

THIS PRINT COVERS CALENDAR ITEM NO. : 10.5

**SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY**

DIVISION: Capital Programs and Construction

BRIEF DESCRIPTION:

Authorizing the Director of Transportation to execute Modification No. 2 to Contract No. 1293, Fall Protection and Disconnect Switch Project, with Cal State Constructors, Inc., for design changes to the catwalk platforms in the amount of \$610,545.94; for adjustment of the final bid quantities in order to close out the Contract in the amount of \$799,793.75, resulting in a net reduction of \$189,247.81, for a final Contract amount of \$6,780,705.14; and retroactively extending the term of the Contract by 121 days, for a revised term of 761 days.

SUMMARY:

- On February 21, 2017, the SFMTA Board of Directors awarded Contract No. 1293, Fall Protection and Disconnect Switch Project (Contract), to Cal State Constructors, Inc. (Contractor) to install fall arrest systems and disconnect systems at multiple SFMTA maintenance facilities, in the amount of \$6,647,000, and for a term of 420 days to substantial completion.
- This Modification is for design changes to catwalk platforms at Cameron Beach and Metro Green yards including all direct and indirect costs and a reasonable profit to the contractor.
- This Modification also adjusts all bid item quantities to close out the contract.

ENCLOSURES:

1. SFMTAB Resolution
2. Contract Modification No. 2
3. Project Budget and Financial Plan

APPROVALS:

DIRECTOR 

SECRETARY 

DATE

December 31, 2019

December 31, 2019

ASSIGNED SFMTAB CALENDAR DATE: January 7, 2020

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PURPOSE

The purpose of this calendar item is to authorize the Director of Transportation to execute Modification No. 2 to Contract No. 1293, Fall Protection and Disconnect Switch Project, with Cal State Constructors, Inc., for design changes to the catwalk platforms in the amount of \$610,545.94; for adjustment of the final bid quantities in order to close out the Contract in the amount of \$799,793.75, resulting in a net reduction of \$189,247.81, for a final Contract amount of \$6,780,705.14; and retroactively extending the term of the Contract by 121 days, for a revised term of 761 days .

STRATEGIC PLAN GOALS AND TRANSIT FIRST POLICY PRINCIPLES

This action supports the following goals and objectives in the SFMTA’s Strategic Plan and Transit First Policy Principles:

Strategic Plan Goals/Objectives:

Goal 1: Create a safer transportation experience for everyone.

Objective 1.2: Improve the safety of the transit system.

Goal 2: Make transit and other sustainable modes of transportation the most attractive and preferred means of travel.

Objective 2.1: Improve transit service.

Goal 4: Create a workplace that delivers outstanding service.

Objective 4.2: Improve the safety, security, and functionality of SFMTA work environments.

Transit First Policy Principles:

1. To ensure quality of life and economic health in San Francisco, the primary objective of the transportation system must be the safe and efficient movement of people and goods.
2. Public transit, including taxis and vanpools, is an economically and environmentally sound alternative to transportation by individual automobiles. Within San Francisco, travel by public transit, by bicycle and on foot must be an attractive alternative to travel by private automobile.

DESCRIPTION

To create more space and improve accessibility for passengers, public transit vehicles are being designed with power, fuel, cooling, and electrical systems on the vehicle roof rather than at the back or bottom of the vehicles. For SFMTA, this transit industry trend impacts the maintenance operations for the electric trolley bus and light rail vehicle (LRV) fleets. Gaining access to the vehicle roof can create a fall hazard for maintenance staff working atop these vehicles. Fall protection systems are used to address these hazards by providing safe access that is compliant with California Division of Occupational Safety and Health (Cal/OSHA) standards, creating a safer work environment for SFMTA employees.

On February 21, 2017, the SFMTA Board of Directors adopted Resolution No. 170221-016, which awarded the Contract to Cal State Constructors, Inc., to install fall arrest systems and disconnect systems at multiple SFMTA maintenance facilities, in the amount of \$6,647,000, and a term of 420 days to substantial completion.

The SFMTA issued the Notice to Proceed with the work effective April 24, 2017. On May 24, 2019, the SFMTA declared substantial completion. Punch list work was completed on July 24, 2019.

The Contractor installed fall protection at Potrero Yard, Metro Green, Cameron Beach, Muni Metro East, Duboce Yard, and at the West Portal Station roof structure. Some of these facilities had inadequate fall protection systems, while others had no systems in place. The project also addressed work areas where workspace is limited and does not readily allow for the use of portable fall protection safety equipment, such as a portable platform.

The project also included the replacement or addition of several overhead contact system (OCS) disconnect switches. The OCS transmits electrical energy to trolley buses and LRVs to make them run. Maintenance yards that service LRVs, trolley buses and historic streetcars all have overhead lines in their maintenance bays. Disconnect switches are used to ensure that an electrical circuit is completely de-energized for service or maintenance and allows maintenance staff to power down energized overhead lines in order to safely access the rooftops of transit vehicles.

Scope of Contract:

The work that was performed included the following:

- Potrero Yard: Installation of new dual rail ceiling systems, including installation of steel rails and mounting brackets on the existing building structure and new disconnect switches to work in conjunction with the dual rail systems.
- Metro Green and Cameron Beach: Installation of new framing supports, guard rails, swing

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gates, entry gates and modifications to the existing platforms. New disconnect switches to work in conjunction with the new dual rail systems.

- Muni Metro East: Installation of a stationary platform extension to reduce the gap between the elevated platform and the LRV roof.
- Duboce Yard: Infill of the pit area for installation of a new slab foundation to allow the use of a portable platform. Installation of a new disconnect switch to work in conjunction with the fall protection system. Installation of lighting within the pit area.
- West Portal Station Roof Structure: Installation of a new fall arrest anchoring system at the sloped concrete slab to allow for gutter cleaning.
- Testing, Training, and Start-up. A comprehensive program for testing, training, and start-up of equipment installed under the Contract, including preparing maintenance manuals, providing training for SFMTA's maintenance personnel, completing testing requirements, and preparing updates to the SFMTA's Standard Operating Procedures.

Contract Modification No. 1

During the implementation of the Contract, the SFMTA Traction Power Group updated the Standard Operating Procedure (SOP) to improve safe access to LRV and trolley bus roof decks during regular maintenance activities. The new SOP required revisions to the design and installation of the new OCS disconnect switches

Additional time was needed to design, review, and implement the product data and shop drawings for the new disconnect switches, as well as time to fabricate and procure the equipment. This work impacted the critical path and postponed the substantial completion date and resulted in additional costs. On October 16, 2019, the Director of Transportation executed Contract Modification No. 1 to extend the term of the Contract by 220 days, for a new term of 640 days to substantial completion, and to increase the Contract amount by \$322,952.95, for a total Contract amount of \$6,969,952.95.

Contract Modification No. 2

After new fall protection, catwalks, and guardrails were installed at Metro Green and Cameron Beach yards, SFMTA staff observed that the new installations would not provide safe access to the tops of historic street cars and new LRV4s as required by Cal/OSHA, and adjustments to the design were necessary. At Cameron Beach, there were large gaps between the catwalks and the street car roofs that were a hazard for maintenance staff. At Metro Green, the new catwalks and guardrails conflicted with heating, ventilation and air conditioning (HVAC) units on the LRV4 roof, preventing staff safe access for maintenance work. Contract Modification No. 2 compensates the contractor for direct and indirect costs resulting from these design changes, including materials, design, installation, guardrails and gates, the cost of additional field

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supervision, the cost of additional insurance and bonding, and any and all incidental costs to perform this work. The resulting costs were \$161,587.21 for the work at Cameron Beach and \$335,086.90 for work at Metro Green.

This work also increased the Contract duration by 121 days and provides compensable delay costs associated with the 121 days, including field office and home office overhead, Contractor's mark-up, and profit, resulting in an additional cost of \$113,871.83. The total cost for the design changes is \$610,545.94.

Contract Modification No. 2 also finalizes all Contract bid item quantities as part of the Contract close out process. Contract bid item quantities are adjusted to reflect actual quantities and amounts of work the Contractor provided versus what was estimated at the start of the Contract. This adjustment results in a reduction of the Contract amount of \$799,793.75. Therefore, the net cost impact for Contract Modification No. 2 is a reduction of \$189,247.81.

STAKEHOLDER ENGAGEMENT

All work on the Contract was performed within the SFMTA's maintenance facilities. The work did not generate loud noise or debris that would impact the public. As such, no external outreach effort was required for the Project except to provide updates to the offices of the Supervisors in the respective districts.

For internal outreach, the Project provided information to staff at each division (Potrero Yard, Muni Metro East, Green Rail, Cameron Beach, Duboce Yard and West Portal) digitally via the "In The Know" newsletter, at monthly safety meetings, and distributed posters and flyers. Staff worked with each facility Superintendent to coordinate the work in order to maintain operation of the facility during the construction period.

ALTERNATIVES CONSIDERED

There is no alternative to the design changes required for the fall protection catwalks and guardrails at Cameron Beach and Metro Green yards, which were necessary to comply with Cal/OSHA regulations. If the work associated with the design change had been postponed to a later time, the SFMTA would be in violation of Cal/OSHA rules.

FUNDING IMPACT

The Project's total cost is approximately \$14 million and is fully funded by Proposition K sales tax funds administered by the San Francisco County Transportation Authority.

Since Contract Modification No. 2 reduced the Contract amount, no additional funds are required for the project budget.

See the enclosed Project Budget and Financial Plan.

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ENVIRONMENTAL REVIEW

On December 23, 2019, the SFMTA, under authority delegated by the Planning Department, determined that the Installation of Fall Protection Systems is not a “project” under the California Environmental Quality Act (CEQA) pursuant to Title 14 of the California Code of Regulations Sections 15060(c) and 15378(b).

A copy of the CEQA determination is on file with the Secretary to the SFMTA Board of Directors and is incorporated herein by reference.

OTHER APPROVALS RECEIVED OR STILL REQUIRED

The SFMTA’s Contract Compliance Office has determined that the contractor has complied with the Local Business Enterprise participation goal of 30% for the Contract.

The City Attorney’s Office has reviewed this calendar item.

No other approvals are required for this Contract Modification to be executed.

RECOMMENDATION

Staff recommends that the SFMTA Board of Directors authorize the Director of Transportation to execute Modification No. 2 to Contract No. 1293, Fall Protection and Disconnect Switch Project, with Cal State Constructors, Inc., for design changes to the catwalk platforms in the amount of \$610,545.94; for adjustment of the final bid quantities in order to close out the Contract in the amount of \$799,793.75, resulting in a net reduction of \$189,247.81, for a final Contract amount of \$6,780,705.14; and retroactively extending the term of the Contract by 121 days, for a revised term of 761 days.

SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
BOARD OF DIRECTORS

RESOLUTION No. _____

WHEREAS, On February 21, 2017, the SFMTA Board of Directors adopted Resolution No. 170221-016, awarding Contract No. 1293, Fall Protection and Disconnect Switch Project, to Cal State Constructors, Inc., to install fall arrest systems and disconnect systems at multiple SFMTA maintenance facilities, in the amount of \$6,647,000, and for a term of 420 days to substantial completion; and,

WHEREAS, On April 24, 2017, the SFMTA issued a written notice to proceed with the work; and,

WHEREAS, On October 16, 2019, the Director Transportation executed Contract Modification No. 1 to compensate the Contractor for direct and indirect costs resulting from a design change to 26 overhead contact system (OCS) disconnect switches, increasing the Contract amount by \$322,952.95, for a total Contract amount of \$6,969,952.95, and extending the term of the Contract by 220 days, for a new term of 640 days; and,

WHEREAS, SFMTA staff identified fall protection systems that did not meet Cal/OSHA requirements for safe access to roof tops of LRV4s and historic streetcars during maintenance activities, requiring revisions to the design and installation of the new fall protection catwalks and guardrails at Cameron Beach and Metro Green yards; and,

WHEREAS, Additional contractor effort was needed to design, procure and install corrections to the fall protection catwalks and guardrails, increasing the Contract duration by 121 days, and a cost increase of \$610,545.94, which includes all direct and indirect costs for the added work, including field office and home office overhead and profit; and,

WHEREAS, As part of the contract closeout process, Contract bid item quantities are adjusted to reflect actual quantities and amounts of work the Contractor provided versus what was estimated at the start of the Contract; and,

WHEREAS, This adjustment results in a decrease to the Contract amount of \$799,793.75; and,

WHEREAS, The SFMTA's Contract Compliance Office has reviewed this Contract Modification and has determined that the Contractor has complied with the Local Business Enterprise participation goals of the Contract; and,

WHEREAS, On December 23, 2019, the SFMTA, under authority delegated by the Planning Department, determined that the Installation of Fall Protection Systems is not defined as a "project" under the California Environmental Quality Act (CEQA) pursuant to Title 14 of the California Code of Regulations Sections 15060(c) and 15378(b); and,

WHEREAS, A copy of the CEQA determination is on file with the Secretary to the SFMTA Board of Directors and is incorporated herein by reference; now, therefore, be it

RESOLVED, That the San Francisco Municipal Transportation Agency Board of Directors authorizes the Director of Transportation to execute Modification No. 2 to Contract No. 1293, Fall Protection and Disconnect Switch Project, with Cal State Constructors, Inc., for design changes to the catwalk platforms in the amount of \$610,545.94; for adjustment of the final bid quantities in order to close out the Contract in the amount of \$799,793.75, resulting in a net reduction of \$189,247.81, for a final Contract amount of \$6,780,705.14; and retroactively extending the term of the Contract by 121 days, for a revised term of 761 days.

I certify that the foregoing resolution was adopted by the San Francisco Municipal Transportation Agency Board of Directors at its meeting of January 7, 2020.

Secretary to the Board of Directors
San Francisco Municipal Transportation Agency

CONTRACT MODIFICATION NO. 02

**San Francisco Municipal Transportation Agency Contract No. 1293
Fall Protection and Disconnect Switch Project**

Contractor: Cal State Constructors, Inc.
246 Second St. Suite 808
San Francisco, CA

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The Contract is modified as follows:

1. Scope of Work

CM-2.A	<p>Design Change to Cameron Beach Lifeline System and Metro Green Platform Changes:</p> <ul style="list-style-type: none">• Revise design to the Cameron Beach catwalk due to safety concerns regarding the clearance between streetcar rooftop and the catwalk system. Proposed Contract Change (PCC) #005 Approval Form and RE Letter #031 R1 are incorporated for reference. (\$161,587.21)• Revise design to the Metro Green newly installed platform, guardrails and gates, to resolve accessibility conflicts for the LRV4 car on Metro Green Track 5, 6, 7 & 8. PCC #006 Approval Form and RE Letter #032 and #035 are incorporated for reference. (\$335,086.90) <p>The lump sum amount includes all costs for these design revisions, including materials, design, installation, guardrails and gates, cost of additional field supervision, cost of additional insurance and bond, and any and all incidental costs to perform this work.</p> <p>This work also increases the Contract duration by 121 Days and provides compensable delay costs associated with the 121 Days, including field office and home office overhead, all contractor's mark-up, and profit. (\$113,871.83)</p> <p>CM- 2.A Contract Increase: \$610,545.94</p>
CM-2.B	<p>Finalizing all Contract Bid Item Quantities for Close Out: The estimated Contract bid item quantities are adjusted to reflect actual quantities and amounts of Work the Contractor provided, furnished and installed, as listed on the attached Engineer's Final Quantity Summary, which decreases the Contract amount by \$799,793.75.</p> <p>CM- 2.B Contract Decrease: \$799,793.75</p>

2. The following new Pay Items are added to the Contract:

CM-2.A	Design Change to Cameron Beach Lifeline System and Metro Green Platform Changes	Lump Sum	\$610,545.94
CM-2.B	Finalizing all Contract Bid Item Quantities for Close-out	Lump Sum	-\$799,793.75

Total Amount of this Contract Modification: Decrease (\$189,247.81)

Previous Total of Contract: \$6,969,952.95

New Revised Total of Contract: \$6,780,705.14

Total Contract Time added by this Contract Modification:	121 Days
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Previous Contract Substantial Completion Date: 01/23/19

Current Contract Substantial Completion Date: 05/24/19

3. This Modification is made in accordance with Articles 6 and 7 of the Contract General Provisions.

4. Except as provided herein all previous terms and conditions of the Contract remain unchanged.

5. Contractor acknowledges and agrees that the compensation stated herein for the Additional Work described above shall be full accord and satisfaction of all current and prospective costs incurred in connection with Contractor's performance of the Additional Work under this Contract Modification, without limitation, including any and all markups and overhead. Contractor releases the City from all claims, for which full accord and satisfaction is made, as set forth above. If this modification involves the granting of an extension of time, with or without cost, Contractor releases the City from all claims and costs associated with such extension of time. Such costs may include, but are not limited to, costs for labor, materials, equipment, and disruption, lost productivity, escalation, delay, extended overhead, administration and extended performance time.

In Witness Whereof, the parties have executed this Modification in San Francisco, California, as of this day:
_____.

Cal State Constructors, Inc.

**CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY**

By: _____
Alan Ko
Chief Finance Officer / Chief Operations Officer

By: _____
Jeffrey P. Tumlin
Director of Transportation

Authorized By:

MUNICIPAL TRANSPORTATION AGENCY
BOARD OF DIRECTORS

Resolution No. _____

Adopted: _____

Attest:

Secretary
SFMTA Board of Directors

APPROVED AS TO FORM:
Dennis J. Herrera, City Attorney

By: _____
Robin M. Reitzes
Deputy City Attorney

ENCLOSURE 3

Fall Protection and Disconnect Switch Project

Project Budget and Financial Plan

Cost	Amount
Conceptual Engineering Phase Staff Support (SFMTA and Other Dept. Services)	\$495,044
Detail Design Phase Staff Support (SFMTA and Other Dept. Services)	\$808,473
Construction Phase Construction Contract, Contingency, and Staff Support	\$12,656,397
Total Cost	\$13,959,914

Funding	Amount
San Francisco County Transportation Authority Proposition K Sales Tax	\$13,959,914
Total Funding	\$13,959,914