

Transbay Program

Documentation of Eligible Costs for CFD Bond Reimbursement

October 30, 2019



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Executive Summary

In 2017 and 2019, the City and County of San Francisco (City) authorized the sale of Community Facilities District (CFD) bonds to help finance the design and construction of the Salesforce Transit Center program. 82.6 percent of the bond proceeds are to be spent on costs incurred by the Transbay Joint Powers Authority (TJPA) related to the extension of Caltrain to the Transit Center and the rooftop park. The City and County of San Francisco's Office of Public Finance has requested documentation to substantiate that the TJPA has incurred costs related to the extension of Caltrain to the Transit Center and the rooftop park equal to or greater than \$357.5 million, the amount of CFD Bond reimbursements (including amounts used to repay City Financing principal) included in TJPA's Phase 1 budget.

From inception to June 30, 2019, the TJPA has incurred \$774.6 million in costs related to the construction of the below-grade train box and the rooftop park. Costs incurred for the train box total \$689.8 million. \$400 million of the train box costs have been funded with a grant from the Federal Railroad Administration (FRA), and are therefore ineligible for reimbursement with CFD bond proceeds. Park costs total \$84.7 million. This report demonstrates that the TJPA has incurred \$374.6 million in capital costs eligible for reimbursement with CFD bond proceeds. The following table summarizes the eligible costs.

Train Box and Park Costs Incurred by TJPA

	Total
Train Box Costs Incurred	\$689,828,101
Less Funding from FRA	(\$400,000,000)
<i>Subtotal: Train Box Costs</i>	<i>\$289,828,101</i>
Park Costs Incurred	\$84,748,497
<i>Subtotal: Park Costs</i>	<i>\$84,748,497</i>
Train Box and Park Costs Eligible for CFD Bond Reimbursement	\$374,576,598

As of June 30, 2019

History

In February 2005, the Federal Transit Administration (FTA) issued a Record of Decision for the Transbay Terminal / Caltrain Downtown Extension / Redevelopment Area project. This action allowed the TJPA to begin Preliminary Engineering activities for the new transit center and rail extension. In June 2005, the San Francisco Board of Supervisors adopted the Redevelopment Plan for the Transbay Terminal Project. The Redevelopment Plan will transform the area surrounding the new station and create a new Transbay neighborhood with homes, parks and retail, and serves as the foundation for the collection of property tax revenue to partially fund the transit center and DTX project.

In June 2006, the TJPA Board phased the Transit Center project in order to deliver transportation benefits to the public sooner. In general, Phase 1 consists of the temporary terminal, Transit Center building, ramp structures, and bus storage facility. Phase 2 includes construction of the Downtown Rail Extension, including a new Fourth and Townsend Street Caltrain station; completion of the Transit Center's train station, including a pedestrian connection to BART and Muni; and a new intercity bus facility. With the project's phasing, engineers developed a plan to build the Transit Center with a "top down" method wherein the above-grade building would be constructed first during Phase 1, and the below-grade rail levels would be excavated and built out during Phase 2.

In 2007, the TJPA selected Pelli Clarke Pelli Architects and Hines as the winners of the Design and Development competition. The winning design included the rooftop park to enhance the vibrancy of the new transit center and neighborhood.

In 2010, Federal Railroad Administration (FRA) awarded an ARRA grant to TJPA which allowed for the construction of the train levels under the Transit Center using a "bottom-up" construction method. This traditional "bottom-up" construction sequencing provided many benefits including substantial construction cost savings. Constructed as part of Phase 1, the "train box" is the shell of the train platform and concourse levels, and serves as the integrated foundation for the Transit Center. The full build-out of the underground rail levels will be part of the Phase 2 construction project. The costs funded by the FRA's \$400 million grant are not eligible for reimbursement with CFD bond proceeds.

The Transit Center District Plan was enacted by the City of San Francisco in August 2012 in order to allow upzoning of certain land parcels in the area surrounding the new Transbay Transit Center and to generate revenues to fund infrastructure in the Transbay neighborhood, including substantial revenues for the Transbay Program.

The Transit Center Community Facilities District (CFD) was established by the City and County of San Francisco in 2015. Special taxes are assessed on certain properties in the district, and the CFD is able to issue bonds to be paid back by the future stream of special tax payments. Pursuant to a Joint Community Facilities Agreement between the City and the TJPA, the Transbay Program will receive 82.6 percent of the total proceeds. Under the Joint Community Facilities Agreement between the TJPA and the City and County of San Francisco, the Transbay Facilities that are eligible to be funded are (i) the planning, design, engineering and construction of an extension of the Caltrain rail tracks to the Transit Center to accommodate Caltrain and California High Speed Rail, including the train components of the Transit Center building and associated systems (the

“Downtown Rail Extension” or “DTX”, including the train box), and (ii) the planning, design, engineering and construction of open space on the roof of the Transit Center.

In 2016, the TJPA, the City and County of San Francisco, and the Metropolitan Transportation Commission (MTC) entered into a short-term financing agreement (known as the “City Financing”) to fully fund the construction of the Phase 1 transit center project. Under the City Financing, the City would cause short-term variable rate obligations to be executed and delivered at the times and in the amounts necessary to meet required Phase 1 Project construction draws not met by other sources and provide such proceeds to TJPA for Phase 1 construction period funding. TJPA would provide Pledged Revenues (primarily net tax increment and pledged at parity to TIFIA for its loan to TJPA) as security for its obligations to repay the City for payments related to the short-term obligations. The amount of the City Financing was set at a maximum of \$260 million (including financing fees and expenses and potentially capitalized interest). Under the TIFIA Loan Agreement, as amended, TJPA cannot use more than \$242 million without TIFIA consent. To date, the TJPA has used \$103 million from the City Financing.¹ The 2019 CFD Bond issuance repaid the City for \$27 million, leaving an outstanding balance of \$76 million. The TJPA does not intend to draw additional City Financing funds.

The TJPA has paid ongoing City Financing interest with Pledged Revenues, and the balance of the City Financing principal will be repaid in part or in full primarily from CFD-backed bond proceeds eligible to be spent on Train Box and City Park costs. As explained above, the City Financing was used to finance costs of the Train Box and City Park.

In 2017 and 2019, the City and County of San Francisco issued a total of \$398,465,000 in bonds backed by the CFD special tax revenues. \$291,616,950 has been made available for train box and rooftop park eligible expenses, including repayment of the City Financing principal.

¹ The \$103 million includes Cost of Issuance of \$1,021,217. As explained elsewhere in this memorandum, neither CFD bond proceeds nor City Financing proceeds were available when the TJPA began paying for Train Box and Salesforce Park costs in 2010. As a result, the TJPA initially paid for certain Train Box and Salesforce Park costs with other funding sources (primarily land sale proceeds). In order to ensure that the City Financing can be refinanced in whole with CFD bond proceeds, the TJPA has re-allocated all of the City Financing proceeds to CFD-eligible expenditures on the Train Box and Salesforce Park, including related financing costs, and re-allocated to other funding sources (primarily land sale proceeds) the costs that are not CFD-eligible. This allocation did not require approval of any third parties and the allocation will be reflected in TJPA’s accounting system, which as of the date of this memorandum, has not been completed but TJPA expects to do so in the future.

CFD Bond Overview

As previously noted, under a Joint Community Facilities Agreement between the TJPA and the City and County of San Francisco, the Transbay Facilities that are eligible to be funded are (i) the planning, design, engineering and construction of an extension of the Caltrain rail tracks to the Transit Center to accommodate Caltrain and California High Speed Rail, including the train components of the Transit Center building and associated systems (the “Downtown Rail Extension” or “DTX”, including the train box), and (ii) the planning, design, engineering and construction of open space on the roof of the Transit Center.

The CFD Resolution of Formation (Board of Supervisors Resolution No. 350-14) authorizes the CFD to reimburse any costs advanced by the City, the landowner(s) in the CFD or any party for authorized facilities. The City issued CFD bonds in 2017 and in 2019. As noted in the Official Statements for the two bond issuances, the proceeds are expected to be used to “finance or reimburse a portion of the costs incurred for the planning, design, engineering and construction of the Train Box and Salesforce Park, both as described below.”

“Train Box. The core and shell of the two below-grade levels of the Salesforce Transit Center, collectively referred to as the “Train Box,” were built to accommodate the planned Downtown Rail Extension to extent the Caltrain trail tracks from 4th & King Streets to the Salesforce Transit Center. The bottom level will be the Train Station Platform and have three passenger platforms that will accommodate six train tracks for Caltrain and California High Speed Rail. The lower concourse is one level below grade and will serve as the passenger connection between the Transit Center building ground floor and the Train Station Platform. Space will be provided in the concourse for retail, ticketing and bike storage.

Salesforce Park. The Salesforce Transit Center’s roof is a 5.4 acre 1,400-foot long public elevated park (the “Salesforce Park”) that includes, an outdoor amphitheater, gardens, trails, open grass areas, and children’s play space, as well as a restaurant and café. The Salesforce Park serves as a “green roof” or “living” roof for the Salesforce Transit Center. It provides shade to much of the ground-level sidewalk when the sun is strongest and provides biological habitat for flora and fauna and public open space for transit passengers, neighborhood residents, and employees. It also acts as insulation for interior spaces, moderating heat build-up in warm weather and retaining heat during cooler weather. Unlike asphalt paving or dark colored roofing surfaces, planning on the green roof cools the surrounding environment and improves air quality by acting as a carbon sink. As a biological organism itself, the park helps to capture and filter the exhaust in the area and helps to improve the air quality of the neighborhood.”²

TJPA and City staff were aware that there were timing issues with the availability of CFD bond proceeds and TJPA’s need for construction dollars for the train box and the rooftop park. In June 2016 as preparations for the first CFD bond issuance were underway, TJPA and City staff

² City and County of San Francisco, Community Facilities District No. 2014-1, Special Tax Bonds Series 2019A and 2019B, Official Statement, February 7, 2019, p.8.

discussed the issue with bond counsel Nixon Peabody (representing TJPA) and Jones Hall (representing the City). As CFD bond proceeds were not initially available, TJPA advanced funds for CFD-eligible capital costs. Counsel agreed that documentation of the train box and park expenditures by TJPA was sufficient for reimbursement of the CFD-eligible expenditures. As permitted, the City reimbursed TJPA for CFD-eligible expenditures when CFD proceeds became available. TJPA previously provided documentation of previous Train Box and Salesforce Park expenditures to CCSF staff. This report provides additional detail for eligible costs incurred through June 30, 2019.



Train Box Costs

Capital costs related to the train box include design, construction, right of way, and support. The following table provides a summary of the train box costs incurred through June 30, 2019 that are eligible for reimbursement with CFD bond proceeds.

Summary of Train Box Capital Costs as of June 30, 2019

Scope	Award + Change Orders	Funded by FRA	CFD- Eligible Train Box Costs	Percent Related to Train Box
Design	168,953,957	44,136,948	29,845,370	43.8%
Construction	986,335,121	297,641,446	190,339,862	49.5%
Right of Way	205,616,597	0	14,396,875	7.0%
Support	383,045,872	58,221,606	55,245,995	29.6%
Total	1,743,951,547	400,000,000	289,828,101	39.6%

Note: The Award + Change Orders amounts reflect only those contracts with train box-related costs eligible for reimbursement with CFD bond proceeds. The Percent Related to Train Box includes costs Funded by FRA and CFD-Eligible Train Box costs.

Design

Both Phase 1 and Phase 2 include engineering and design activities related to the train box and the DTX. Design of the train box occurred in Phase 1, and DTX preliminary engineering activities which are currently underway are captured in Phase 2. The following table shows the Phase 1 train box engineering and design costs through June 30, 2019 that are eligible for reimbursement with CFD bond proceeds.

Train Box Design Costs as of June 30, 2019

Scope	Vendor	Award + Change Orders	Funded by FRA	CFD-Eligible Train Box Costs	Percent Related to Train Box
Design					
Preliminary Engineering	Pelli Clarke Pelli Architects	42,500,000	14,203,650	0	33.4%
Construction Documents	Pelli Clarke Pelli Architects	31,847,718	7,684,918	2,410,267	31.7%
Bid & Award Support	Pelli Clarke Pelli Architects	2,500,000	0	792,457	31.7%
Construction Administration	Pelli Clarke Pelli Architects	19,940,500	3,142,841	3,177,958	31.7%
Warranty Support	Pelli Clarke Pelli Architects	1,000,000	0	316,983	31.7%
Final Design Change Orders	Pelli Clarke Pelli Architects	62,611,848	16,700,250	19,515,884	57.8%
Train Box Design Geotechnical Testing	Webcor/Obayashi Joint Venture	3,631,821	0	3,631,821	100.0%
Permits & Fees	CCSF DBI, other	4,922,070	2,405,289	0	48.9%
Total Design		168,953,957	44,136,948	29,845,370	43.8%

Note: The Award + Change Orders amounts reflect only those contracts with rail-related costs eligible for reimbursement with CFD bond proceeds. The Percent Related to Train Box includes costs Funded by FRA and CFD-Eligible Train Box costs.

The contracts for the train box design are described below.

PRELIMINARY ENGINEERING, FINAL DESIGN, AND CONSTRUCTION DOCUMENTS

Vendor	Pelli Clarke Pelli Architects
Rail Costs for CFD Reimbursement	\$26,213,549
Total Award + Change Orders	\$160,400,066
Percent Rail to Total Contract	42.4%

Transit Center Building Design - the Architect provides professional design services through the completion of construction. Scope includes concept validation, schematic design, and design development phases.

The design costs are allocated to the train box based on the percentage of train box construction to total construction costs, or 31.7 percent. For Preliminary Engineering, FRA agreed to fund a larger share than the 31.7 percent; thus, TJPA is not seeking reimbursement of Preliminary Engineering costs from CFD bond proceeds. Change orders are individually identifiable between the train box and other costs, and are listed accordingly. For all other phases, the amounts eligible for reimbursement from CFD bond proceeds is the difference between the 31.7 percent share and the amount previously funded by FRA.

TRAIN BOX DESIGN GEOTECHNICAL TESTING

Vendor	Webcor/Obayashi Joint Venture
Rail Costs for CFD Reimbursement	\$3,631,821
Total Award + Change Orders	\$3,631,821
Percent Rail to Total Contract	100%

Scope includes development and execution of a detailed exploration, site investigation, and field testing program along with guidelines for appropriate exploration and testing methods. The results of the site investigation program are analyzed and evaluated, and subsurface sections

prepared to facilitate the design process. The field exploration program (boring tests) includes drilling, sampling and in situ (at the project site location). Actual borings tests will range in depth from 140 feet to 70 feet depending on the topography, rail profile and tunnel or box cross-section. Representative samples of the major soils strata and rocks will be selected for laboratory testing. The results of the laboratory tests will be reviewed, evaluated and summarized so that they can be readily used to develop geotechnical engineering parameters for the analysis and design.

PERMITS AND FEES

Vendor	City and County of San Francisco Departments
Rail Costs for CFD Reimbursement	\$0
Total Award + Change Orders	\$ 4,922,070
Percent Rail to Total Contract	48.9%

The San Francisco Department of Building Inspection (DBI), Fire Department, Public Works, and other governmental agencies provide plan check and inspection services as needed.

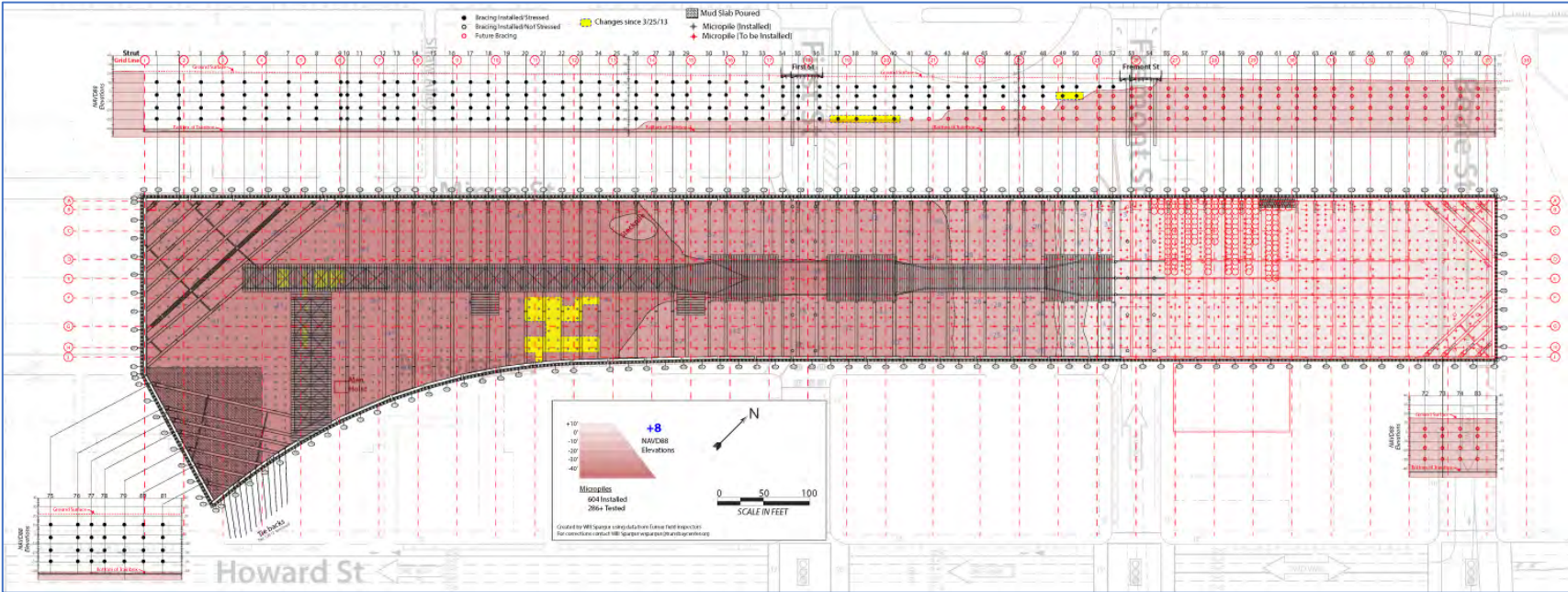
Construction

The construction of the train box was completed during Phase 1. The following table shows the various construction packages and the costs attributed to the train box through June 30, 2019.

Train Box Construction Costs as of June 30, 2019

Scope	Contract / Trade Package	Vendor	Award + Change Orders	Funded by FRA	CFD-Eligible Train Box Costs	Percent Related to Train Box
Construction						
Demolition	08-08	Evans Brothers	16,828,975	0	12,112,738	72.0%
Utility Relocation	various	Various	34,313,829	18,538,520	7,084,691	74.7%
Buttress, Shoring and Excavation	TG 03	Balfour Beatty Infrastructure	234,304,628	214,342,803	19,656,175	99.9%
Below Grade Concrete Work	TG 06	Shimmick Construction Company	125,237,886	40,806,775	78,492,719	95.3%
Structural Steel	TG 7.1	Skanska USA Civil	195,163,171	0	21,561,778	11.0%
Structural Concrete	TG 7.2	Shimmick Construction Company	62,004,991	13,196	24,917,879	40.2%
Plumbing	TG 10.2	Desert Mechanical	27,422,396	0	3,184,216	11.6%
HVAC	TG 10.3	Desert Mechanical	12,567,251	0	2,862,011	22.8%
Electrical, Communications, Security & Integrated Networks	TG 10.4	Fisk Electric Company	118,558,121	150,000	3,811,336	3.3%
Miscellaneous Other		Various	23,656,679	2,943,692	0	12.4%
CM/GC Fee		Webcor/Obayashi Joint Venture	78,270,517	20,448,372	10,724,130	39.8%
Performance and Payment Bond Premium		Webcor/Obayashi Joint Venture	11,750,875	0	4,408,060	37.5%
Permits, Fees, FF&E		Various	46,255,802	398,088	1,524,129	4.2%
Total Construction			986,335,121	297,641,446	190,339,862	49.5%

Note: The Award + Change Orders amounts reflect only those contracts with rail-related costs eligible for reimbursement with CFD bond proceeds. The Percent Related to Train Box includes costs Funded by FRA and CFD-Eligible Train Box costs.



Transit Center Excavation Progress, March 2013

The contracts for the construction of the train box are described below.

DEMOLITION

Vendor	Evans Brothers
Rail Costs for CFD Reimbursement	\$12,112,738
Total Award + Change Orders	\$16,828,975
Percent Rail to Total Contract	72.0%

Below grade demolition scope consists of deconstruction/recycling of basement walls, basement slabs, pile caps, ramp structures, hazardous waste off haul/remediation, and associated shoring.

UTILITY RELOCATION

Vendor	Various
Rail Costs for CFD Reimbursement	\$7,084,691
Total Award + Change Orders	\$34,313,829
Percent Rail to Total Contract	74.7%

Utility relocation work permanently relocated existing utilities to allow construction of the Transit Center and to facilitate the improvements required to bring the permanent power supply to the Transit Center. Utilities included sanitary, storm, and combined sewers; domestic water lines and hydrants; San Francisco Fire Department auxiliary water supply system lines and hydrants; Pacific Gas & Electric gas and electric lines; telecommunication lines; traffic signal lines; street lights; steam lines; and fiber-optic cable.

BUTTRESS, SHORING AND EXCAVATION (TG03)

Vendor	Balfour Beatty Infrastructure
Rail Costs for CFD Reimbursement	\$19,656,175
Total Award + Change Orders	\$ 234,304,628
Percent Rail to Total Contract	99.9%

Scope consists of the following: shoring, internal bracing, buttress, temporary access trestle, temporary cross-street decking, mass excavation, demolition, dewatering and tie-downs.

BELOW GRADE CONCRETE WORK (TG 06)

Vendor	Shimmick Construction Company
Rail Costs for CFD Reimbursement	\$78,492,719
Total Award + Change Orders	\$125,237,886
Percent Rail to Total Contract	95.3%

Major items of work include: concrete protection slab; waterproofing system; structural concrete substructure (concrete train box structure); all mechanical, electrical, plumbing, telecommunications, and utility connections; geothermal loop; and grounding system.

STRUCTURAL STEEL (TG 7.1)

Vendor	Skanska USA Civil
Rail Costs for CFD Reimbursement	\$21,561,778
Total Award + Change Orders	\$195,163,171
Percent Rail to Total Contract	11.0%

Structural steel work consists of the fabrication, shipment, erection, and welding of the steel-frame structure of the Transit Center. The steel fabrication stretches across multiple domestic foundries in the United States. Work includes the trial assembly of cast steel node connections to steel members at fabrication shops before installation on the project site.

STRUCTURAL CONCRETE (TG 7.2)

Vendor	Shimmick Construction Company
Rail Costs for CFD Reimbursement	\$ 24,917,879
Total Award + Change Orders	\$ 62,004,991
Percent Rail to Total Contract	40.2%

The superstructure concrete work consists of reinforced concrete elements for all structural slabs including the final lift of perimeter reinforced concrete foundation walls (fourth lift walls), the train box lid, and all structural slabs on the metal decks inclusive of the of the lower concourse and Level 1 (at grade) levels.

PLUMBING (TG 10.2)

Vendor	Desert Mechanical
Rail Costs for CFD Reimbursement	\$ 3,184,216
Total Award + Change Orders	\$ 27,422,396
Percent Rail to Total Contract	11.6%

The scope of work includes constructing the complete plumbing system. The major items of work consist of the general plumbing, including pumps, tanks, meters, gauges, piping, vibration isolation, and insulation, domestic and recycled water systems, drainage systems, greywater systems, a natural gas system, and fuel oil systems.

HVAC (TG 10.3)

Vendor	Desert Mechanical
Rail Costs for CFD Reimbursement	\$ 2,862,011
Total Award + Change Orders	\$12,567,251
Percent Rail to Total Contract	22.8%

The scope of work includes constructing the complete heating, ventilating and air conditioning systems. The major items of work consist of heating, ventilating and air conditioning equipment, panels, pumps, heat exchangers, air handlers, cooling towers, heat pumps, dampers, fans, valves, louvers, hydronic system, insulation, and all general piping and duct distribution.

ELECTRICAL, COMMUNICATIONS, SECURITY & INTEGRATED NETWORKS (TG 10.4)

Vendor	Fisk Electric Company
Rail Costs for CFD Reimbursement	\$ 3,811,336
Total Award + Change Orders	\$ 118,558,121
Percent Rail to Total Contract	3.3%

The scope of work under this package includes constructing the electrical, communications, security, and integrated network systems. The major items of work consist of general electrical provisions (switchgear, power distribution, equipment connections, meters, wire & cable, raceways & boxes, grounding, vibration isolation, seismic restraints, etc.); interior and exterior lighting and controls; communications infrastructure (conduits, ducts, raceways, panels, boxes, cabinets, fiber optics, cabling, support structures, etc.); emergency power and emergency communications systems; fire and life-safety systems; uninterruptable power system and automated transfer switch system; communications, safety and security systems; audio-video systems; public information, public address and paging systems; building management and control systems; energy management and monitoring; and construction temporary lighting and power.

MISCELLANEOUS OTHER

Vendor	Various
Rail Costs for CFD Reimbursement	\$0
Total Award + Change Orders	\$23,656,679
Percent Rail to Total Contract	12.4%

Various other construction trade packages included train box elements that were funded by FRA, but do not have additional costs eligible for reimbursement with CFD proceeds. These trade packages include Survey & Control, Temporary Power, Traffic Control Services, Site Maintenance Services, Metal Stairs, Fire Suppression, and the 301 Mission Screen Wall.

CM/GC FEE

Vendor	Webcor/Obayashi Joint Venture
Rail Costs for CFD Reimbursement	\$10,724,130
Total Award + Change Orders	\$ 78,270,517
Percent Rail to Total Contract	39.8%

The fee includes all of the general contractor's overhead, profit, and general conditions fee for administering and coordinating construction services.

PERFORMANCE AND PAYMENT BOND PREMIUM

Vendor	Webcor/Obayashi Joint Venture
Rail Costs for CFD Reimbursement	\$ 4,408,060
Total Award + Change Orders	\$11,750,875
Percent Rail to Total Contract	37.5%

Actual costs associated with the expense of performance and payment bonds for construction work.

PERMITS, FEES, FF&E

Vendor	Various
Rail Costs for CFD Reimbursement	\$1,524,129
Total Award + Change Orders	\$ 46,255,802
Percent Rail to Total Contract	4.2%

The San Francisco Department of Building Inspection (DBI), Fire Department, Public Works, and other governmental agencies provide plan check and inspections services as needed.

Right of Way

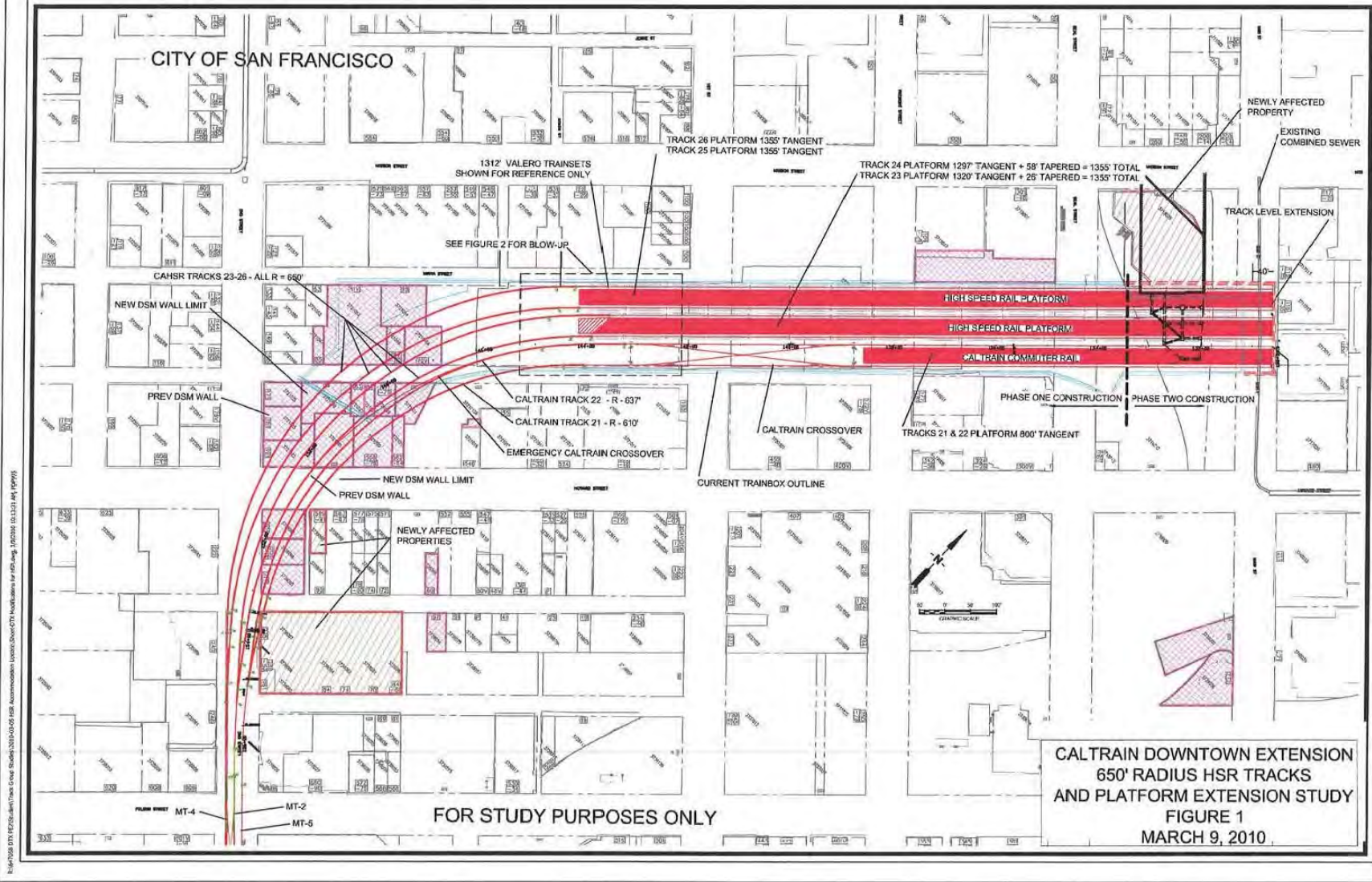
Construction of the train box required the acquisition of right of way. Several parcels have been acquired that were necessary to construct the train box and the Transit Center building. The cost of one of the properties, 85 Natoma, is attributed to the train box in its entirety. Right of way support costs include appraisals, relocation assistance, loss of business goodwill payments, and other expenses required by State and Federal right of way acquisition procedures.

The following table summarizes the right of way costs attributable to the train box. The image on the following page shows the parcels required for the train box and DTX.

Train Box Right of Way Costs as of June 30, 2019

Scope	Award + Change Orders	Funded by FRA	CFD- Eligible Train Box Costs	Percent Related to Train Box
Right Of Way				
85 Natoma	12,723,576	0	12,723,576	100.0%
Other ROW	188,612,244	0	0	0.0%
ROW Support	4,280,777	0	1,673,299	39.1%
Total Right of Way	205,616,597	0	14,396,875	7.0%

Note: The Award + Change Orders amounts reflect only those costs with rail-related costs eligible for reimbursement with CFD bond proceeds. The Percent Related to Train Box includes costs Funded by FRA and CFD-Eligible Train Box costs.



Support

Capital costs have been incurred for the oversight and support of the design and construction of the train box. The following table summarizes the support costs attributable to the train box through June 30, 2019.

Train Box Support Capital Costs as of June 30, 2019

Scope	Vendor	Award + Change Orders	Funded by FRA	CFD-Eligible Train Box Costs	Percent Related to Train Box
Support					
Construction Management Oversight	Turner	81,223,503	18,790,626	2,250,391	25.9%
Pre-Construction Services	Webcor/Obayashi Joint Venture	27,269,872	9,856,444	3,985,690	50.8%
Construction Reimbursable Costs - traffic control and other services	Webcor/Obayashi Joint Venture	14,101,058	4,214,582	4,867,894	64.4%
Project Management Project Controls	URS / AECOM	106,763,755	22,534,380	32,750,905	51.8%
TJPA Salaries, Benefits, Admin Costs	Various	65,990,452	9,600	11,391,115	17.3%
Other Professional Services	Various	87,697,232	2,815,974	0	3.2%
Total Support		383,045,872	58,221,606	55,245,995	29.6%

Note: The Award + Change Orders amounts reflect only those contracts with rail-related costs eligible for reimbursement with CFD bond proceeds. The Percent Related to Rail includes costs Funded by FRA and CFD-Eligible Train Box costs.

The support costs related to the train box are described below.

CONSTRUCTION MANAGEMENT OVERSIGHT

Vendor	Turner
Rail Costs for CFD Reimbursement	\$ 2,250,391
Total Award + Change Orders	\$ 81,223,503
Percent Rail to Total Contract	25.9%

Scope includes procurement support, contract administration, project communication, documentation, record keeping, cost and schedule management, technical support, environmental monitoring oversight, coordination with other agencies, administration of the construction contractor and demolition contracts, progress reporting, and quality assurance services (testing and inspection).

PRE-CONSTRUCTION SERVICES

Vendor	Webcor/Obayashi Joint Venture
Rail Costs for CFD Reimbursement	\$ 3,985,690
Total Award + Change Orders	\$ 27,269,872
Percent Rail to Total Contract	50.8%

Scope consists of: administration planning and management; building information modeling; construction operation planning; cost estimating; design review and constructability analysis; sustainability planning and analysis; schedule development and analysis; trade coordination; and trade work package planning and management.

REIMBURSABLE COSTS

Vendor	
Rail Costs for CFD Reimbursement	\$ 4,867,894
Total Award + Change Orders	\$14,101,058
Percent Rail to Total Contract	64.4%

Fees include actual, approved costs for incidentals such as reproduction of bid materials, permits and consumables not included by overhead or the scope of construction work.

PROJECT MANAGEMENT / PROJECT CONTROLS

Vendor	URS / AECOM
Rail Costs for CFD Reimbursement	\$ 39,581,565
Total Award + Change Orders	\$106,763,755
Percent Rail to Total Contract	58.2%

Services include project management, program coordination activities, and cost/schedule/status reporting. The services are in support of the Transit Center and Bus Ramps Design, and Construction projects. Activities include coordination with transit operators, public agencies, and other stakeholders; community outreach; program contracts administration; permit coordination; design coordination; design review; schedule and cost monitoring; and status reporting.

TJPA ADMINISTRATION

Rail Costs for CFD Reimbursement	\$11,391,115
Total Budget	\$65,990,452
Percent Rail to Total Budget	17.7%

TJPA staffing and administration costs have been allocated to the train box costs based on the proportion of the total construction costs attributed to the train box. Only the staff and administration costs incurred between March 2009 and September 2016 have been allocated to this line item, as this timeframe covers the award of the construction contract to Webcor and the completion of the below-grade steel and concrete work.

Park



The Transit Center features “Salesforce Park,” a public 5.4-acre rooftop park. Capital costs related to its design and construction are eligible for reimbursement with CFD Bond Proceeds. The following table summarizes the park costs by contract.

Park Capital Costs as of June 30, 2019

Scope	Trade Package	Vendor	Award + Change Orders	Park Costs	Percent Related to Park
Design					
Preliminary Engineering, Final Design, and Construction Documents		Pelli Clarke Pelli Architects	\$ 160,400,066	\$ 11,618,750	7.2%
Construction					
Concrete	TG 7.6	Concrete North Inc.	\$ 34,141,297	\$ 7,964,632	23.3%
Electrical, Communications, Security & Integrated Networks	TG 10.4	Fisk Electric Company	\$ 118,558,121	\$ 16,948,218	14.3%
Miscellaneous Metals	TG 7.3	Olson and Co. Steel	\$ 15,661,966	\$ 600,000	3.8%
Plumbing	TG 10.2	Desert Mechanical	\$ 26,754,626	\$ 4,991,068	18.7%
Roof Park Landscaping and Irrigation	TG 13.1	McGuire and Hester	\$ 32,870,637	\$ 32,470,009	98.8%
Roofing/Waterproofing	TG 13.2	Best Contracting Services	\$ 22,973,114	\$ 4,273,400	18.6%
Structural Steel	TG 7.1	Skanska USA Civil	\$ 195,163,171	\$ 1,648,006	0.8%
Temporary Facilities	TG 5.10	Anvil Builders	\$ 41,590,136	\$ 1,743,690	4.2%
CM/GC Fee		Webcor/Obayashi JV	\$ 78,270,517	\$ 2,490,724	3.2%
<i>Subtotal Construction</i>			<i>\$ 565,983,585</i>	<i>\$ 73,129,747</i>	<i>12.9%</i>
Total Park Costs Eligible for Reimbursement				\$ 84,748,497	

Note: The Award + Change Orders amounts reflect only those contracts with park-related costs eligible for reimbursement with CFD bond proceeds.

The contracts and trade packages for the design and construction of the park are described below.

PRELIMINARY ENGINEERING, FINAL DESIGN, AND CONSTRUCTION DOCUMENTS

Vendor	Pelli Clarke Pelli Architects
Park Costs	\$ 11,618,750
Total Award + Change Orders	\$ 160,400,066
Percent Park to Total Contract	7.2%

Transit Center Building Design - the Architect provides professional design services through the completion of construction. Scope includes concept validation, schematic design, and design development phases.

CONCRETE (TG7.6)

Trade Subcontractor	Concrete North, Inc.
Park Costs	\$ 7,964,632
Total Award + Change Orders	\$ 34,141,297
Percent Park to Total Contract	23.3%

The major items of work consist of furnishing and installing the following: all concrete topping slabs, curbs, stem walls, ramps and all associated accessories; all polished concrete; concrete protection slabs over roofing/waterproofing; all mechanical and electrical equipment pads; and all floor expansion joints and seismic joints.

ELECTRICAL, COMMUNICATIONS, SECURITY & INTEGRATED NETWORKS (TG10.4)

Trade Subcontractor Fisk Electric Company

Park Costs \$16,948,218

Total Award +
Change Orders \$118,558,121Percent Park to
Total Contract 14.3%

The scope of work under this package includes constructing the electrical, communications, security, and integrated network systems. The major items of work consist of general electrical provisions (power distribution, equipment connections, meters, wire & cable, raceways & boxes, grounding, vibration isolation, seismic restraints, etc.); interior and exterior lighting and controls; communications infrastructure (conduits, ducts, raceways, panels, boxes, cabinets, fiber optics, cabling, support structures, etc.); emergency power and emergency communications systems; fire and life-safety systems; communications, safety and security systems; audio-video systems; public information, public address and paging systems; building management and control systems; energy management and monitoring; and construction temporary lighting and power.

MISCELLANEOUS METALS (TG7.3)

Trade Subcontractor Olson and Co. Steel

Park Costs \$ 600,000

Total Award +
Change Orders \$ 15,661,966Percent Park to
Total Contract 3.8%

The scope of work includes designing, fabricating, and installing the handrails and guardrails that are not part of the metal stairs and ladders package, as well as metal covers, fences, metal plates/covers on walls, site metal fabrications, stair enclosure profiles, and miscellaneous secondary steel support members.

PLUMBING (TG10.2)

Trade Subcontractor	Desert Mechanical
Park Costs	\$ 4,991,068
Total Award + Change Orders	\$ 26,754,626
Percent Park to Total Contract	18.7%

The scope of work includes constructing the complete plumbing system. The major items of work consist of the general plumbing, including pumps, tanks, meters, gauges, piping, vibration isolation, and insulation, domestic and recycled water systems, drainage systems, and greywater systems.

ROOF PARK LANDSCAPING AND IRRIGATION (TG13.1)

Trade Subcontractor	McGuire and Hester
Park Costs	\$ 32,470,009
Total Award + Change Orders	\$ 32,870,637
Percent Park to Total Contract	98.8%

The scope of work includes furnishing and installing all landscaping and irrigation for the rooftop park of the transbay transit center building including hardscape and site furnishings. Major items of work includes: substructure; hardscape; contract grow and acclimatization; landscaping; maintenance; utility corridors; drainage and irrigation, site furnishings such as benches, seating and tables; bus fountain artwork; and play structure.

ROOFING & WATERPROOFING (TG13.2)

Trade Subcontractor	Best Contracting Services
Park Costs	\$ 4,273,400
Total Award + Change Orders	\$22,973,114
Percent Park to Total Contract	18.6%

The TG13.2 trade subcontractor is responsible for furnishing and installing the PVC (polyvinyl chloride) roofing at the rooftop park, sheet waterproofing over the train box lid, PVC waterproofing, thermoplastic water tank liners, crystalline concrete waterproofing, floor coatings, repellent coatings, joint sealants, and sheet metal flashing and trim.

STRUCTURAL STEEL (TG7.1)

Trade Subcontractor	Skanska USA Civil
Park Costs	\$1,648,006
Total Award + Change Orders	\$195,163,171
Percent Park to Total Contract	0.8%

Structural steel work consists of the fabrication, shipment, erection, and welding of the steel-frame structure of the Transit Center. The steel fabrication stretches across multiple domestic foundries in the United States.

TEMPORARY FACILITIES (TG5.10)

Trade Subcontractor	Anvil Builders
Park Costs	\$ 1,743,690
Total Award + Change Orders	\$ 41,590,136
Percent Park to Total Contract	4.2%

The original rooftop park pathway, composed of crushed granite, did not perform as required and needed to be replaced. This work was awarded in May under an existing trade package. The trade subcontractor demolished the old pathway, replaced it with a new concrete pathway, and applied a sealant in time for the reopening of the transit center in July.

CM/GC FEE

Trade Subcontractor	Webcor/Obayashi Joint Venture
Park Costs	\$ 2,490,724
Total Award + Change Orders	\$ 78,270,517
Percent of Total	3.2%

The fee includes all of the general contractor's overhead, profit, and general conditions fee for administering and coordinating construction services.