needs to submit a statement of this. Upon receipt and review of the information, W/O and the Trade Subcontractor will identify the events when the noise control measures should be used based on the specifications.

W/O will require all Trade Subcontractors plans to include use of temporary barriers near noisy activities as required by the specifications or contract. Such barriers shall be located close enough to the noise source to achieve noise attenuation. As necessary and when it is shown it would be effective, Trade Subcontractors shall construct shed-like structures or complete buildings to contain the noise from nighttime activities.

W/O shall require haul route map, plan and storage location to be part of Trade Subcontractor's plan and included within its submittal.

VIBRATION CONTROL

Vibration limits are based upon the Federal Transit Administration's Planning and Environment Transit Noise and Vibration Impact Assessment guidelines. W/O will require all Trade Subcontractors' to limit or prohibit use of construction techniques that create high vibration levels when it affects adjacent properties.

If construction techniques that create high vibration levels are used, W/O will require all Trade Subcontractors' to comply with the following additional restrictions:

1. Provide advance notice to TJPA of any vibration intensive activities. Perform vibration intensive activities only during daytime hours between 7 a.m. and 8 p.m. unless otherwise allowed by special permit or variance, as required by the specifications or contract. Perform vibration monitoring during vibration intensive activities during daytime hours between 7 a.m. and 8 p.m. unless otherwise allowed by special permit or variance, as required by the specifications or contract. Recorded data should be part of the Trade Subcontractor Daily report. A summary shall be submitted monthly and uploaded to Constructware.

2. Investigate alternative construction methods and practices to reduce the impacts if present and implement alternative methods and practices as reasonable.
3. Provide a plan to measure vibration levels including but not limited to measurement locations, times and metrics. Plan shall also include contingency plan if operations exceed the limits. This plan shall be uploaded into Constructware by W/O.
4. Limit or prohibit use of construction techniques that create high vibration levels.

Trade Subcontractors shall be responsible for providing technical information, as required by the specifications, in their plan. Trade Subcontractor's plan shall be submitted via Constructware for Record Only.

Transbay Transit Center – San Francisco, CA

Air Quality Plan
Webcor/Obayashi
January 16, 2012

GENERAL PLAN:

The Webcor/Obayashi (W/O) Air Quality Plan that will be implemented on the Transbay Transit Center Project will be an overall policy with each subcontractor contributing their specific plan as they come on board to the project. The primary function of this plan is to comply with the Bay Area Air Quality Management District regulations and requirements.

W/O will require its Trade Subcontractors to establish a plan that complies with all requirements set for in specification sections 00 08 13, and 01 35 65 prior to starting Work onsite. W/O shall check and verify trade subcontractor's compliance with air quality requirements on a daily basis. Any non-compliant trade subcontractors will receive both verbal and written notice through Safe Site One (W/O internal program). Additional, W/O will require trade subcontractors to demonstrate they are actively monitoring air quality by providing checklists or documentation on each Trade Subcontractors daily report. W/O shall verify its Trade Subcontractors Air Quality plan includes the following but not necessary limited to:

1. Specific measures to minimize impacts to sensitive receptors associated with exposure to respirable nuisance dust (PM10) and achieve a goal of No Visible Emissions.
2. W/O shall verify Trade Subcontractors comply with City Dust Control Order (DPW Order No. 171,378. Water active construction areas at least twice daily to control dust using non-potable water in accordance with San Francisco Ordinance 175-91
3. Identify specific measures to minimize dust generation; to reduce health risks to workers and the public.
4. Mist the immediate excavation area with a water spray to prevent airborne dust particles. Perform continuous water spraying during dust-generating activities. Mist or spray in such a way as to prevent puddling or generation of runoff, which could potentially reach storm drains or catch basins.
5. Minimize the amount of excavated material or demolished debris stored at the Site. Remove excavated material and demolished debris, with the exception of hazardous materials or suspected hazardous materials, from the Site no later than the end of each workday. If hazardous materials or suspected hazardous materials are stored on site, store such materials in accordance with all applicable California Environmental Protection Agency regulations, including providing storage in proper containers and protection from exposure to the elements. Remove such materials from the Site as soon as possible for disposal or recycling in accordance with applicable laws and regulations.
6. Wet all exposed soil surfaces at least 3 times daily during dry weather or more frequently if dust is blowing or if required by the TJPA. Immediately wet sweep serpentine residuals from the street.
7. Keep the Site and adjacent areas clean and perform wet sweeping at the end of each shift. Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites. Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.
8. Load haul trucks carrying excavated material so that the material does not extend above the walls or back of the truck bed. Wet before covering and tightly cover the surface of each load before the haul truck leaves the loading area. Cover trucks hauling soil, sand, and other loose materials or require trucks to maintain at least 2 feet of freeboard
9. Clean up spillage on City streets, whether directly or indirectly caused by Contractor's operations.

10. Minimize use of on-site diesel construction equipment, particularly unnecessary idling. Shut off construction equipment to reduce idling when not in direct use. Where feasible, replace diesel equipment with electrically powered machinery.
11. Retain receipts of ultra-low sulphur fuel (ULSF) purchase and equipment tuning and repair and make these available to the TJPA Representative or to the Federal Transit Administration (FTA) designee upon request.
12. Locate diesel engines, motors, or equipment as far away as possible from existing residential areas.
13. Properly tune and maintain diesel power equipment. To manufacturer's specification and frequency.
14. Suspend grading operations during first and second stage smog alerts, and during high winds (i.e., winds greater than 25 miles per hour).
15. Upon completion of the construction phase, buildings with visible signs of dirt and debris from the construction site shall be power-washed and/or painted (provided that permission is obtained from the property owner to access and wash the property with no fee charged by the (owner). Trade Contractor shall request CMGC to contact Singer and Associates to notify property owners for access. If permission from property owners for access is not granted, Trade Contractor is not responsible for power-washing or painting.
16. Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites.
17. If applicable, replant vegetation in disturbed areas as quickly as possible.

W/O will verify Trade Subcontractors comply with the requirements of the Bay Area Air Quality Management District (BAAQMD) Regulation 6 (for particulate matter and visible emissions), Regulation 7 "Odorous Substances," Regulation 11 "Hazardous Pollutants," and the California Health and Safety Code Division 26 "Air Resource", Chapter 3 "Emission Limitations," Section 41700 "Prohibited Conduct," and related regulations. Trade Subcontractors shall notify the BAAQMD 10 working days prior to commencing demolition or hazardous materials abatement work.

1. Such notification shall include the names and addresses of operations and persons responsible; description and location of the structure to be demolished or altered including size, age and prior use, and the approximate amount of friable asbestos; scheduled starting and completion dates of demolition or abatement; nature of planned work and methods to be employed; procedures to be employed to meet BAAQMD requirements; and the name and location of the disposal site.
2. The BAAQMD randomly inspects removal operations and will respond to any complaints received. Contractor shall cooperate with and facilitate all BAAQMD authorized inspections.\
3. Notifications shall be documented and provided to CM/GC for submission to the TJPA via ConstructWare.

Trade Subcontractors shall be responsible for providing technical information, as required by the specifications, in their plan. All trade subcontractors plans shall be submitted for Record Only via ConstructWare.

Transbay Transit Center – San Francisco, CA

Waste Management and Construction Debris Plan Revision 6

Webcor/Obayashi
November 7, 2013

Exhibit P

GENERAL PLAN:

Webcor/Obayashi Joint Venture (Webcor/Obayashi) understands that the building contractor plays a critical role in the management of jobsite produced construction waste. Webcor /Obayashi has adopted a waste reduction and recycling policy that will be implemented on the Transbay Transportation Center Project. This policy will be an overall policy with each subcontractor contributing their specific plan as they come on board to the project.

The primary goal of the plan is to divert as much construction generated debris & unused material from landfills as possible. At a minimum, Webcor/Obayashi and its trade subcontractors will divert 75% of the waste generated on the construction project from landfills. Trade subcontractors Construction Waste Management Plan shall be prepared and submitted in compliance with the Owner's LEED project requirements and the requirements of the City and County of San Francisco.

The Trade Subcontractors are required to comply with Specification Sections 00 08 15, 01 74
00, and 01 81 13 as well as any or all of the procedures listed below. If a conflict in percentages exists between this section and Section 01 81 13, General LEED Building Design and Construction Requirements, the most stringent section shall govern.

- Use of approved debris haulers with documented recycling levels.
- Source separated debris boxes will be provided onsite for mixed debris and recyclable items such as lumber and wood related products, dirt, concrete and asphalt, cardboard & metals.
- Trade Subcontractors are required to handle and dispose of any generated hazardous waste.
- Requesting Trade Subcontractors and vendors to utilize reusable packaging when possible.
- Trade Subcontractor shall provide a Construction Waste Management Plan.

All Trade Subcontractors shall develop their own Waste Management and Construction Debris Plan that complies with the Contract Documents and this plan. Trade Subcontractors shall submit this plan in accordance with the specifications and it shall become part of Webcor/Obayashi's overall project plan. All technical requirements defined in the contract documents shall be fulfilled by Trade Subcontractors and submitted to the Construction Management Oversight (CMO) For Record Only through ConstructWare

Webcor/Obayashi will ensure the Trade Subcontractors are effectively implementing the procedures and are in compliance with Specifications.
Webcor/Obayashi will verify that after Award of Contract and before commencement of the Work at the site, the Trade Subcontractor conducts a Reuse/Recycle Assessment as part of their Solid Waste Management Plan (SWMP): Trade Subcontractor's assessment shall

estimate the types and quantities of materials for the Project that are anticipated to be feasible for source separation for recycling or reuse, either onsite or offsite, and note the procedures intended for a recycling, reuse, and salvage program. Documentation of the trade subcontractor's plan shall consist of the following:

- Trade subcontractor and vendor waste management strategies.
- Trade subcontractor required to provide a monthly summary of the total waste material with backup documentation (weight tickets) if processed offsite.
- The amount recycled (in tons), material types, recycling procedures, and processing facility locations to which materials were diverted if processed offsite.

Trade Subcontractor's Construction Waste Management Plan shall also include estimated wastes, disposal, and handling with the following:

A. List of materials that comprise source separated materials include, but are not limited to:

- Concrete, Wood, Mud, Mixed Aggregates, Yard waste, Metals, and Cardboard.
- Yard waste is not included in our overall diversion rate calculation on the template or corresponding spreadsheet per the requirements from the LEED BD&C v3.0 Reference Guide.

B. List of materials that comprise Miscellaneous Construction Debris include, but are not limited to:

- Wood, Scrap Metal, Drywall, Plastics, Film Plastics, Wire, Cable, Glass.
- The total quantity estimated, inception to completion Disposal.
- Total Project Generation, Diversion + Disposal.
- Project Diversion Rate.

Webcor/Obayashi will verify that Construction and Demolition Waste; Non- hazardous solid resources resulting from Trade Subcontractor's construction, remodeling, repair, and demolition operations for the Project are properly transferred to a C&D Recycling Facility. The C&D Recycling Facility shall be a facility that receives only C&D (construction and demolition) material. Trade Subcontractors shall provide Webcor/Obayashi a summary sheet, including all receipts for transport materials each month with the progress billing if any materials are processed offsite.

Webcor/Obayashi will verify that of the inevitable waste generated, Trade Subcontractor's reuse, salvage, or recycle as many of the waste materials as economically feasible.

Webcor/Obayashi will participate/attend a meeting with Trade Subcontractor, the TJPA Representative and representatives of the City's Solid Waste Management and recycling programs prior to commencement of work. Webcor/Obayashi will

ensure all Trade Subcontractors are made aware of the LEED requirements for C&D diversion before being allowed to work on the site.

Webcor/Obayashi will verify that Trade Subcontractors submit a Monthly Disposal and Recycling Summary Report; quantifying the construction and demolition waste generated and recycled, reused or disposed of at Class 3 Landfill. Contractor shall also send a copy of this report to the TJPA Representative and the SWMP to the City Government Recycling Coordinator. The Comprehensive Disposal and Recycling Summary Report shall be submitted quantifying the construction and demolition waste generated and recycled, reused or disposed of at Class 3 Landfill, on a monthly basis. This report is a condition of progress payment and failure to submit this information shall render the Applications for Payment incomplete. The Trade Subcontractors/trades are also responsible for contracting with a regional facility to haul any hazardous materials from the site. The Trade Subcontractor shall calculate the C&D diversion rate for both LEED requirements (excluding yard waste) and the requirements set by the City (including yard waste) for all materials processed offsite. The W/O LEED representative will screen every C&D Submittal and review Trade Subcontractor and lower-tier subcontractors C&D Plans for clarity, completeness, and compliance with City/LEED requirements.

Webcor/Obayashi will verify that Trade Subcontractors develop and implement procedures for source separation to the greatest extent feasible.

Webcor/Obayashi will verify the Trade Subcontractors plans develop and implement procedures for transporting commingled (mixed) construction and demolition waste that cannot be feasibly source-separated if the intent is to process it offsite instead of using debris boxes provided onsite.

Webcor/Obayashi will verify the Trade Subcontractors plans develop and implement procedures for Salvage and Reuse.

Webcor/Obayashi will verify the Trade Subcontractors plans develop and implement practices for this project that will reduce waste at the source.

Webcor/Obayashi will verify the Trade Subcontractors plans develop and implement procedures for materials that are recycled and/or reused onsite

Webcor/Obayashi will verify that Trade Subcontractors participate in reuse programs by reviewing each Trade Subcontractors Monthly Disposal report for any material processed offsite. For such reuse programs, Trade Subcontractor shall refer to the City's construction and demolition recycling program.

Webcor/Obayashi shall review the environmental goals of this Project with all Trade Subcontractors during the preconstruction meeting. Webcor/Obayashi shall make a proactive effort to increase awareness of these goals among the job site workers. Webcor/Obayashi will make a proactive effort to increase awareness of these goals among the site workers by requiring that each Subcontractor take Click Safety training prior to stepping on the jobsite. As part of this Click Safety training, there is a module dedicated to teaching and reviewing the

LEED requirements of the project during construction activity.

Webcor/Obayashi will verify that Trade Subcontractors are using registered transporters and registered facilities. Only registered transporters can remove mixed construction and demolition debris from the construction site, and they must take this material to a registered facility. NOTE: A Registered facility: is any facility that accepts mixed construction and demolition debris for processing and recycling must be registered with the City and County of San Francisco and must demonstrate an overall minimum recycling rate of 65% for mixed construction and demolition debris. A registered facility must have applied for and received a registration from the San Francisco Department of the Environment. Webcor/Obayashi will ensure that Waste Management Companies that service San Francisco and retained by the Trade Subcontractors are registered transporters and meet the City/LEED requirements. Trade Subcontractors shall refer to SFEnvironment.org for the City's most current list of registered transporters.

Webcor/Obayashi will verify that Trade Subcontractors are implementing the following:
1. Eliminate the procurement of unneeded supplies.
2. Reduce waste by printing and copying double-sided.
3. Submit all submittals, reports, and forms in electronic format (PDF) unless otherwise noted.
4. Fully participate in available and required recycling and composting programs.
5. Purchase products made with recycled content such as paper and recycled aggregate.

Webcor/Obayashi will verify that Trade Subcontractors shall submit:
1. Construction and Demolition Debris Management Plan.
2. Construction and Demolition Debris Recovery Monthly Summary Report and supporting documentation for any materials processed offsite.
3. Construction and Demolition Debris Recovery Final Report for all materials processed offsite.

Trade Subcontractor's plan shall comply with specification section 02 41 00. All Trade Subcontractors will remove and dispose of all waste materials from the site for off-site disposal in compliance with all applicable laws, ordinances, rules, and regulations. Webcor/Obayashi and all Trade Subcontractors will work with the TJPA representative so that the representative may characterize the waste materials as required by law to the extent required by Webcor/Obayashi's selected disposal facilities.

Trade Subcontractor's plan shall comply with specification section 01 15 00. Trade Subcontractor's shall perform work in a manner to minimize generation of dust, dirt, rubbish, and other debris, to prevent dust and debris from interfering with the progress of the work, and to keep dust and debris from accumulating at the work site or adjacent areas. Trade Subcontractor's shall remove debris and rubbish from the site on a daily basis.

Trade Subcontractor's plan shall comply with specification section 01 13 50, by preventing the mixing of hazardous and non-hazardous materials.

Trade Subcontractor's shall be required to provide technical information, as required by the specifications including compliance with the City and County of San Francisco Ordinance 27-

06, in their plan which will be submitted For Record Only to the CMO.

Exhibit Q

APPRENTICESHIP PROGRAM

WEBCOR/OBAYASHI JOINT VENTURE - TRADE SUBCONTRACTOR'S APPRENTICESHIP REQUIREMENTS

Trade Subcontractor Name	

CRAFTS EXPECTED TO BE EMPLOYED BY TRADE SUBCONTRACTOR

CRAFT (i.e. Carpenters)	**List Minimum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)	**List Maximum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)

CRAFTS EXPECTED TO EMPLOYED BY SUBCONTRACTORS OF THE TRADE SUBCONTRACTOR

SUBCONTRACTOR #1

Subcontractor Name	

CRAFT (i.e. Carpenters)	**List Minimum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)	**List Maximum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)

SUBCONTRACTOR #2

Subcontractor Name	

CRAFT (i.e. Carpenters)	**List Minimum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)	**List Maximum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)

WEBCOR/OBAYASHI JOINT VENTURE - TRADE SUBCONTRACTOR'S APPRENTICESHIP REQUIREMENTS

SUBCONTRACTOR #3

Subcontractor Name	

CRAFT (i.e. Carpenters)	**List Minimum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)	**List Maximum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)

SUBCONTRACTOR #4

Subcontractor Name	

CRAFT (i.e. Carpenters)	**List Minimum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)	**List Maximum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)

SUBCONTRACTOR #5

Subcontractor Name	

CRAFT (i.e. Carpenters)	**List Minimum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)	**List Maximum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)

SUBCONTRACTOR #6

Subcontractor Name	

CRAFT (i.e. Carpenters)	**List Minimum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)	**List Maximum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)

WEBCOR/OBAYASHI JOINT VENTURE - TRADE SUBCONTRACTOR'S APPRENTICESHIP REQUIREMENTS

SUBCONTRACTOR #7

Subcontractor Name	

CRAFT (i.e. Carpenters)	**List Minimum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)	**List Maximum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)

SUBCONTRACTOR #8

Subcontractor Name	

CRAFT (i.e. Carpenters)	**List Minimum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)	**List Maximum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)

SUBCONTRACTOR #9

Subcontractor Name	

CRAFT (i.e. Carpenters)	**List Minimum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)	**List Maximum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)

SUBCONTRACTOR #10

Subcontractor Name	

CRAFT (i.e. Carpenters)	**List Minimum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)	**List Maximum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)

WEBCOR/OBAYASHI JOINT VENTURE - TRADE SUBCONTRACTOR'S APPRENTICESHIP REQUIREMENTS

SUBCONTRACTOR #11

Subcontractor Name	

CRAFT (i.e. Carpenters)	**List Minimum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)	**List Maximum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)

SUBCONTRACTOR #12

Subcontractor Name	

CRAFT (i.e. Carpenters)	**List Minimum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)	**List Maximum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)

SUBCONTRACTOR #13

Subcontractor Name	

CRAFT (i.e. Carpenters)	**List Minimum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)	**List Maximum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)

SUBCONTRACTOR #14

Subcontractor Name	

CRAFT (i.e. Carpenters)	**List Minimum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)	**List Maximum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)

WEBCOR/OBAYASHI JOINT VENTURE - TRADE SUBCONTRACTOR'S APPRENTICESHIP REQUIREMENTS

SUBCONTRACTOR #15

Subcontractor Name	

CRAFT (i.e. Carpenters)	**List Minimum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)	**List Maximum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)

SUBCONTRACTOR #16

Subcontractor Name	

CRAFT (i.e. Carpenters)	**List Minimum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)	**List Maximum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)

SUBCONTRACTOR #17

Subcontractor Name	

CRAFT (i.e. Carpenters)	**List Minimum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)	**List Maximum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)

SUBCONTRACTOR #18

Subcontractor Name	

CRAFT (i.e. Carpenters)	**List Minimum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)	**List Maximum Apprentice Ratio** (As required by registered Apprenticeship program for Craft)

WEBCOR/OBAYASHI JOINT VENTURE - TRADE SUBCONTRACTOR'S APPRENTICESHIP REQUIREMENTS

SUBCONTRACTOR #19

Subcontractor Name	

CRAFT (i.e. Carpenters)	**List Minimum Apprentice Ratio** **(**As required by registered Apprenticeship program for Craft)	**List Maximum Apprentice Ratio** **(**As required by registered Apprenticeship program for Craft)

SUBCONTRACTOR #20

Subcontractor Name	

CRAFT (i.e. Carpenters)	**List Minimum Apprentice Ratio** **(**As required by registered Apprenticeship program for Craft)	**List Maximum Apprentice Ratio** **(**As required by registered Apprenticeship program for Craft)

MONTHLY

TRADE SUBCONTRACTOR AFFIDAVIT

TRADE PACKAGE NO.:_____

I, _____ declare under penalty of perjury that:

1. **I am the _____ of _____ and I am responsible**
(Owner, Officer, Partner) (Company)
for the payment of persons employed by_____ who performed work on
(Company)
the_____, in the classification(s) of_____
(Project)
_____.

2. **_____ The apprenticeship committee(s) either denied or failed to respond to our request for the dispatch of apprentices, and therefore all workers were classified as journeymen for the following crafts: _____**
_____

Or

During the previous monthly period _____
(month)
The required number of apprentices by craft listed and initialed below have been employed according to the minimum and/or maximum requirements as required by the regulating documents for the previous period. (Attach backup demonstrating compliance for period referenced above)

CRAFT	IN COMPLIANCE (Y/N)	BACKUP ATTACHED (Y/N)

Or

Provide a plan to satisfy this requirement by the end of the project without exceeding the maximum number of apprentices on a daily basis.

This document must be submitted and approved, with backup if required, prior to submittal and subsequent approval of the next billing period's progress billing.

Executed this _____ day of _____ 201___, in _____, CA.

_____
(Signature)

FINAL

TRADE SUBCONTRACTOR AFFIDAVIT

TRADE PACKAGE NO.: _____

I, _____ declare under penalty of perjury that:

1. **I am the _____ of _____ and I am responsible**
(Owner, Officer, Partner) (Company)
for the payment of persons employed by_____ who performed work on
(Company)
the_____, in the classification(s) of_____
(Project)
_____.

2. **During the payroll periods commencing on _____ and ending _____, all persons employed by my company on this project have been paid the specified general prevailing rate of per diem wages for the specified craft or classification pursuant to Labor Code §§ 1771 and 1813.[1]**

3. **_____ The apprenticeship committee(s) either denied or failed to respond to our request for the dispatch of apprentices, and therefore all workers were classified as journeymen.**

Or

The required number of apprentices by craft listed and initialed below have been employed according to the minimum and/or maximum requirements as required by the regulating documents.

CRAFT	IN COMPLIANCE (Y/N)

Executed this _____ day of _____ 201___, in _____, CA.

WEBCOR/OBAYASHI JOINT VENTURE - TRADE SUBCONTRACTOR'S APPRENTICESHIP REQUIREMENTS

This document must be submitted and approved prior to final retention payment.

_____

(Signature)

[1] Except for public works projects of one thousand dollars ($1,000) or less, not less than the general prevailing rate of per diem wages for work of a similar character in the locality in which the public work is performed, and not less than the general prevailing rate of per diem wages for holiday and overtime work fixed as provided in this chapter, shall be paid to all workers employed on public works.

This section is applicable only to work performed under contract, and is not applicable to work carried out by a public agency with its own forces. This section is applicable to contracts let for maintenance work.

Exhibit R

Survey Information

CHAUDHARY & ASSOCIATES, INC.

ENGINEERS
SURVEYORS
INSPECTORS

851 NAPA VALLEY CORPORATE WAY ■ SUITE G ■ NAPA, CALIFORNIA 94558-7551
PHONE: 707.255.2729 ■ FAX: 707.255.5021 ■ WWW.CHAUDHARY.COM

December 27, 2011
#11-03-014

Mr. Rick Buellesbach
Senior Project Manager - Transbay Transit Center
Webcor/Obayashi Joint Venture
175 Beale Street
San Francisco, CA 94105

Re: Transbay Transit Center Quality Control Surveys
Subject: December 2011 Control Verification Survey Results

Dear Mr. Buellesbach:

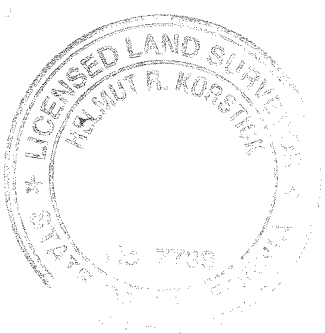
The field work for subject surveys was conducted by Chaudhary & Associates December 5 - 8, 2011. The surveys included verification of Chaudhary & Associates control (as shown on the Survey Control Plan dated 11-10-2011), with the exception of control point 217 which was destroyed sometime between the November 2011 and December 2011 control verification surveys.

Horizontal control values for point numbers 54, 208, 209, 213, 101, 105, 215, and 227 were constrained in this control network horizontal adjustment. The elevation values remain unchanged from the November 2011 surveys. The table below shows both the 11-10-2011 and the 12-21-2011 values for the remaining control points. Because data values can be impacted by environmental factors (temperature and humidity), seismic activity, and the various combinations of back sight and foresight data available on any given day, only the values which differ by 0.01' or more are adjusted and shown on the following table (and updated on the 12/2011 control map to be sent to you tomorrow). Field note copies and Star Net Reports have been mailed to you.

Horizontal Values

Point #	November 10, 2011		December 2011		Description
	Northing	Easting	Northing	Easting	
79	2115835.42	6013588.51	2115835.43	6013588.49	Fnd Mag+Shnr on TC
205	2115091.66	6013145.43	2115091.66	6013145.42	Mag Nail
221	2115642.30	6013753.17	2115642.32	6013753.18	Fnd Scribed-X KCA #4
223	2115654.49	6014255.95	2115654.48	6014255.95	Fnd Scribed-x KCA 9605
224	2115924.30	6013990.82	2115924.30	6013990.81	Cut-X
225	2115838.99	6014083.47	2115838.98	6014083.47	Fnd Scribed-X KCA 9761
229	2115259.63	6013325.88	2115259.62	6013325.87	Mag+Wshr

Please feel free to call me at (707) 255-2729 any questions or comments.



Sincerely,
CHAUDHARY & ASSOCIATES, INC.
A California Corporation

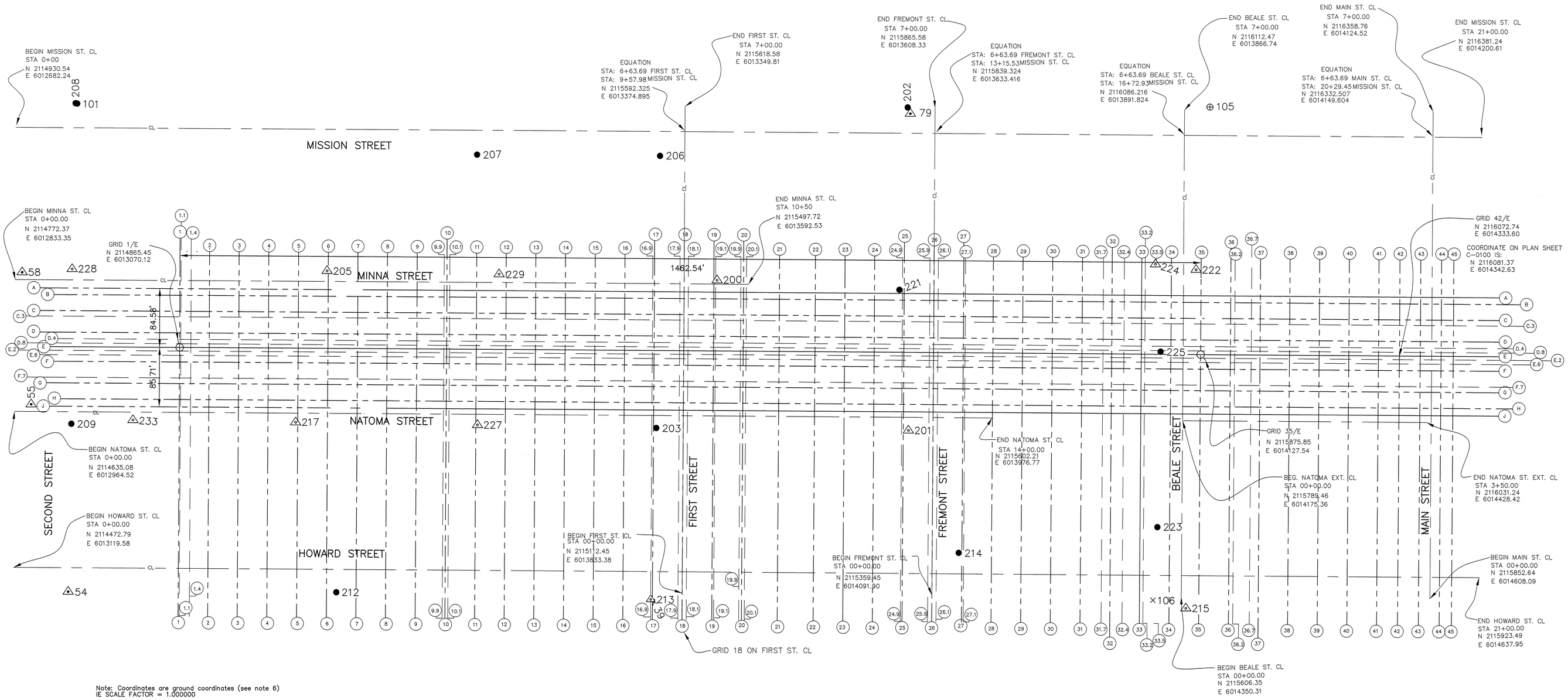
Helmut R. Korstick, PLS 7739
Project Surveyor

SURVEY PROCEDURES

1) CHAUDHARY AND ASSOCIATES FIELD CREW LOCATED AND TIED OUT CONTROL BETWEEN APRIL 22–MAY 13, 2011. DIGITAL LEVELS WERE UTILIZED FOR THE VERTICAL COMPONENT, AND A TRIMBLE S6 WAS USED FOR THE HORIZONTAL COMPONENT. CONTROL WAS ADJUSTED UTILIZING STAR–NET SOFTWARE. OF THE 4 MAIN CONTROL POINTS SHOWN ON SHEET GT–0100 OF PLANS (BEING PTS. 54, 101, 105, AND 106), PTS. 54, 101, AND 105 REMAIN AS OF THE DATES OF THIS SURVEY. CONSEQUENTLY, PTS. 54, 101, AND 105 WERE HELD IN THE STAR NET ADJUSTMENT. A TOPCON DL–102 DIGITAL LEVEL WAS UTILIZED FOR THE VERTICAL COMPONENT. NOTE: CONTROL POINTS 220–226 WERE FIELD SURVEYED BETWEEN SEPTEMBER 9–14, 2011.

2) CENTERLINES AS SHOWN ON PLAN SHEET C–0100 TO BE FIELD VERIFIED.

3) GRID LINES TO BE SET BY PLACING A CUT X OR OTHER APPROPRIATE SURVEY MARKER ON THE EXTENSION OF SAID GRID LINES WHERE PRACTICAL OR PER WEBCOR AUTHORIZATION.



Note: Coordinates are ground coordinates (see note 6)
IE SCALE FACTOR = 1.000000

POINT TABLE					
Pt.#	Northing	Easting	Elev.	DESC.	SOURCE
54*	2114501.77	6013199.83	25.36	FND MAG+WASHER ON TC	C&A FROM PARSONS\CALTRAIN PROJECT
55	2114658.94	6012974.42	24.11	FND MAG+WASHER ON TC	C&A FROM PARSONS\CALTRAIN PROJECT
58	2114786.86	6012833.18	23.16	FND MAG+WASHER ON TC	C&A FROM PARSONS\CALTRAIN PROJECT
79	2115835.43	6013588.49	14.14	FND MAG+SHNR ON TC	C&A FROM PARSONS\CALTRAIN PROJECT
101	2115016.20	6012721.43	22.05	FND SCRIBED X KCA 101	MARTIN M. RON (PER SHEET GT–0100)
105	2116140.97	6013889.65	12.74	FND RIVET+BT MMR CTL	MARTIN M. RON (PER SHEET GT–0100)
106***	2115574.58	6014324.45	13.31	DPW BD+RIVET	DPW
200	2115470.67	6013556.22	18.22	MAG NAIL & WASHER	SET ON 4–21–2011 BY C&A
201	2115505.98	6013903.24	15.11	MAG NAIL	SET ON 4–21–2011 BY C&A
202	2115839.15	6013579.47	14.56	FND RIVET+BT MMR CTL	MARTIN M. RON
203	2115257.23	6013641.61	18.55	FND LEAD+TACK	UNKNOWN
205	2115091.66	6013145.42	20.64	MAG NAIL	SET ON 4–21–2011 BY C&A
206	2115542.47	6013373.50	16.37	FND NAIL+BT RCE 14786	UNKNOWN
207	2115361.22	6013183.82	18.43	FND NAIL+BT RCE 14786	UNKNOWN
208	2115014.84	6012719.45	22.04	FND CUT–X WITH RIVET	UNKNOWN
209	2114678.65	6013035.17	24.66	FND RIVET+BT MMR CTL	MARTIN M. RON
212	2114768.20	6013476.35	22.76	FND 1" BRASS PLUG	CCSF
213	2115074.65	6013807.38	20.23	MAG NAIL & SHNR	SET ON 4–26–2011 BY C&A
214	2115429.58	6014077.34	15.37	FND 1" BRASS PLUG	CCSF
215	2115599.06	6014366.41	13.92	MAG NAIL & WASHER	SET ON 4–26–2011 BY C&A
221	2115642.32	6013753.18	15.49	SCRIBED–X KCA 4	KCA ENGINEERS
222	2115959.09	6014037.98	13.16	CUT–X	SET ON 9–12–2011 BY C&A
223	2115654.48	6014255.95	13.46	SCRIBED–X KCA 9605	KCA ENGINEERS
224	2115924.30	6013990.81	12.57	CUT–X	SET ON 9–12–2011 BY C&A
225	2115838.98	6014083.47	12.66	SCRIBED–X KCA 9761	KCA ENGINEERS
227	2115081.93	6013454.34	20.43	MAG NAIL & WASHER	SET ON 10–3–2011 BY C&A
228	2114839.80	6012881.28	23.01	MAG NAIL & WASHER	SET ON 10–3–2011 BY C&A
229	2115259.62	6013325.87	18.80	MAG NAIL & WASHER	SET ON 10–3–2011 BY C&A
233	2114743.93	6013094.94	23.58	CUT–X IN GUTTER	SET ON 10–31–2011 BY C&A
39***	2115074.59	6013813.50	20.34	SCRIBED X ON CONCRETE	C&A FROM PARSONS\CALTRAIN PROJECT

* SAME AS CONTROL POINT 54 ON PLAN SHEET GT–0100
** HELD AS POINT 101 ON PLAN SHEET GT–0100 (DESCRIBED AS MMR BD+RIVET ON SHEET GT–0100)
*** CONTROL POINT SEARCHED FOR AND NOT FOUND ON THIS SURVEY

CONTROL VALUES REVISED FROM PREVIOUS REVISION(11–10–2011) (VALUES NOW TO THE NEAREST 0.01' INSTEAD OF 0.001')

SURVEYOR'S STATEMENT

I CERTIFY THAT THIS MAP CORRECTLY REPRESENTS A FIELD SURVEY MADE BY ME AND AN ASSISTANT IN DECEMBER 2011. THE CONTROL VALUES PASSED THE CHI–SQUARE TEST AT 5.00% LEVEL AS PER THE STAR NET REPORTS.

Helmut R. Korstick L.S. 7739
License Expires: 12–31–2011

LEGEND

× SURVEY POINTS (SEARCHED FOR AND NOT FOUND ON THIS SURVEY)

△ CHAUDHARY AND ASSOCIATES CONTROL SET AND TIED OUT ON THIS SURVEY. COORDINATES WERE ADJUSTED USING STAR NET SOFTWARE. DIGITAL LEVELS WERE PERFORMED FOR THE VERTICAL COMPONENT.

⊗ CONTROL POINT AS SHOWN ON SHEET GT–0100 OF PLANS (50% SUBMITTAL).

⚠ CHAUDHARY AND ASSOCIATES CONTROL FOUND AND TIED OUT ON THIS SURVEY. COORDINATES WERE ADJUSTED USING STAR NET SOFTWARE. DIGITAL LEVELS WERE PERFORMED FOR THE VERTICAL COMPONENT.

CL CENTERLINE AS SHOWN ON SHEET C–0100 OF PLANS (50% SUBMITTAL).

BT BRASS TAG

● CONTROL POINTS SET BY OTHERS FOUND AND TIED OUT ON THIS SURVEY.

——— – – ——— – – ——— – – ——— MAIN GRID LINE
——— ——— ——— ——— ——— SUB GRID LINE

C&A CHAUDHARY AND ASSOCIATES
CCSF CITY AND COUNTY OF SAN FRANCISCO
MMR MARTIN M. RON
TC TOP OF CURB
SHNR SHINER
FND FOUND
RCE REGISTERED CIVIL ENGINEER
REB REBAR
DPW DEPARTMENT OF PUBLIC WORKS FOR THE CITY AND COUNTY OF SAN FRANCISCO

BASED UPON 50% CONSTRUCTION DOCUMENTS

GRAPHIC SCALE
60 0 30 60 120 240
(IN FEET)
1 inch = 60 ft.

NOTES

1) SEE ARCHITECTURAL PLANS FOR GRID LAYOUT AND DIMENSIONS.
2) NAD 83 REFERS TO THE CALIFORNIA STATE PLANE COORDINATE SYSTEM. HORIZONTAL CONTROL FOR THIS SURVEY IS BASED UPON NAD83, CA ZONE 3, EPOCH 1991.35, GEOID 03.
3) UNITS ARE FEET AND REPRESENT GROUND (NOT GRID) DISTANCES.
4) THE VERTICAL DATUM IS BASED UPON NAVD 88.
5) CONTROL VALUES BASED UPON FIELD TIES SURVEYED BETWEEN APRIL 22 AND MAY 13, 2011 BY C&A FIELD CREW. CONTROL VALUES FOR POINTS 220–226 WERE BASED UPON FIELD TIES BETWEEN SEP. 9–14, 2011.
6) COORDINATES AS SHOWN REPRESENT GROUND COORDINATES AND WERE CONVERTED BY APPLYING A SCALE FACTOR OF GRID/.99993411. THE ORIGIN OF THE SCALING FOR THE ENTIRE PROJECT IS CONTROL POINT NO. 39, GRID=GROUND COORDINATES: NORTH 2115074.592 EAST 6013813.502. (REFER TO NOTE 6 ON SHEET GT–0100) CONTROL POINT NO. 39 SEARCHED FOR AND NOT FOUND ON APRIL 23, 2011.
7) BASIS OF ELEVATION IS DPW SURVEY CONTROL PT. NO. 54, BEING A C&A MAG NAIL AND WASHER IN THE CURB AT THE EASTERLY CORNER OF 2ND AND HOWARD STREETS. ELEV.=25.36 NAVD 88 VERTICAL DATUM.
8) CENTERLINE DATA DERIVED FROM PLAN SHEET C–0100.

Note:
If this sheet is not 44" x 34", it has been revised from its original size. Scales noted on drawings/details are no longer applicable.

TRANSBAY JOINT POWERS AUTHORITY

CONSULTANT:
CHAUDHARY & ASSOCIATES, INC.
ENGINEERS SURVEYORS INSPECTORS
851 NAPA VALLEY CORPORATE WAY, SUITE G
NAPA, CALIFORNIA 94558

REVISIONS

NO.	DATE	DESCRIPTION	BY
0	5–4–2011	INITIAL CONTROL DRAWING	HRK
1	5–13–2011	ADD NOTES AND VALUES REGARDING CONTROL POINT 101	HRK
2	5–16–2011	CORRECT GRAMMAR IN SURVEY PROCEDURES STATEMENT 1	HRK
3	6–1–2011	DELETE CP–210 AND ADD CP–217	HRK
4	9–14–2011	ADD CONTROL POINTS 220–226 AND DELETE CP 211 & 216	HRK
4	9–14–2011	EDIT VALUES FOR CONTROL POINT 200	HRK
5	10–5–2011	EDIT VALUES FOR POINTS 58, 200, 203, 212, AND 217.	HRK
5	10–5–2011	ADD CONTROL POINTS 227–229.	HRK
6	12–23–2011	ADD CONTROL POINT 233 AND REVISE VALUES	HRK
7		REVISE VALUES TO READ TO NEAREST 0.01'	HRK

CONTRACT NO. 08–04–CMGC–000

PROJECT TITLE: TRANSBAY TRANSIT CENTER PROGRAM
SAN FRANCISCO, CA

SHEET TITLE: SURVEY CONTROL AND CONCEPTUAL GRID AND CENTERLINE PLANS AND NOTES

SURVEYOR SEAL
LICENSED LAND SURVEYOR HELMUT R. KORSTICK No. 7739 STATE OF CALIFORNIA

APPROVED: PRINCIPAL	ARVIN K. CHAUDHARY
APPROVED: PROJECT MANAGER	ARVIN K. CHAUDHARY
APPROVED: PROJECT SURVEYOR	HELMUT R. KORSTICK
DESIGNED BY: H. KORSTICK	CHECKED BY:
DRAWN BY: H. KORSTICK	DATE: DECEMBER 23, 2011
SCALE: 1"=60'	REVISION 7
SHEET NUMBER 1 OF 1	

Elmo Dec 23, 2011 – 7:40am Q:\2011\11–03–14 Webcor T.P.A\DWG\01–CNT–GEC–2011–HRK.dwg

EXHIBIT “S”

Transbay Transit Center – San Francisco, CA

Traffic Control Plan
Webcor/Obayashi
WO-TCP0001
REVISION 2
8/22/2012

GENERAL

The Webcor/Obayashi Joint Venture (W/O) Traffic Control Plan that will be implemented on the Transbay Transportation Center Project is an overall project policy, with each trade subcontractor contributing their specific plan as they come on board to the project. The primary function of this plan is to provide a framework to insure compliance with Specification Section 01 15 70. To assist in this effort, W/O has enlisted the services of a traffic control consultant (TCC) – Sandis Engineering. Award of this contract between Sandis Engineering and W/O was based on a competitive request for proposal (RFP) process referred to as TG05.4.

TCC is responsible for participating in all aspects of traffic control planning and implementation including, but not limited to:

- Traffic control design oversight;
- Coordination between trade subcontractor traffic control designs;
- Interface with City of San Francisco and other agencies as necessary;
- Participate in coordination efforts of the TJPA Representative;
- Oversight of implementation of approved traffic plans;
- Provide daily reports regarding status of traffic control measures;
- On call traffic control services as requested.

TRAFFIC PLAN REVIEW AND COORDINATION

TCC shall prepare a detailed "as built" traffic plan for approximately four blocks in all directions from the jobsite. This map will be based on SFMTA maps and will be augmented as appropriate per field review of existing conditions. This map will include all striping, signage, curb lines, curb cuts, curb painting, buildings and any other feature of the street layout and traffic control. Beyond the four block distance, the map will include street layout and striping configuration.

Once a trade subcontractor is under contract, W/O shall provide the trade subcontractor with the as-built plan in CADD format. The trade subcontractor will then be required to use this base map for preparation of all their traffic control plans. A summary of the below criteria can be found in the attached Traffic Control Plan Preparation Packet.

The trade subcontractor is required to prepare and submit a complete traffic plan consistent with requirements of the project specification and all requirements per the City of San Francisco. The submittal must be made in a timely fashion to allow for the review timeframe prescribed in the specifications plus an additional four weeks for review by the TCC.

Upon receipt of the submittal from trade subcontractor, W/O will forward it to the TCC for review. The plan will be reviewed for adherence to specifications and for compatibility with previously submitted plans. Comments will be returned to the trade subcontractor who will make modifications as is appropriate.

When the trade subcontractor's traffic control plan is reviewed and coordinated with the TCC, it will be submitted to the TJPA Representative for approval. Submittal will be in compliance with Specification Section 01 15 70, paragraph 1.4B.

Upon approval by the TJPA Representative and SFMTA, the TCC will update the baseline traffic

control plan as appropriate. The baseline plan will be updated only when a change to the traffic pattern will be in place for three or more months. If the traffic control plan will be in place for less than three months, the plan will be superimposed over the base map for coordination but the baseline drawing will not be modified.

FIELD IMPLEMENTATION

It is intended that the TCC will maintain a regular, but not full time, presence on site. Similar to the traffic control design review, their scope of work is to review the trade subcontractor's adherence to city standards, project specifications and approved traffic control plans.

TCC review and assistance in in field coordination includes but is not necessarily limited to:

- Perform site review of traffic control;
- Note traffic control deficiencies;
- Coordinate correction of site deficiencies with W/O and trade subcontractor;
- Provide daily report of traffic control observations and corrective measures;
- Attend site meetings as necessary to review short term Special Traffic Permit and coordinate between subcontractors and SFMTA;
- Miscellaneous coordination with SFMTA as necessary;
- Review of pedestrian protection as it relates to vehicle traffic;
- Provide traffic control devices and personnel as required to augment traffic control efforts;
- Confirm proper training of subcontractor flagging personnel;
- Provide continuous oversight of traffic control for major construction operations as determined by CM/GC.

TASKS NOT CURRENTLY ANTICIPATED BY TCC

Training of flaggers for the trade subcontractors although it is an option should it become apparent that subcontractor employees need additional training.

Coordination of the 10b police officers between subcontractors will be the responsibility of the CMO.

Pedestrian control unless it is specifically impacted by vehicle traffic.

TRANSBAY TRANSIT CENTER – TRAFFIC CONTROL PLAN PREPARATION PACKET

Overview

The purpose of this packet is to provide the contractor with the information necessary to prepare a Traffic Control Plan (TCP) for their work in accordance with the requirements of the Project Specifications and the City and County of San Francisco (CCSF). It includes procedures, timing, a base map, plan sheet template and examples for use when preparing and submitting Traffic Control Plans (TCPs) for review and approval. The documents included in the TCP Packet are described below.

Flow Diagram

The flow diagram included within the TCP packet identifies the specific components and required time intervals for TCP submittal, review and approval. Please note time requirements for Plan review and approval. No work will be allowed without an approved plan. It is the contractor's responsibility to anticipate and allow for required lead times.

Base Map File

The AutoCAD drawing of the Base Map file included in this packet represents the City of San Francisco street layout as of the date indicated on the Base Map file title block. ALL proposed TCPs shall be created using this Base Map file as a starting point. It is crucial that proposed TCPs be provided on the same coordinate system as the Base Map file so multiple approved TCPs can be overlain in a composite exhibit. TCPs prepared using a different base or plan template will be rejected.

TCP Standards

Design Standards

The Traffic Control Plans shall be prepared and submitted in accordance with the following documents:

1. Transbay Transit Center Project Specification Section 011570 – Traffic Routing Work, dated September 23, 2010. A copy of this specification is included in the TCP Packet.

2. City and County of San Francisco Regulations for Working in San Francisco Streets (Bluebook), 7th Edition dated October 2006. Refer to the following link for a copy of this document: http://www.sfmta.com/bluebook

CAD Standards

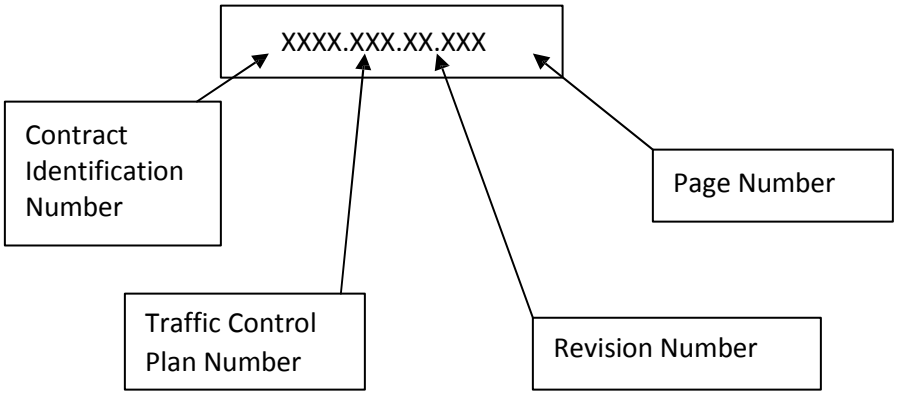
The sheet TCP-001 provides a template with title block, symbols, and specific details pertaining to the presentation and setup of drawings to be used when preparing a TCP. The CAD standards identified under the Vendor Submittal Instructions, including layering configuration, title block, and symbols, shall be referenced and followed when creating all TCP AutoCAD drawings. The contractor shall include additional signs in the form of blocks, notes, and details as needed.

TCP Samples

There are three sample Traffic Control Plans included in this packet. These samples provide an example of how the TCPs shall be set up and configured.

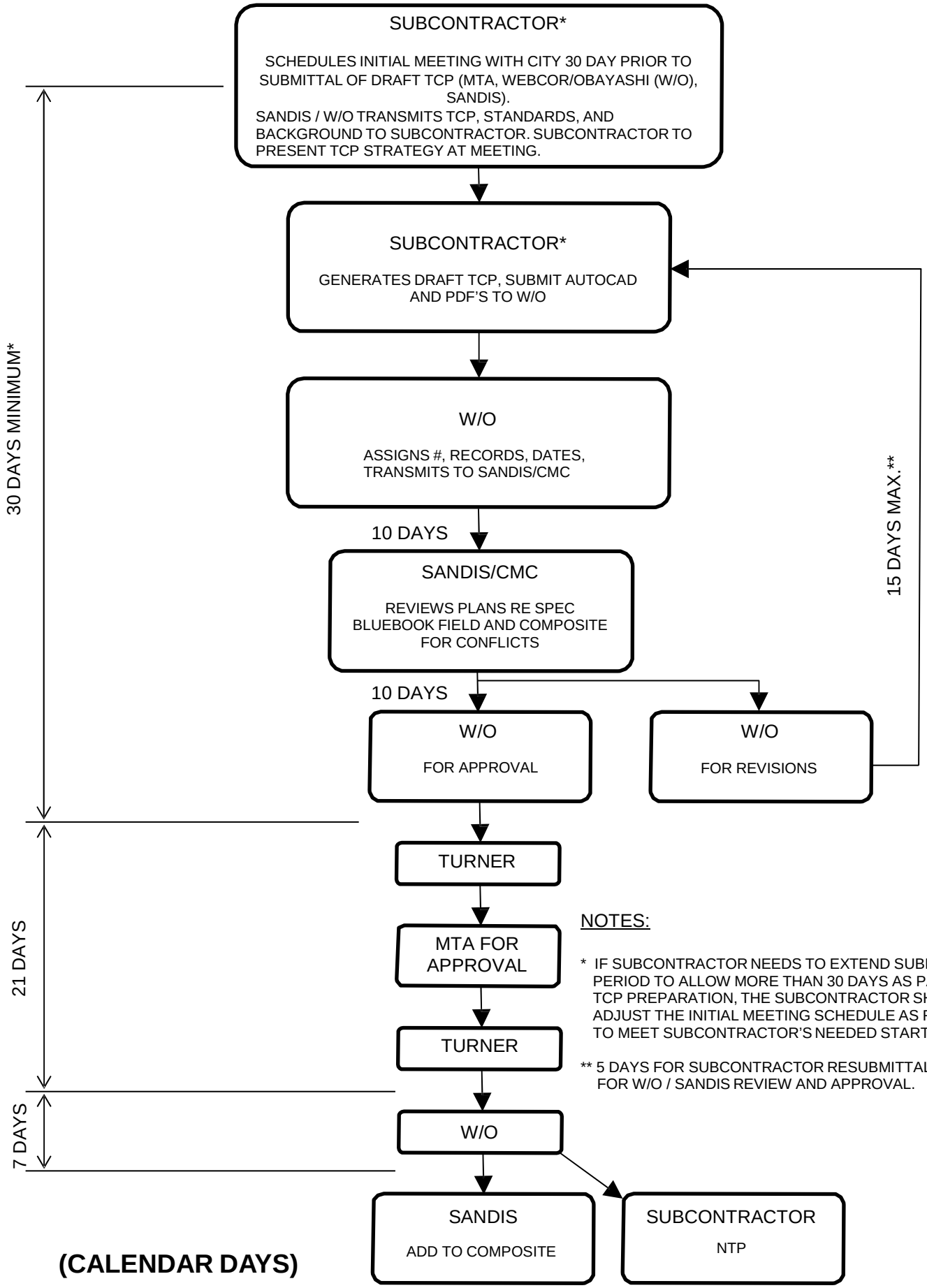
TCP Submittals

All proposed Traffic Control Plans shall be submitted at 1"=80' scale on 22"x34" sheet size in both pdf and AutoCAD 2007 formats. They are to be submitted electronically to Webcor-Obayashi's trade package project manager. An important item to be included on all TCP sheets is the submittal tracking number. The tracking number consists of four segments separated by a period. The first segment is the 4-digit contract identification number, the second segment the 3-digit TCP number (provided by Webcor), the third segment is the 2-digit revision number, and the fourth the 3-digit page number. Refer to the Submittal Tracking Number Diagram below for additional direction.



Submittal Tracking Number Diagram

TRAFFIC CONTROL PLAN SUBMITTAL REVIEW AND APPROVAL PROCESS



NOTES:

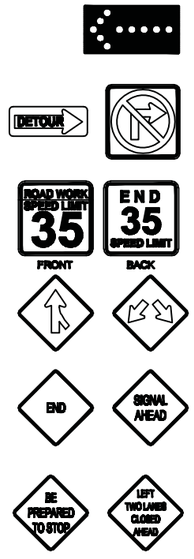
* IF SUBCONTRACTOR NEEDS TO EXTEND SUBMITTAL PERIOD TO ALLOW MORE THAN 30 DAYS AS PART OF TCP PREPARATION, THE SUBCONTRACTOR SHALL ADJUST THE INITIAL MEETING SCHEDULE AS REQUIRED TO MEET SUBCONTRACTOR'S NEEDED START DATE.

** 5 DAYS FOR SUBCONTRACTOR RESUBMITTAL. 10 DAYS FOR W/O / SANDIS REVIEW AND APPROVAL.

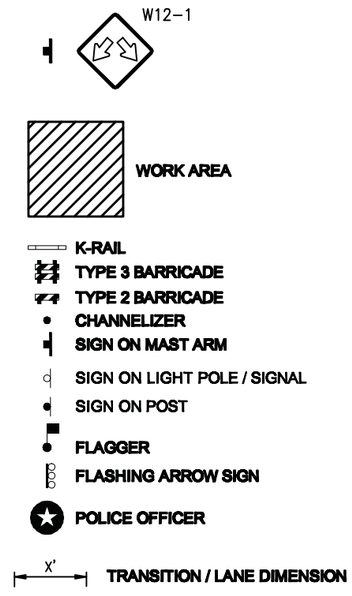
VENDOR SUBMITTAL INSTRUCTIONS

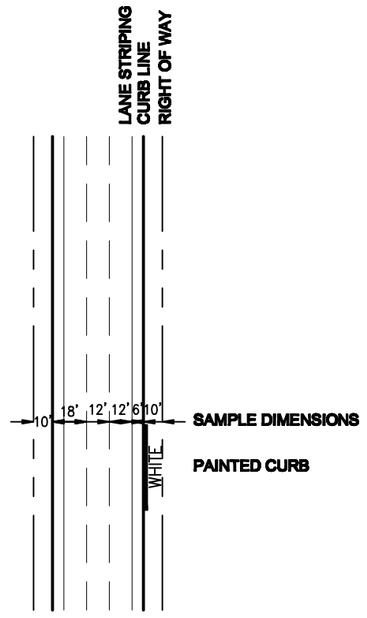
TRAFFIC CONTROL PLANS SHALL BE SUBMITTED AS FOLLOWS:

1) FIVE (5) HARD COPIES
2) ELECTRONIC COPY IN PDF AND AUTOCAD 2007 FORMATS
3) 11"x17" SHEET SIZE
4) 1"=80' SCALE
5) SHEET NUMBERING "TCP-###"
6) ELECTRONIC FORMAT PER TEMPLATE PROVIDED: SINGLE CAD FILE CONTAINING MULTIPLE LAYOUT TABS WITH A SINGLE TCP PER TAB. THE TCP SHALL BE DRAFTED IN MODEL SPACE ON TOP OF THE STREET BASE FILE WITH NOTES/LEGEND IN PAPER SPACE. MODEL SPACE SHALL BE DRAFTED AS FOLLOWS:
   a) EACH TCP PAGE SHALL CONSIST OF FIVE LAYERS WITH A PREFIX FOR THAT PAGE NUMBER. FOR EXAMPLE, PAGE 001 WOULD CONTAIN THE FOLLOWING LAYERS:
      001-TC-DIM
      001-TC-NOTES
      001-TC-SIGN
      001-TC-SIGNTEXT
      001-TC-STRIPELINE
      001-TC-WORKAREA
   b) ALL SYMBOLS, BLOCKS AND DIMENSIONS SHALL MATCH THOSE ON THIS SHEET IN SIZE, COLOR, AND LAYER. CREATE NEW BLOCKS USING SIMILAR COLOR AND SIZE FOR SIGNS/DEVICES NOT SHOWN HERE.
   c) INSERT STANDARD TITLE BLOCK PER SHEET. USE ATTRIBUTE EDITOR TO FILL IN TITLE BLOCK WITH APPLICABLE INFORMATION.
   d) TABLES, NOTES, AND LEGENDS SHALL BE IN PAPER SPACE PER SHEET ON LAYER XXX-TC-GENERAL, WHERE XXX IS THE PAGE NUMBER
   e) STANDARD TEXT STYLES, SIZES, DIM STYLES PER TEMPLATE
   f) STANDARD LAYER COLORS AND NAMES; AND CTB/PEN SETTINGS PER TEMPLATE
   g) FREEZE LAYERS IN VIEWPORTS AS NECESSARY TO ONLY SHOW THOSE NEEDED FOR THAT INDIVIDUAL SHEET.
7) REFER TO PROVIDED SAMPLE TCP PLAN FOR AN EXAMPLE OF THE FORMAT BEING IMPLEMENTED.



NOTE:
SAMPLE TEXT FOR FREESTANDING NOTES.





APPROVAL
TURNER

	DATE	INITIAL
RECEIVED		
TO SFMTA		
TO W/O WITH SFMTA APPROVAL		

SFMTA

	DATE	INITIAL
RECEIVED		
1ST REVIEW		
2ND REVIEW		
APPROVAL		

WEBCOR BUILDERS
OBAYASHI

TJPA
TRANSBAY JOINT POWERS AUTHORITY

VENDOR

SEAL

PROJECT 1
PROJECT 2
PROJECT 3
PROJECT

XXXX.XXX.XX.XXX
WEBCOR SUBMITTAL No.

No.	REVISION	DATE
X	-----	XX/XX/XX

SCALE: 1"=80'
DATE: XX/XX/XX

TRAFFIC CONTROL STANDARDS

TCP-001
SHEET

LEGEND

- TYPE II BARRICADE
- TYPE III BARRICADE
- CHANNELIZING DEVICE
- TRAFFIC CONE WITH CLIP ON SIGN
- SIGN
- ARROW PANEL (FLASHING ARROW)
- FLAGGER
- POLICE OFFICER
- WORK ZONE (ACTIVITY AREA) LIMITS

TABLE I.

MINIMUM TAPER LENGTH FOR WIDTH OF OFFSET = 12 FT (3.6m)

APROACH SPEED MPH (km/h)	MERGING L FT (m)	SHIFTING L/2 FT (m)	SHOULDER L/3 FT (m)	DOWN STREAM FT (m)
20 (30)	80 (21)	40 (10)	27 (7)	100 (30)
25 (40)	125 (37)	63 (19)	42 (12)	100 (30)
30 (50)	180 (55)	90 (29)	60 (19)	100 (30)
35 (60)	245 (84)	123 (42)	82 (28)	100 (30)
40 (70)	320 (158)	160 (79)	107 (53)	100 (30)
45 (80)	540 (180)	270 (90)	180 (60)	100 (30)
50 (90)	600 (203)	300 (101)	200 (68)	100 (30)
55 (100)	660 (225)	330 (113)	220 (75)	100 (30)
60 (110)	720 (248)	360 (124)	240 (83)	100 (30)
65	780	390	260	100
70	840	420	280	100

APROACH SPEED (MPH)	MAXIMUM CHANNELIZER SPACING		
	TAPER (FT)	TANGENT (FT)	CONFLICT (FT)
20	21	42	10
25	26	63	15
30	32	69	15
35	37	74	18
40	42	84	20
45	48	95	23
50	53	106	25
OVER 50	74	148	35

NOTES:
1) WORK HOURS: 9:00 AM TO 3:00 PM

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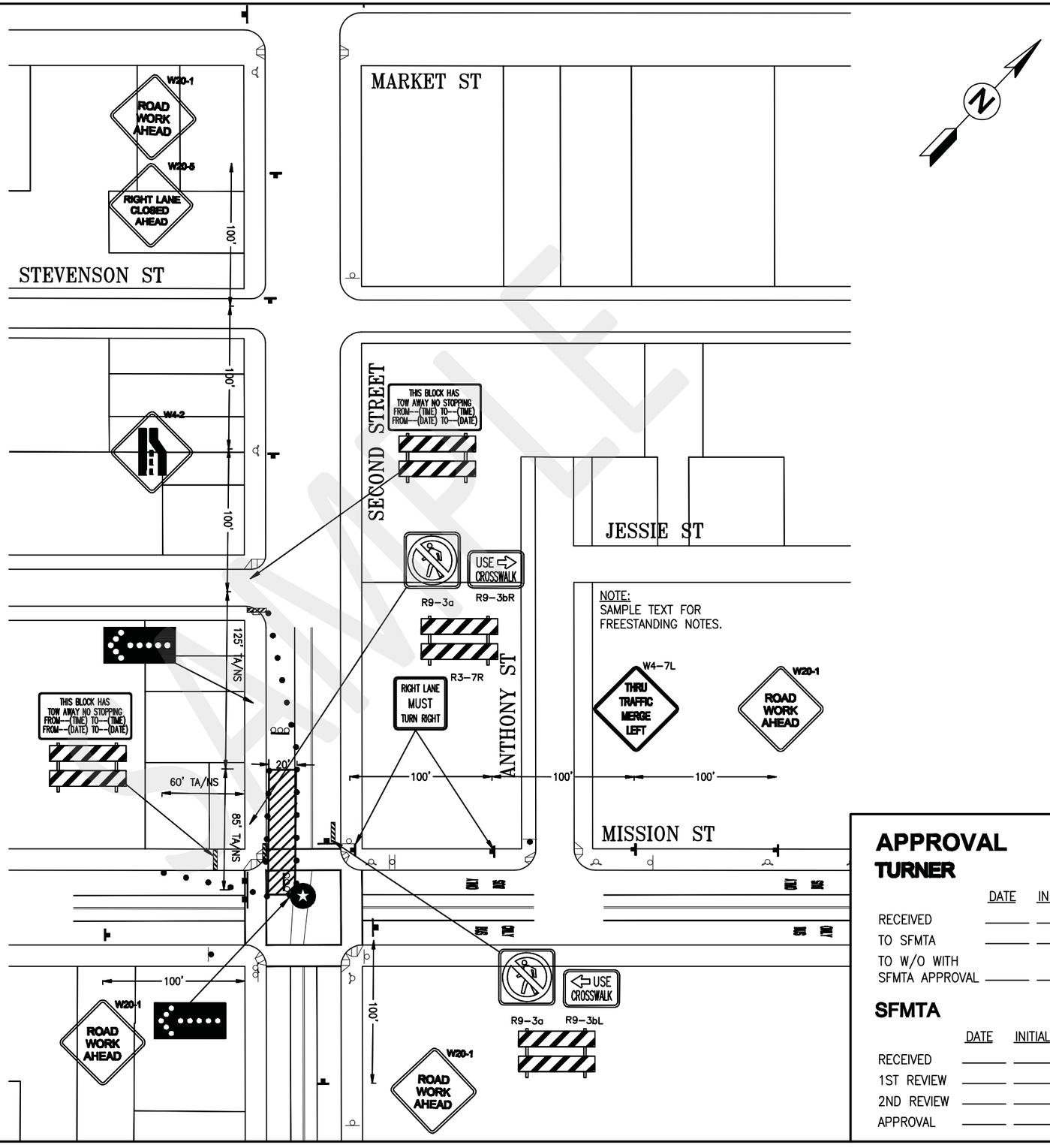
1" = 80' GRAPHIC SCALE



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2ND REVIEW		
APPROVAL		

WEBCOR BUILDERS | OBAYASHI

TJPA TRANSBAY JOINT POWERS AUTHORITY

VENDOR

SEAL

PROJECT

PROJECT

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WEBCOR SUBMITTAL No.

No.	REVISION	DATE
X	-----	XX/XX/XX

SCALE: 1"=80'
DATE: XX/XX/XX

TRAFFIC CONTROL STANDARDS

TCP-002

SHEET

LEGEND

- TYPE II BARRICADE
- TYPE III BARRICADE
- CHANNELIZING DEVICE
- TRAFFIC CONE WITH CLIP ON SIGN
- SIGN
- ARROW PANEL (FLASHING ARROW)
- FLAGGER
- POLICE OFFICER
- WORK ZONE (ACTIVITY AREA) LIMITS

TABLE I.

MINIMUM TAPER LENGTH FOR WIDTH OF OFFSET = 12 FT (3.6m)

APROACH SPEED MPH (km/h)	MERGING L FT (m)	SHIFTING L/2 FT (m)	SHOULDER L/3 FT (m)	DOWN STREAM FT (m)
20 (30)	80 (21)	40 (10)	27 (7)	100 (30)
25 (40)	125 (37)	65 (19)	42 (12)	100 (30)
30 (50)	180 (55)	90 (29)	60 (18)	100 (30)
35 (60)	245 (84)	123 (42)	82 (28)	100 (30)
40 (70)	320 (158)	160 (79)	107 (53)	100 (30)
45 (80)	540 (180)	270 (90)	180 (60)	100 (30)
50 (90)	600 (205)	300 (101)	200 (68)	100 (30)
55 (100)	660 (225)	330 (113)	220 (75)	100 (30)
60 (110)	720 (245)	360 (124)	240 (83)	100 (30)
65	780	360	260	100
70	840	420	280	100

APPROACH SPEED (MPH)	MAXIMUM CHANNELIZER SPACING TAPER (FT)	TANGENT (FT)	CONFLICT (FT)
20	21	42	10
25	26	65	15
30	32	65	15
35	37	74	15
40	42	84	20
45	48	95	23
50	55	105	25
OVER 50	74	148	35

NOTES:
1) WORK HOURS: 9:00 AM TO 3:00 PM

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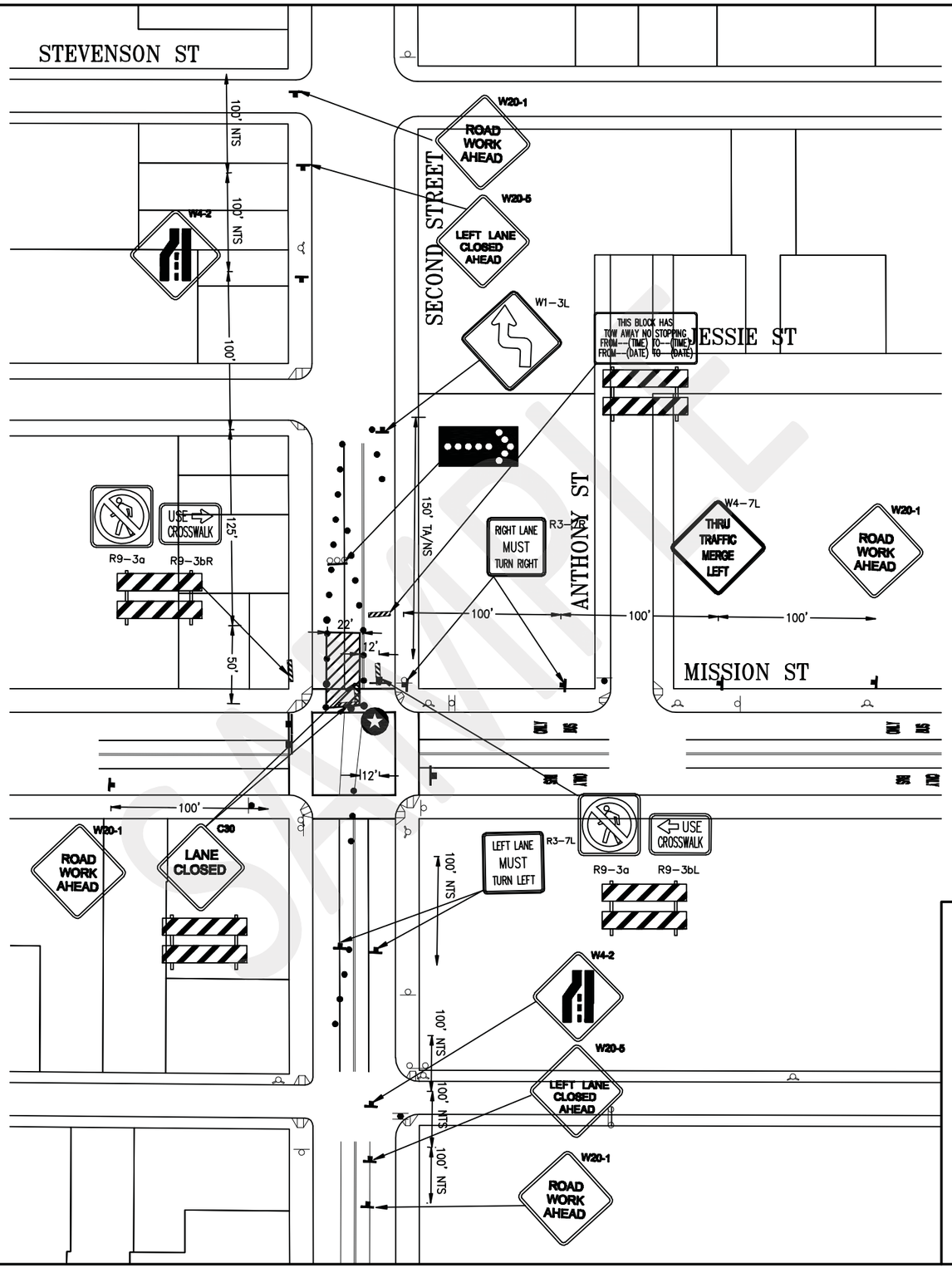
1" = 80' GRAPHIC SCALE



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2ND REVIEW		
APPROVAL		

WEBCOR BUILDERS / OBAYASHI

TJPA TRANSBAY JOINT POWERS AUTHORITY

VENDOR

SEAL

PROJECT

PROJECT

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WEBCOR SUBMITTAL No.

No.	REVISION	DATE
X	-----	XX/XX/XX

SCALE: 1"=80'
DATE: 08/10/11

TRAFFIC CONTROL STANDARDS

TCP-003

SHEET

LEGEND

- TYPE II BARRICADE
- TYPE III BARRICADE
- CHANNELIZING DEVICE
- TRAFFIC CONE WITH CLIP ON SIGN
- SIGN
- ARROW PANEL (FLASHING ARROW)
- FLAGGER
- POLICE OFFICER
- WORK ZONE (ACTIVITY AREA) LIMITS

TABLE I.

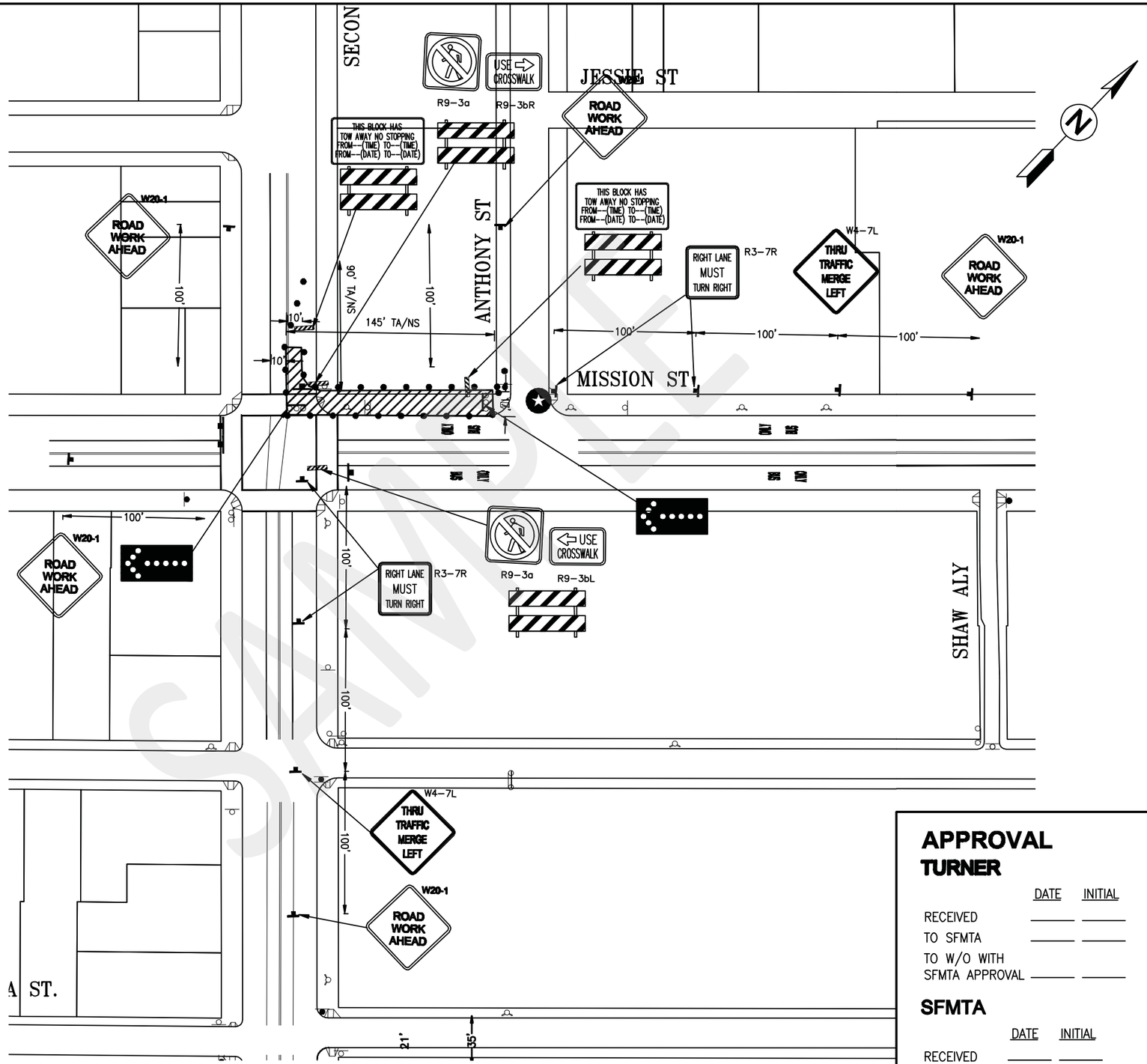
MINIMUM TAPER LENGTH FOR WIDTH OF OFFSET = 12 FT (3.6m)

APROACH SPEED MPH (km/h)	MERGING L FT (m)	SHIFTING L/2 FT (m)	SHOULDER L/3 FT (m)	DOWN STREAM FT (m)
20 (30)	80 (21)	40 (10)	27 (7)	100 (30)
25 (40)	125 (37)	65 (19)	42 (12)	100 (30)
30 (50)	180 (55)	90 (25)	60 (18)	100 (30)
35 (60)	245 (84)	123 (42)	82 (28)	100 (30)
40 (70)	320 (158)	160 (79)	107 (53)	100 (30)
45 (80)	540 (180)	270 (90)	180 (60)	100 (30)
50 (90)	600 (203)	300 (101)	200 (68)	100 (30)
55 (100)	660 (225)	330 (113)	220 (75)	100 (30)
60 (110)	720 (248)	360 (124)	240 (83)	100 (30)
65	780	390	260	100
70	840	420	280	100

APROACH SPEED (MPH)	MAXIMUM CHANNELIZER SPACING		
	TAPER (FT)	TANGENT (FT)	CONFLICT (FT)
20	21	42	10
25	26	65	13
30	32	65	15
35	37	74	18
40	42	84	20
45	48	95	23
50	53	106	25
OVER 50	74	148	35

NOTES:
1) WORK HOURS: 9:00 AM TO 3:00 PM

80 0 80 160
1" = 80' GRAPHIC SCALE



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WEBCOR BUILDERS / OBAYASHI

TJPA TRANSBAY JOINT POWERS AUTHORITY

VENDOR

SEAL

PROJECT

PROJECT

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WEBCOR SUBMITTAL No.

No.	REVISION	DATE
X	-----	XX/XX/XX

SCALE: 1"=80'
DATE: 08/10/11

TRAFFIC CONTROL STANDARDS

TCP-004

SHEET

SAMPLE

Exhibit U Submittal Schedule

Trade Subcontractor's Schedule submission shall include a full submittal schedule per Specification Section 01 13 00 1.4 – Submittal Schedule.

1. All submittals are to be submitted to Webcor/Obayashi Joint Venture within 60 days of Award.
2. The Submittal Schedule shall contain additional data fields to indicate: 1) the duration in work days for procurement of the item starting from the date that the submittal is approved until the item is available for construction, and 2) the Activity ID of the earliest construction activity for which the item will be required (the submittal/procurement item's successor).
3. The Trade Subcontractor should use the attached data format, Submittal Schedule Excel Template, for the submission of Submittal Schedule as Microsoft Excel File. Contact Webcor/Obayashi Joint Venture to obtain the blank excel file of the Submittal Schedule.
4. The Trade Subcontractor shall show critical submittals in the Exhibit I Construction Schedule in addition to providing the comprehensive submittal schedule required herein. Critical submittals are those submittals considered vital to the timely progression of the project schedule. These items may include, but are not limited to, engineering submissions; long lead items; items required within the first 25% of Subcontractor's performance period; and items that are required for construction or installation of a task with less than 20 working days of total float in the overall project schedule. The last group of items may not be determined until after acceptance of the Trade Subcontractor Construction Schedule submission and its full incorporation into the project schedule. Therefore, the Subcontractor may be required to add items to its Primavera schedule file subsequent to approval of its Construction Schedule submission.

PMFSMI_COMP_CODE	PMFSMI_PROJ_CODE	PMFSMI_SBMT_ID	PMFSMI_SBMT_NAME	PMFSMI_PKG_CODE	PMFSMI_REC_FROM_PARTN_ABBREV	PMFSMI_REC_FROM_CONTACT_COD	PMFSMI_RET_BY_PARTN_ABBREV	PMFSMI_RET_BY_CONTACT_COD	PMFSMI_SENT_TO_PARTN_ABBREV	PMFSMI_SENT_TO_CONTACT_COD	PMFSMI_FWD_TO_PARTN_ABBREV	PMFSMI_FWD_TO_CONTACT_COD
Always 30	Project #	Submittal #	Submittal Name		Received From Partner Abbreviation(Sub)	From Contract Code(Sub)	Return By Partner Abbreviation (Architect)	Returned By Contact Code(Architect)	Sent To Partner Abbreviation (Architect)	Sent to Contact Code (Architect)	Forward To Partner Abbreviation(Sub)	Forward to Contact Code(Sub)
30	30100	[T-000000-001]	Test Submittal	TG####-001	ADERH023	BOBBRO2	TURNE361		TURNE361			

PMFSMI_REQUIRED_START_DATE DATE DD-MON-RRRR	PMFSMI_REQUIRED_END_DATE DATE DD-M	PMFSMI_CLV_VALUE_CODE1		PMFSMI_CLV_VALUE_CODE2		PMFSMI_CLV_VALUE_CODE3		PMFSMI_CLV_VALUE_CODE4	PMFSMI_CLV_VALUE_CODE5	PMFSMI_CLV_VALUE_CODE6	PMFSMI_SBMT_STATUS_CODE
DO NOT USE	DO NOT USE	LEED MR 1 (See Sheet 2)	Credit Specific Data	LEED MR 2 (See Sheet 2)	Credit Specific Data	LEED EQ (See Sheet 2)	Credit Specific Data				Use PEND
											PEND

PMFSMI_ACTIVITY_START_DATE DATE DD-MON-RRRR	PMFSMI_DATE_CHANGE_CODE	PMFSMI_COPIES_NUM	PMFSMI_LEAD_TIME_STAGE6	PMFSMI_LEAD_TIME_STAGE5	PMFSMI_LEAD_TIME_STAGE4	PMFSMI_LEAD_TIME_STAGE3	PMFSMI_LEAD_TIME_STAGE2	PMFSMI_LEAD_TIME_STAGE1	PMFSMI_SPEC_SEC_CODE	PMFSMI_SORT_ORDER_NUMBER	PMFSMI_CLOSED_DATE DATE DD-MON-RRRR
	DO NOT USE	Number of Copies	Lead time Delivery	Lead Time Fabrication	Lead Time Float	Lead Time Arch Review	Lead Time Webcor Review	Lead Time From Sub to Web	Spec Section	DO NOT USE	DO NOT USE
		6	5	8	5	21	5	5			

PMFSMI_TYPE_CODE	PMFSMI_SPEC_SUBSEC_CODE	PMFSMI_PROC_FLG	Schedule Activity ID
Type Code(See Sheet 2)	Spec Sub Section	Procurement Flag	
		Choose Yes or No	

Code List for Submittal Schedule Data

Submittal Types

3DCORD	3D Coordination
ASBUILT	As Built Drawings
ATTIC	Attic Stock
BRUSH	Brushouts
CALC	Calculations
CERT	Certificates
CLOSE	Close Out
COMM	Commissioning
DRAW	Shop Drawings
LEED	LEED Documentation
METHODS	Methods
MOCK	Mock Up
MSDS	MSDS Documentation
PRIME	Prime Level
PROD	Product Data
QUAL	Qualifications
SAMPLE	Samples
SCHED	Schedules
SURVEY	Survey
TEST	Test Reports

LEED MR1

Code	
NC MR 3	Material Reuse
NC MR 4	Recycled Content
NC MR 5	Regional Materials
NC MR 6	Rapidly Renewable Materials
NC MR 7	Certified Wood
CS MR 3	Material Reuse
CS MR 4	Recycled Content
CS MR 5	Regional Materials
CS MR 6	Certified Wood
CI MR 3	Resource Reuse
CI MR 4	Recycled Content
CI MR 5	Regional Materials
CI MR 6	Rapidly Renewable Materials
CI MR 7	Certified Wood

LEED MR2

Code	
NC MR 3	Material Reuse
NC MR 4	Recycled Content
NC MR 5	Regional Materials
NC MR 6	Rapidly Renewable Materials
NC MR 7	Certified Wood
CS MR 3	Material Reuse
CS MR 4	Recycled Content
CS MR 5	Regional Materials
CS MR 6	Certified Wood
CI MR 3	Resource Reuse
CI MR 4	Recycled Content
CI MR 5	Regional Materials
CI MR 6	Rapidly Renewable Materials
CI MR 7	Certified Wood

LEED EQ

Code	
NC EQ 4.1	Low-Emitting Materials: Adhesives & Sealants
NC EQ 4.2	Low-Emitting Materials: Paints & Coatings
NC EQ 4.3	Low-Emitting Materials: Carpet Systems
NC EQ 4.4	Low-Emitting Materials: Composite Wood & Agrifiber Products
CS EQ 4.1	Low-Emitting Materials: Adhesives & Sealants
CS EQ 4.2	Low-Emitting Materials: Paints & Coatings
CS EQ 4.3	Low-Emitting Materials: Carpet Systems
CS EQ 4.4	Low-Emitting Materials: Composite Wood & Agrifiber Products
CI EQ 4.1	Low-Emitting Materials: Adhesives & Sealants
CI EQ 4.2	Low-Emitting Materials: Paints & Coatings
CI EQ 4.3	Low-Emitting Materials: Carpet Systems
CI EQ 4.4	Low-Emitting Materials: Composite Wood & Agrifiber Products
CI EQ 4.5	Low-Emitting Materials: Systems Furniture & Seating

EXHIBIT "W"

The information, processes, techniques, material and other matters contained in the Quality Commissioning Procedures and Guidelines are proprietary, confidential, and unique to WEBCOR/OBAYASHI.

The Quality Commissioning Procedures and Guidelines shall only be used for WEBCOR/OBAYASHI only.

Any other use without the expressed written consent from an Officer of WEBCOR/OBAYASHI is prohibited. Any unauthorized use could give rise to liability under the California Civil Code Sections 3426 et seq. involving Uniform Secrets Act, the California Business and Professions Code Sections 17200 et seq. involving Unfair Competition and 17500 et seq. involving Unfair Practices, the common law of unfair competition and interference with contractual relations and prospective advantage.

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QUALITY COMMISSIONING PROCEDURES AND GUIDELINES
Exterior Skin and Waterproofing Systems

- ✓ **Roofs**
- ✓ **Decks**
- ✓ **Windows**
- ✓ **Curtain Walls**
- ✓ **Exterior Wall Systems (Precast, Stucco, EIFS, GFRC)**
- ✓ **Water Shedding Systems**
- ✓ **Flashings**
- ✓ **Expansion Joints**
- ✓ **Caulking, Sealants**
- ✓ **Primary and Secondary Water Barrier Systems**
- ✓ **Above & Below Grade Waterproofing**
- ✓ **General Waterproofing Systems**

1.0 Purpose

The purpose of this procedure and guideline is to set forth a commissioning process, which will ensure that the building's exterior envelop and waterproofing systems perform and function in conformity with design intent and to provide a means of verifying the implementation of these systems based on the project specifications, design and applicable industry standards.

2.0 Definition of Commissioning

The term "Commission" refers to a Quality Assurance process by which the building's exterior envelop and waterproofing systems (i.e., below and above-grade waterproofing, decks, roofs, caulking, plaster, precast concrete and GFRC, curtain-wall, flashing, expansion joints, etc.) are provided, installed and tested in order to verify the systems perform in accordance with the contract documents and the design intent.

Commissioning entails the development of a clear and complete process that verifies the systems design and operational intent. It also is to verify that the exterior envelop and waterproofing systems and its components are installed according to the contract documents, manufacturer's recommendations and published industry standards and that the system receives adequate installation and performance inspections by the installing contractor.

The process must include verifying and documenting the installation steps, phases, and system performance with respect to the design intent and the contract documents. Commissioning is a team effort that requires cooperation by all parties to succeed.

3.0 Description of the Commissioning Process

Commissioning is a **"systematic"** process for achieving, validating and documenting the performance of building systems as so that it meets the design intent and requirements.

The process extends through all phases from design to occupancy, and extending through the warranty period. Numerous checks and inspections shall be performed at each stage of the process to ensure that established procedures are followed. The process also includes training of facility operational personnel to ensure continued efficient use of the exterior envelop and waterproofing systems as originally designed and installed.

This guideline provides a uniform, integrated and consistent approach for the commissioning of all waterproofing systems as well as assisting in insuring product and design compatibility. Since many building waterproofing systems are integrated, a deficiency in one system or component may result in sub-optimal performance and failure among others.

4.0 Commissioning Plan

Commissioning is a **"Quality Process"** for validating the system and component design performance.

The reports from the commissioning process are not just test reports, but reports that document design, installation, inspections, and particular tests and or evaluation procedures. The commissioning plan is continually updated to reflect changes in program and design of the waterproofing system(s). Commissioning reports shall document and record the results of the commissioning process.

Each Trade Subcontractor's specific commissioning plan must be neatly organized in a consistent manner that reflects the nature of the building systems and their performance. The commissioning plan shall include schedules, requirements and procedures.

Trade Subcontractor(s) shall be responsible for the timely and efficient completion of all commissioning in accordance with the Subcontract Agreement.

At no time shall any work be permitted to commence without a WEBCOR/OBAYASHI' approved Trade Subcontractor Waterproofing Commissioning Program.

Failure to do so may require Trade Subcontractor to assume all related costs and expenses in accordance with the Subcontract Agreement.

In addition, Trade Subcontractor may also be required to assume all related cost should WEBCOR/OBAYASHI find it necessary to develop, manage and or perform any Trade Subcontractor commissioning work.

5.0 Objectives

The fundamental objectives of the commissioning process are:

5.1 Create a procedure to verify and provide documentation that the waterproofing performance of the facility meet the design requirements.

5.2 Enhance communication by documenting data and decisions throughout all phases of the project.

5.3 Validate and report that the performance of waterproofing systems meets design intent.

5.4 Provide a means of Quality Control and Quality Assurance (QA/QC) throughout all phases of the waterproofing system(s) installation, inspection, and testing process.

6.0 Contractors Normally Participating in the Commissioning Process

- ✓ Waterproofing Consultant
- ✓ Architect
- ✓ Structural Engineer
- ✓ Mechanical
- ✓ Plumbing
- ✓ Electrical
- ✓ Fire Sprinkler
- ✓ Glass Systems
- ✓ Caulking
- ✓ Brick, Tile, Precast, GFRC, and Stone
- ✓ Fountains and Ponds
- ✓ Swimming Pools & Spas
- ✓ Roofing
- ✓ Insulation
- ✓ Flashing & Sheetmetal
- ✓ Waterproofing Contractors
- ✓ Concrete (If waterproofing admixtures are included by design)
- ✓ Stucco, EIFS, DEFS systems
- ✓ Elastomeric Painting
- ✓ Rough Carpentry (Wood cladding)
- ✓ Architectural Metal Cladding
- ✓ Expansion Joint Systems
- ✓ Water Tanks
- ✓ Special Systems or Components

7.0 Commissioning Team

The commissioning team members may consist of the following:

- ✓ WEBCOR/OBAYASHI - Project Team as required

- ✓ Owner - Designated representative of the owner, building operator/engineer, and/or the owner's construction management firm
- ✓ Engineers - Architect and Designers
- ✓ Waterproofing Contractor
- ✓ Waterproofing Consultant
- ✓ Flashing / Sheet Metal Contractor
- ✓ Exterior Skin Contractor
- ✓ Roof Contractor
- ✓ Glass and Curtain Contractor
- ✓ Caulking and Sealants Contractor
- ✓ Commissioning Agent (CA)
- ✓ Mechanical Contractor
- ✓ Plumbing Contractor
- ✓ Fire Sprinkler Contractor
- ✓ Electrical Contractor
- ✓ Testing Contractor
- ✓ Other as necessary

8.0 Meetings

Regularly scheduled commissioning meetings of **the entire team** shall be conducted for site coordination, communicating issues of concern, resolving conflicts, reporting on system process and status, identifying urgent work and all deficiencies.

Commissioning meetings are critical to the **Quality** of the commissioning process as well as timely completion of the project.

9.0 Trade Subcontractor Performance Requirements

9.1 Designation of the primary person who will be responsible, accountable, and act as the main contact person for all commissioning communications. Provide organizational chart indicating personnel who will be involved in the project. The chart should indicate factory, office, and on-site field personnel.

9.2 Review of drawings and specifications for completeness, appropriateness of details, and acceptance by Trade Subcontractor thereof.

9.3 Review WEBCOR/OBAYASHI standard details.

9.4 Preparing and submitting documentation of Trade Subcontractor's respective materials and systems to be integrated into the overall Commissioning Plan.

9.5 Submitting information on the intended commissioning protocol used on materials, and the integration into the system as a whole.

9.6 Provide a presentation of the commissioning process to WEBCOR/OBAYASHI, the Owner and or the owner's representatives. Demonstration shall indicate compliance with the Trade Subcontractor Commissioning requirements as outlined in this document.

9.7 Submitting shop drawings detailing waterproofing system layout as outlined in the contract documents. Shop drawings shall reflect all conditions present in the building, including but not limited to the following:

a. Conditions where different materials meet (i.e. windows to plaster or stone to plaster).

b. Corner conditions.

c. Conditions where vertical planes meet horizontal planes (i.e. soffits and sills).

d. Expansion joints and control joints.

e. Flashing.

f. Penetrations (i.e. Z-ducts, electrical outlets, louvers).

g. Conditions typically utilized by Trade Subcontractor's common practices.

Shop drawings shall include installation drawings indicating the planned sequence of installation of all components.

9.8 Providing means and method for preliminary testing of the exterior envelop and waterproofing systems with manufacturer's representative present as required:

a. Caulking: Include complete coordination with the caulking manufacturer's representative to assure compatibility of the caulking system with the

surrounding substrate and finishes. Trade Subcontractor shall submit caulking samples including manufacturer's specifications for materials, color, cleaning procedure, required primers, proper backer rod, installation procedures, testing requirements and results. Testing of caulking samples between all combinations of materials shall be performed by qualified testing agencies in direct accordance with A.S.T.M. Standard Test Method C794 (75), including seven (7) day immersion. A letter from the Caulking Manufacturer shall be submitted approving all testing procedures, the installation procedure and the use of the specified materials for the intended application. Any materials installed without such approval that may be in conflict with the approved procedures or of unacceptable color and appearance will be removed and replaced at the Trade Subcontractor's expense.

b. Windows and Sliding Glass Doors: Assemblies shall be field tested in accordance with American Architectural Manufacturers Association (AAMA) 502-02 Voluntary Specification for Field Testing of Windows and Sliding Glass Doors using Test Methods A and B, testing a minimum of 1% of the products for air leakage resistance and water penetration resistance as specified for various stages of the product installation.

9.9 Reviewing all required testing under the witnessing of WEBCOR/OBAYASHI, Building Owner, and or the Owners representatives.

9.10 Correcting all system deficiencies at Trade Subcontractor expense.

9.11 Obtaining all required permits, code required inspections and final certifications.

9.12 Preparing complete as-built record drawings made from an original set that has been marked up throughout the duration of the project. Drawings must indicate all work as it was actually installed showing change order revisions, field changes required to meet the working conditions, and any other items that will affect or reflected in the operation and maintenance of the facility.

9.13 Obtaining all manufacturer’s warranties and guarantees.

9.14 Organizing the O&M manuals, if any, from suppliers and manufacturers.

9.15 Performing any specified training for the facility’s operational staff.

10.0 Information Management

The management and continued organization of the commissioning information shall be the sole responsibility of the Trade Subcontractor.

WEBCOR/OBAYASHI and the Trade Subcontractor shall mutually agree on the location were all the commissioning information and documentation shall be stored.

The Trade Subcontractor shall make every effort to continually update and manage the information throughout the commissioning process. WEBCOR/OBAYASHI and the Building Owner may review the commissioning information provided by the Trade Subcontractor at any time for updates, accuracy and completeness.

WEBCOR/OBAYASHI may elect to withhold or make appropriate adjustments to the Trade Subcontractor's monthly progress billing in the event the commissioning information or performance requirements as described in the Waterproofing Quality Commissioning Procedures & Guidelines are not being performed, managed and updated by the Trade Subcontractor.

11.0 Trade Subcontractor Commissioning Submittal Requirement

Each Trade Subcontractor has a responsibility to WEBCOR/OBAYASHI and the Building Owner to comply with the terms of the contract and to verify that the design intent of the waterproofing systems for the project is achieved.

Each Trade Subcontractor is required to provide two completed commissioning manuals containing the information outlined in Section 19 - Commissioning Binder Tab Index of this guideline. Each proposed formatted “3-ring” binder containing all information, including blank forms shall be provided to WEBCOR/OBAYASHI and the Owner for **“review and comment”** before the commissioning process begins, or by an agreed upon date.

WEBCOR/OBAYASHI, the Owner and the owner representative shall review the information and return it to the Trade Subcontractor within **two-week** time with all comments.

Each Trade Subcontractor shall make all required changes as agreed, to the commissioning manuals and resubmit them to WEBCOR/OBAYASHI within **two-weeks**.

Each Trade Subcontractor shall schedule and provide a formal demonstration of their commissioning process to WEBCOR/OBAYASHI, the Owner and the Owners representative after all required changes to the manuals have been satisfactory completed. Demonstration shall indicate compliance with the Trade Subcontractor Waterproofing Commissioning requirements as outlined in this document.

Each Commissioning Manual **shall be neatly organized** using appropriate tabs, dividers, table of content, index, etc. as required for easy referencing. Refer to Section 19 Commissioning Binder Tab Index for a standard binder organization. All Commissioning Manual(s) **must be user friendly**.

12.0 Commissioning Binder Tab Index

Tab 1. **Project design criteria specifications –** Provide information that describes the overall design criteria and performance requirements for the waterproofing system(s).

Tab 2. **Manufacture products and components** – Provide complete submittal list of all components that shall be contractually provided and installed.

Tab 3. **Manufacture installation instructions –** Provide manufacture documentation insuring that the system and components installation complies with all Manufacture requirements to maintain performance and guarantee obligations.

Tab 4. **Manufacture details –** Provide manufacture details or published industry standards for penetrations and terminations interfacing with other installed systems.

Tab 5. **Design transition review –** Provide design review comments and concerns on transition interfaces to other s or other compatibility issues.

Tab 6. **Quality Assurance / Quality Control Program –** Provide QAQC program with complete field inspections and checklists.

Tab 7. **Documentation –** Trade Subcontractor shall maintain a separate field binder documenting the QAQC inspections and field-testing for all installed work.

Tab 8. **Field mock-up and testing –** Provide information on mock-up or field performance tests that shall be preformed for all installed system(s). Provide manufacture recommendations or published testing standards used. If no performance testing is preformed, Trade Subcontractor shall provide documentation on how each system is performing in accordance to the documented design intent and contract warranty requirements.

Tab 9. **Schedule –** Provide schedule for, shop drawing devolvement, submittals fabrication, delivery and installation.

Tab 10. **Agency and factory test reports –** Provide all factory, agency, and field performance-testing reports on installed systems.

Tab 11. **Factory and Trade Subcontractor guarantee information –** Provide warranty responsibilities and durations for all systems and components installed.

Tab 12. **Owner Training –** Provide (O&M) and training for all required service and maintenance requirements as it extends throughout each system to maintain warranty. Include owner sign-off sheets verifying training.

Tab 13. **Attic Stock –** Provide list of spare material that shall be supplied by Trade Subcontractor to owner – Paint, applied materials, gaskets, handles, glazing, or patching products.

Tab 14. **As-Built Drawings –** Provide completed set of drawing and details accurately reflecting all installed and completed work.

Tab 15. **Material Safety Data Sheets –** Provide all Material and Data Safety Sheets (MSDS).

13.0 Identifying the Defects

It is the intent of the commissioning process to avoid defects in waterproofing systems. A standard of care exhibited during the commissioning process should anticipate potential defects and determine appropriate solutions prior to the installation of these systems. In the event that defects do occur, proper defect identification will help determine the repair needed and assist in selecting the appropriate method and materials.

It is important to acknowledge which factors have caused deficiencies in the waterproofing system and its components, and how a deficiency in one system may influence or amplify another. Careful and thorough defect identification is critical to obtain long-lasting, quality repairs. It is critical and necessary to eliminate the cause of the defect and not solely treat the symptom.

Each Trade Subcontractor shall be responsible for determining the cause and origin of various problems as it pertains to their contractual scope of work. Failure to do so may require Trade Subcontractor to assume all related costs and expenses for damages, repairs performed by others, testing, special inspections, and consultant fees.

14.0 Applicable Industry Standards

Unless the Contract Documents include more stringent requirements, applicable published construction industry standards shall be utilized. Where compliance with two or more standards is specified for quality or quantity levels, comply with the most stringent requirement.
Where sections of the specifications require that a product, material, installation, or test complies with a specified industry standard, the Trade Subcontractor shall obtain copies directly from the publication(s) source and include the information in the submitted commissioning information.

Each Trade Subcontractor engaged in construction on the project must be familiar with published industry standards applicable to their construction activity.

15.0 Schedules

An initial schedule shall be developed by the Trade Subcontractor identifying dates, times, and durations for shop drawings, approval of submittals, material fabrication, product delivery, acceptance, installation, testing and completion.

The schedule shall also include any commissioning task that shall be performed on waterproofing systems that may involve or affect other related building systems.

Each Trade Subcontractor shall update schedules, daily, weekly, monthly, or as required to keep WEBCOR/OBAYASHI and the Owner informed of the activities performed. This schedule will indicate appropriate milestones during the installation to allow WEBCOR/OBAYASHI and or the Owner the ability to observer and witness system installations prior to being cover up by subsequent s. The schedule will indicate milestone dates for Trade Subcontractor inspection and testing.

16.0 Execution of Inspections and Checklists

Trade Subcontractor and or vendors shall schedule initial inspections and checklist review with the commissioning team. The inspections and reviews shall be directed, executed, and documented by the Trade Subcontractor or vendor.

To document the process, the Trade Subcontractor performing the task shall provide and complete all documentation forms and checklists. (See attached sample checklist)

17.0 Field Inspections

One of the most important commissioning activities for waterproofing systems is field inspections. The field inspection process shall serve as a method and means of documenting the installation process as well as indicate variations between contractual design and construction.

Each Trade Subcontractor shall identify in detail the scope of their field inspections, and the types of field procedures that will be required to obtain the necessary information to provide a complete waterproofing quality control evaluation at the completion of the job.

18.0 Field Witnessing of Trade Subcontractor's Quality Control

WEBCOR/OBAYASHI, the Owner, consultants and the Architect reserve the right to witness the waterproofing system installation at any time. Spot checks shall be conducted on a random basis. If inconsistencies are discovered in quality, performance, or if commissioning information differs from those submitted, the Trade Subcontractor may be required to completely remove and remedy all conditions where the inconsistencies occurred at no additional cost or impact to the schedule.

Witnessing shall include all or part of, but not limited to the following:

14.1 Mock ups

14.2 Waterproofing component and system installation

14.3 System inspection and checks

14.4 Performance tests

14.5 Special Inspections

19.0 Documentation

Trade Subcontractor shall maintain a separate field binder documenting quality control inspections and field-testing for all installed work. Documentation shall include dates, quality control field checklist, reports with inspected locations defined by grid lines and elevations. Provide a dated photo log, documenting inspected areas and general sequence of installed work for the duration of the project.

20.0 Testing and Methods

The objective of field-testing is to correlate paths of moisture infiltration and to observe the source of damages. Moisture entering a building during extreme weather may be obvious, but the most reliable method to discover the infiltrating path is to recreate the leakage condition in a controlled manner. Testing also allows verification of the theory for the cause of leakage.

As all system and component tests are unique to some degree, there may not be one standard or method for testing that can be applied to all. There are several methods, standards, governing requirements, and manufacture recommendations, etc., which should be applied.

There are three types of acceptable testing methods that can be used during the investigation. All of which must be approved by WEBCOR/OBAYASHI. These testing categories include:

- ✓ Non-Destructive Testing
- ✓ Destructive Testing
- ✓ Laboratory Testing

20.1 Non-Destructive Testing

Non-destructive testing uses a variety of non-invasive tools. This type of testing causes little or no damage or interference to the building envelope. The various methods of non-destructive testing include:

a. *Rilem Tube* - This calibrated device is adhered to exterior masonry walls to determine the porosity and condition of brick masonry units, mortar joints, head joints, and embedment joints.

b. *Water Spray Rack (ASTM E1105)* - This test simulates a wind-driven rain condition on a facility. It can assist in determining the specific cause and origin of moisture infiltration when it is used to test independent components of the envelope. Spraying water over a large area in an uncontrolled fashion will not reveal specific causes of water infiltration.

c. *Hose Spray Test (AAMA 501.2)* - This test method also simulates wind-driven rain in small segmented areas using a standard garden hose in which a calibrated nozzle is attached with a pressure gauge. The spray is

directed at a specific joint, crack, or defect to reveal potential moisture intrusion.

d. *Differential Pressure Test (ASTM E1105)* - A pressure chamber is constructed on the interior of the facility at a specific location to test moisture driven through an assembly or component. The assembly or component is subjected to a negative force while simultaneously a spray rack is directed at the assembly to draw the moisture into the facility to simulate a negative pressure under a wind-driven rain condition.

e. *Infra-Red Thermography* - Infra-red Thermography photographs the building exterior to determine the locations of wet components. Components, such as insulation and sheathing, etc., will act as heat sinks if they contain high levels of moisture. During the day, moist and dry components absorb heat. At night, the moist areas release the heat much slower than the dry areas. By reading the heat signature, Infrared Thermography will help expose the problem areas. Small test cuts may be required to verify moisture areas.

f. *Soundings (ASTM D4580)* - There are different ways to perform sounding tests including the hammer tap test. In this test, a 16 oz. hammer is tapped against concrete for sound. A hollow sound indicates areas where the concrete has separated from the reinforcing steel, typically due to exfoliation or corrosion of the steel. Another method of sounding is to chain drag a heavy 15 ft. link chain along a concrete surface to listen for hollow sounds, indicating defective concrete. This method can cover larger areas effectively and is commonly used on parking garages and loading docks.

g. *Pachometer Survey* - This test uses a magnetic device used to locate embedded steel reinforcement and help determine the concrete cover over the reinforcement. Generally, the Pachometer is fairly accurate when measuring ¼ inch to 3-inch thick concrete cover and when reinforcing placement is not too congested.

h. *Poly-sheet Tape-down* - This test determines the presence of moisture coming through a concrete surface, typically a slab-on-grade type of assembly where the typical problem is tile or membrane separation from the floor. A 2’ x 2’ section of polyethylene is sealed to the concrete with duct tape and removed 24 hours later. If there is moisture beneath the polyethylene, it is a good indication that there is a vapor drive through the concrete section.

i. *Glass-Slide Epoxy or Crack-o-meter* - This device is sealed in place over a crack and periodically checked to determine if any movement has occurred. If movement has occurred, the glass will crack or the meter will record movement.

j. *Optical Illuminated Boroscope* - A boroscope is inserted into a 5/8-in. diameter pilot hole through an exterior wall system and allows the cavity walls of brick veneer, stud wall backup of exterior insulated finish systems (EIFS), or other types of constructions to be observed without large-scale destructive testing.

k. *Smoke/Dust Tracer* - The smoke/dust tracer helps to find air infiltration. It is moved across the interior face of a window to observe the smoke and dust particles coming through the assembly.

l. *Moisture Meter* - A Delmhorst meter is a digital device that detects the presence of moisture in various building components. This test is typically accompanied by a gravimetric analysis (oven drying of samples), which is used to confirm the results of the Delmhorst meter.

m. *Flashlight and mirror* - These simple tools can be very useful to detect problem areas. Placing the mirror into the plenum or behind difficult-to-access areas with the flashlight will allow observation of concealed conditions.

20.2 Destructive Testing

When the main objective is to determine the existing composition and configuration of concealed assembly conditions, destructive testing may be warranted. The most common methods of destructive testing are test cuts and borings.

Any type of destructive testing must be reviewed and approved by WEBCOR/OBAYASHI.

a. *Roof Testing* - Test cuts in the roof assembly may be necessary to determine the condition of the underlying insulation and substrate. Cutting into the system may help verify whether roofing problems are causing corrosion of the steel deck, or a spalled and cracked concrete deck, etc. Test cuts may also expose the as-built configurations of the flashing components at roof-to-wall locations, curb locations, etc. This information is critical to the appropriate remedial design and/or repairs.

b. *Exterior Wall/Skin Testing* - Test cuts on exterior walls may be required to identify the origin of moisture infiltration. For masonry walls, it is most effective to make test cuts at window heads and sills, and at any through-wall flashing locations that may be suspected of allowing moisture intrusion. Masonry test cuts may expose defective through-wall flashing that is allowing moisture intrusion. Test cuts may also help determine the underlying conditions of the steel components in wall systems, including wall ties, reinforcing steel, sub-steel columns, etc.

20.3 Laboratory Testing

Destructive testing is also used to obtain samples for lab analysis. Samples of sealants, coatings, painted finishes, roofing materials, etc. can be sent to a laboratory to determine the presence of lead or asbestos. Samples of masonry or concrete can also be tested to help identify causes of moisture/air infiltration (descriptions of these analyses follow).

Laboratory testing may help obtain a better understanding of existing material types, presence of contaminants, and the possibility of hazardous components.

This type of testing can also provide valuable information concerning proper surface preparation, material selection, and implementation of repairs.
The following laboratory tests are some of the more useful when performing building envelope evaluations:

a. *Gravimetric Analysis* - This test will determine moisture content. After weighing and recording the in-situ existing sample, completely dry the sample in an oven and re-weigh it. The weight difference indicates moisture content and is particularly useful for insulating materials. Testing moisture contents of samples is critical to verify results from non-destructive moisture scans.

b. *Petrography* - Petrography determines the "make-up" of concrete. This test will indicate the size and type of aggregate, air/void ratio, type of cement, and general mix design data of the concrete. Most materials testing lab can perform this test.

c. *Air Entrainment* - Provides an indication of the existing concrete's durability and freeze-thaw resistance. Air entrainment is generally indicated by petrography.

d. *Presence of Carbonization* - Accomplished by spraying a solution of phenothelene on the concrete substrate and recording the depth of the solution's color change. This will indicate to what depth carbon dioxide has progressed into the concrete. Carbon dioxide will degrade the cement matrix of the concrete and lower the pH level of it. The layer surrounding the reinforcement is then destroyed, allowing corrosion of the reinforcing steel. Corrosion by carbonization usually occurs over a broad area.

e. *Chloride Ion Content* - Chlorides from marine atmospheres or mists from road salts entering the concrete substrate, and salts originally introduced to the concrete via admixtures or aggregates can promote accelerated corrosion of reinforcing steel, usually at concentrated or specific locations. The chlorides are not consumed in the corrosion process but rather act as catalysts in the process. The corrosion will progress along the reinforcing bars causing concrete de-bonding, cracking, and spalling.

f. *Reinforcement Placement, Depth, Quantity, and Type* - This information may be established with the use of a Pachometer or similar electronic metal detector. It is useful in determining required steel replacement and structural capacities during engineering analysis phases.

21.0 Engineering Analysis

Using information obtained from the field, laboratory results, and collected data, a comprehensive engineering analysis may be required. The engineering analysis should include an assessment of field and laboratory data, structural analysis as well as the following:

- ✓ Thermal Analysis
- ✓ Drainage Analysis

- ✓ Vapor Drive Analysis
- ✓ Fire Rating Requirements
- ✓ Cost Estimations

22.0 Deficiencies and Non-Conformance

The Trade Subcontractor shall identify and list any outstanding deficiencies or procedures that were not completed successfully during any final testing. Documented deficiencies shall be submitted to WEBCOR/OBAYASHI within 48 hours of each test completion.

The Trade Subcontractor shall also provide in writing, the corrective action for each deficiency as required within 48 hours. The installing Trade Subcontractor and or vendor shall correct all outstanding issues or deficiencies in the materials or the installation of the materials and provide the commissioning team with dates and times for the required corrections and any re-testing.

23.0 Remedial Work

General considerations for the repair of defects and replacement of components should include the following:

23.1 Determine the effect, if any; the repairs have on the structure, surroundings, and operations of the building.

23.2 Ensure proper preparation of surfaces to be repaired and provide chemical and mechanical bonds for new materials.

23.3 Material selection should include an understanding of performance limitations and should rely on the products past acceptable performance. Material selections should include consideration of the following:

- ✓ Compatibility
- ✓ Maintenance
- ✓ Life cycle

24.0 Project Commissioning Closeout

WEBCOR/OBAYASHI, the Owner, and/or the Owner's representative shall determine when the Trade Subcontractor commissioning process has been satisfactorily completed and when to submit the final report information and all other documentation to Webcor.

As part of the project turnover, the quality of all work will be reviewed to determine whether it is within specific and manufacturers' guidelines, industry standards, and code compliance.

WEBCOR/OBAYASHI, the Owner, and/or the Owner's representative consultant must be completely satisfied that the commissioning procedures have been performed accurately and professionally.

In the event the commissioning information or performance requirements outlined in the Waterproofing Quality Commissioning Procedure & Guidelines have not been met, WEBCOR/OBAYASHI may elect to withhold or make appropriate adjustments to the Trade Subcontractor's final billing.