## THIS PRINT COVERS CALENDAR ITEM NO.: 10.3

## SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY

#### **DIVISION:** Capital Programs and Construction

#### **BRIEF DESCRIPTION:**

Authorizing the Director of Transportation to execute Modification No. 1 to Contract No. 1293, Fall Protection and Disconnect Switch Project, with Cal State Constructors, Inc., to compensate the Contractor for direct and indirect costs resulting from a design change to 26 overhead contact system (OCS) disconnect switches, increasing the amount by \$322,952.95, for a total amount not to exceed \$6,969,952.95, and retroactively extending the term by 220 days, for a total term of 640 days through January 23, 2019.

### **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 includes costs associated with incorporating a design change for the 26 OCS Disconnect Switches, direct material costs, and indirect costs for the time extension, which include costs for renting an office trailer, storage containers, and office equipment; utilities, other facilities, additional insurance and bond, taxes, contractor's mark-up, and profit.

#### **ENCLOSURES:**

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

APPROVALS:	DATE
DIRECTOR <u>100</u>	September 10, 2019
SECRETARY R. Boomer	September 9, 2019

ASSIGNED SFMTAB CALENDAR DATE: September 17, 2019

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## PURPOSE

The purpose of this calendar item is to authorize the Director of Transportation to execute Modification No. 1 to Contract No. 1293, Fall Protection and Disconnect Switch Project, with Cal State Constructors, Inc., to compensate the contractor for direct and indirect costs resulting from a design change to 26 OCS disconnect switches, increasing the amount by \$322,952.95, for a total amount not to exceed \$6,969,952.95, and extending the term by 220 days, for a total term of 640 days through January 23, 2019.

## 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.

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## 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. This creates a fall hazard for maintenance staff working atop these vehicles. Fall protection systems are used to address these hazards. As such, the objectives of this project are to provide compliant fall protection systems and 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 tight and limited and does not readily allow for the use of portable fall protection safety equipment, such as a portable platform.

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

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• 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 startup 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.

The former SOP requires that vehicle maintenance staff schedule traction power staff to confirm the shut-off of OCS power and ground the OCS system prior to maintenance personnel working adjacent and near OCS lines. The grounding process removes any residual electrical current in the OCS system and is necessary to prevent potential injury to staff.

With the redesigned OCS disconnect switches installed, the grounding operation goes from a manual operation done by certified staff to an automatic mechanical operation, thereby decreasing the opportunity for human error and increasing safety.

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 critical path impact postponed the substantial completion date from June 17, 2018 to January 23, 2019, increasing the contract duration by 220 days, for a new term of 640 days. A future no-cost Modification will be issued to close out the Contract and add 120 more days to the substantial completion date as a result of unknown site conditions discovered during construction. Splitting the overall time extension into two Modifications allows the SFMTA to issue payment to the Contractor for Modification No. 1 scope more quickly.

The resulting cost increase of \$322,952.95 includes costs associated with incorporating a design change for the 26 OCS disconnect switches, direct material costs, and indirect costs, which includes rental costs for the office trailer, rental of storage containers, office equipment, utilities, other facilities, cost of additional insurance and bond, taxes, contractor's mark-up, and profit

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associated with direct and indirect costs.

## 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 change required for the 26 OCS disconnect switches to comply with the updated SOP of the Traction Power Controls Unit. If the work associated with the design change were to be postponed to a later time, the SFMTA would be in violation of its own updated SOP and CalOSHA 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.

Contract Modification No. 1 will be funded through existing Project construction funds with no impact to overall project budget.

See enclosed Project Budget and Financial Plan.

#### **ENVIRONMENTAL REVIEW**

On April 20, 2015, 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.

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## OTHER APPROVALS RECEIVED OR STILL REQUIRED

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.

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. 1 to Contract No. 1293, Fall Protection and Disconnect Switch Project, with Cal State Constructors, Inc., to compensate the Contractor for direct and indirect costs resulting from a design change to 26 OCS disconnect switches, increasing the Contract amount by \$322,952.95, for a total amount not to exceed \$6,969,952.95, and retroactively extending the Contract term by 220 days for a total term of 640 days through January 23, 2019.

#### 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 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, The SFMTA updated its Standard Operating Procedure (SOP) to improve safe access to LRV and trolley bus roof decks during regular maintenance activities, requiring revisions to the design and installation of the new overhead contact system (OCS) disconnect switch units; and,

WHEREAS, Additional time was needed to design, review, and install the product data and shop drawings for the disconnect switches, as well as time to fabricate and procure the material, increasing the Contract duration by 220 days; and,

WHEREAS, The resulting cost increase of \$322,952.95 includes all direct and indirect costs associated with incorporating the design change for the 26 OCS disconnect switches, including field office and home office overhead; 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 April 20, 2015, 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. 1 to Contract No. 1293, Fall Protection and Disconnect Switch Project, with Cal State Constructors, Inc., to compensate the Contractor for direct and indirect costs resulting from a design change to 26 overhead contact system disconnect switches, increasing the amount by \$322,952.95, for a total amount not to exceed \$6,969,952.95, and retroactively extending the term by 220 days, for a total term of 640 days through January 23, 2019.

I certify that the foregoing resolution was adopted by the San Francisco Municipal Transportation Agency Board of Directors at its meeting of September 17, 2019.

Secretary to the Board of Directors San Francisco Municipal Transportation Agency

## **CONTRACT MODIFICATION NO. 01**

## 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 1 of 3

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The Contract is modified as follows:

1. Scope of Work

CM-1 Proposed Contract Change #003 – Update design for OCS Disconnect Switches - Revise design to 26 Overhead Catenary System Disconnect Switches (OCS Disconnect Switches) resulting from changes made to the SFMTA Traction Power Group Standard Operating Procedure (SOP), as specified on SFMTA PCC#003 Approval Form and RE Letter #011, which are incorporated by reference.
The lump sum includes costs for direct material and equipment costs to furnish and install the 26 newly designed disconnect switches. The lump sum also includes all indirect costs associated with 220 Days of compensable delay, including field office and home office overhead, and all contractor's mark-up, and profit.

Total Contract Increase:

\$322,952.95

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

CM-1	Proposed Contract Change #003 – Update design to upd OCS Disconnect Switch; Costs for Time Extension	late Lump Sum	\$322,952.95
	Total Amount of this Contract Modification:	Increase	\$322,952.95
	Previous Total of Contract:		
	New Revised Total of Contract:		
	Total Contract Time added by this Contract Modification:   220		220 Days
	Previous Contract Substantia	al Completion Date:	06/17/18
	Current Contract Substantia	al Completion Date:	01/23/19

- 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 hereby 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 of \_\_\_\_\_.

#### Cal State Constructors, Inc.

By: \_\_\_\_\_

Alan Ko Chief Finance Officer / Chief Operations Officer

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

By: \_\_\_\_\_

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

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