

Item No. 5 – Consider Integrated Program Management Team (IPMT) Recommendations regarding Modifications to Project Delivery Strategy for Select Project Elements

Executive Steering Committee

October 20, 2023



San Francisco
County Transportation
Authority

Recommendation

Forward the Integrated Project Management Team's recommendation to make four (4) modifications to the Project Delivery Strategy to the TJPA Board of Directors, including:

- 1a. Shift the Fourth and Townsend Street Station fit-out and two ventilation structures fit-out to **Contract No. 40-CT: Civil and Tunnel** progressive design-build (PDB) and accelerate the investigation of additional construction laydown areas
- 1b. Retain the design and construction of the Salesforce Transit Center fit-out with the General Engineering Consultant (GEC) and the construction manager/general contractor (CMGC) Station Fit-Out contractor, respectively

Recommendation (con't)

2a. Divide 4th and King Yard Preparation into two packages:

- **Contract No. 20-4KYA:** Site Clearing
- **Contract No. 21-4KYB:** Track and Systems

2b. Defer decision on contract delivery agency

3a. Select design-bid-build contract model for:

Contract No. 20-4KYA: 4th and King Yard Preparation, Site Clearing

3b. Select CMGC contract model for:

Contract No. 21-4KYB: 4th and King Yard Preparation, Track and Systems

Recommendation (con't.)

4. Affirm decision to procure two CMGC contracts:

Contract No. 50-TS: Track and Systems

Contract No. 60-SF: Station Fit-out, Salesforce Transit Center

Summary of Proposed Changes

Contract	As approved	As proposed
10-UR, Utility Relocation	Advance utility relocation of over 20 public and private utilities	No change
20-4KY, 4 th and King Yard	Relocation or removal of structures, site clearing, rearrangement of track, overhead catenary, and supporting facilities	Division of work into two packages, 20-4KYA and 21-4KYB, to better protect Caltrain operations while providing for construction laydown and access needed for the Portal, addition of at grade track and systems to 21-4KYB
30-BD Building Demolition	Demolition of 7 buildings as required for Portal construction	No change

Summary of Proposed Changes (con't)

Contract	As approved	As proposed
40-CT, Civil and Tunnel	Construction of tunnel, throat, and civil structures including Fourth and Townsend station box, two ventilation structures, and certain utility temporary support and/or relocation	Addition of mechanical, electrical, plumbing, and architectural finishes at Fourth and Townsend Station and the two mid-tunnel ventilation structures
50-TS, Track and Systems	<ul style="list-style-type: none">a. Installation of track and rail systemsb. Potentially combine with 60-SF, Station Fit-out	<ul style="list-style-type: none">a. No change to scope, except removal of at grade track and systemsb. Do not combine with 60-SF, Station Fit-out
60-SF, Fourth and Townsend and Salesforce Transit Center Fit-out	<ul style="list-style-type: none">a. Mechanical, electrical, plumbing, and architectural finishes at Fourth and Townsend Station, Salesforce Transit Center, and the two ventilation structuresb. Potentially combine with 50-TS, Track and Systems	<ul style="list-style-type: none">a. Deletion of the mechanical, electrical, plumbing, and architectural finishes at the Fourth and Townsend Station and two mid-tunnel ventilation structuresb. Do not combine with 50-TS, Track and Systems

Recommendation No. 1

- 1a. Shift the Fourth and Townsend Street Station fit-out and two ventilation structures fit-out to **Contract No. 40-CT: Civil and Tunnel PDB** and accelerate the investigation of additional construction laydown areas

- 1b. Retain the design and construction of the Salesforce Transit Center fit-out with the GEC and the CMGC Station Fit-out contractor, respectively

Background

- The Project Delivery Alternatives Study (PDAS) proposed a CMGC delivery method for stations and ventilation structures fit-out
- Desire to have control of the Salesforce Transit Center design.
- Design and construction interface is an important risk.
- Detailed contract scopes and interface graphics illustrated a substantial number of contract interfaces at the Fourth and Townsend Street Station and ventilation structures.

Analysis

Risk	Mitigation
Potential for reduction in architectural control at Fourth and Townsend Street Station and ventilation structures	Clear design standards will be provided in PDB contract. Owner and operators will continue to have design milestone approval authority and frequent design progress meetings.
Reduces Small Business Enterprise/Disadvantaged Business Enterprise (SBE/DBE) scope in GEC contract	Require larger SBE/DBE percentage in PDB contract.
Potential loss of institutional knowledge	Allow eligible designers of Fourth and Townsend 30% design to bid as part of PDB teams pending legal determination of potential Conflict of Interest (COI).
Design and construction conflicts between contractors and disciplines	Proposed shift would shift design and construction interface risk between structural, architectural, mechanical, electrical, plumbing, vertical circulation, and civil disciplines from TJPA to the contractor.
Limited laydown and staging areas may lead to conflict claims	Proposed shift would reduce construction contractor interface risk by reducing the interfaces between contractors working in the same locations. Additional laydown space to also be investigated.
Multiple interfaces increases owner intervention	Reduces contract interface management for the Integrated Program Delivery Team (IPDT).

Increases construction value of PDB from \$2.4B to \$2.6B (2023\$), decreases CMGC Station Fit-Out from \$0.5B to \$0.3B (2023\$)

Recommendation No. 2

- 2a. Divide 4th and King Yard Preparation (4KY) into two packages:
- Contract No. 20-4KYA: Site Clearing
 - Contract No. 21-4KYB: Track and Systems
- 2b. Defer decision on contract delivery agency

4th and King Yard (4KY) Preparation



Scope of 4KY Contract Packages

4th and King Yard Preparation Package A: Site Clearing (4KYA)

The relocation or removal of structures, utilities, signal/power/comms and storage tracks, along the northern and western portions of the 4th and King Railyards

4th and King Yard Preparation Package B: Track and Systems (4KYB)

Modifications and additions to at-grade trackwork and associated systems (staged construction during operations) to facilitate DTX u-wall construction and connection to the DTX below-grade trackwork and systems

Current Activities

- Procurement Options Analysis Study
 - Kickoff held on August 8
 - Workshops with Caltrain held on September 13 and 14
 - Draft report distributed October 5
- 30% Preliminary Engineering
 - Draft Basis of Design and plans submitted August 25
 - Review comments anticipated on October 10
 - Final design package anticipated Q1 2024

Recommendation No. 3

- 3a. Select a design-bid-build (DBB) contract model for:
Contract **No. 20-4KYA**, 4th and King Yard Preparation: Site Clearing
- 3b. Select a CMGC contract model¹ for:
Contract **No. 21-4KYB**, 4th and King Yard Preparation: Track and Systems

¹ JPB Board action will also be required

4KYA PDAS Suitability of Short-List Options

Key Constraint	Impact	Suitable Short-List Option
Design Retention	Design is currently well progressed and understood. Changing design team would be an unnecessary impact to schedule and risk of impact to design quality itself.	DBB or CMGC
Early Contractor Involvement	The design and scope are well understood and developed. The interface with the operational corridor is minimal; therefore, sequencing is not a concern. Early contractor involvement is not required.	DBB
Scale and Complexity	The scope of the 4KYA package is relatively specialized and could be considered complex; however, it is well understood by the design team. The scale, however, is very small and would be out of balance with administrative and development costs of a collaborative contract model.	DBB
Schedule	The 4KYA package is on the critical path and needs to be procured immediately should it be effective in de-risking the broader project. With the need to procure the works as soon as possible, the best option would be to finalize design and prepare to procure a DBB contract.	DBB

4KYB PDAS Suitability of Short-List Options

Key Constraint	Impact	Suitable Short-List Option
Design Retention	The design is currently well progressed and understood. Changing the design team would be an unnecessary negative impact to the schedule and risk affecting the design quality itself.	DBB or CMGC
Early Contractor Involvement	Despite the design and scope being well understood, major concerns regarding implementation and sequencing and the need for a collaborative working approach with a contractor are seen as the primary challenge for the 4KYB package.	CMGC
Scale and Complexity	The 4KYB package is complex both in terms of the scope as well as the challenges around sequencing and implementing the work in an operational corridor with a number of stakeholders. The scale is small compared to the overall Project and other packages; this would need to be considered when developing the approach for a collaborative procurement with early contractor involvement.	DBB or CMGC
Schedule	The 4KYB package is not currently on the critical path for the Project; however, it will be a key risk to the Project if not executed within the planned timelines. The TJPA will develop a procurement plan in coordination with Caltrain for a collaborative model that involves a form of early contractor involvement. Caltrain has indicated JPB Board action will also be required for this work.	DBB or CMGC

Recommendation No. 4

- Affirm decision to procure two CMGC contracts:
 - Contract **No. 50-TS**: Track and Systems
 - Contract **No. 60-SF**: Station Fit-out, Salesforce Transit Center

Analysis

- Systems contractors have advised against mixing the Track and Systems and Station Fit-out scopes.
- CMGC for separate Salesforce Transit Center Fit-out work allows for pushing procurement out several months, reducing demands on TJPA procurement.
- Separate Track and Systems and Station Fit-out contracts provide better alignment with specialty contractor scope and experience.
- Operator engagement and authorities will be built into both contracts.

Questions?

