STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

CONTRACT CHANGE ORDER MEMORANDUM

TO: Tony Anziano, Program Manager /	FILE: E.A. 04 - 0120F4
	CO-RTE-PM SF-80-13.2/13.9
FROM: Darryl Schram, Senior TE	FED. NO. No
CCO#: 303 SUPPLEMENT#: 0 Category Code: CHPT	CONTINGENCY BALANCE (incl. this change) $24,619,839.86
COST: $360,767.00 INCREASE ☑ DECREASE ☐	HEADQUARTERS APPROVAL REQUIRED? ☑ YES ☐ NO
SUPPLEMENTAL FUNDS PROVIDED: $0.00	IS THIS REQUEST IN ACCORDANCE WITH ENVIRONMENTAL DOCUMENTS? ☑ YES ☐ NO
CCO DESCRIPTION: Additional Bikepath Field Work	**PROJECT DESCRIPTION:** CONSTRUCT SELF-ANCHORED SUSPENSION BRIDGE

Original Contract Time:	Time Adj. This Change:	Previously Approved CCO Time Adjustments:	Percentage Time Adjusted: (including this change)	Total # of Unreconciled Deferred Time CCO(s): (including this change)
2490 Day(s)	0 Day(s)	630 Day(s)	25 %	2

THIS CHANGE ORDER PROVIDES FOR:

Perform additional field work to install revised bikepath panels including, but not limited to:

1)Adjust bikepath panels, field weld threaded studs, and adjust E2/E3 traveler rail connection plates between Panel Point (PP) 125 and Hinge A.

2)Increase threaded stud weld size at PP 9 through 47.

3)Furnish and install PTFE sheeting at PP 9 through 51.

4)Furnish extra nut and hardened washer for bikepath anchor studs. Installation is included in CCO 211.

5)Furnish and install 32 mm threaded studs at PP 117 and 121 cantilever beams and 18 additional threaded studs at PP 127 and 128 cantilever beams. Cleaning and painting of stud welds is included in CCO 186.

6)Furnish larger elastomeric sleeves for PP 117 and 121. Installation of elastomeric sleeves is included in CCO 186.

7)Furnish and install elastomeric sleeves at PP 127.

8)Furnish and install 40 mm thick steel ring plates, bumpers, and steel reinforced elastomeric shims with HDPE epoxy and 22 mm studs at PP 127 and 128.

9)Grout the shear rings at PP 128.

10)Furnish and install shim plates under emergency access gate tracks.

11)Caulk the lap in the E2/E3 traveler rails at the top and bottom seams.

12)Paint the following in accordance with Special Provisions Section 10-1.69 "Clean and Paint Structural Steel":
- o Stud welds at PP 9 through 47
- o Ring plate welds and bumpers at PP 127 and 128
- o Caulked E2/E3 traveler rail seams
- o Chains and shackles at PP 128
- o Studs for shims at PP 127 and 128
- o Cover plates over grout tubes at PP 128

Contract Change Order (CCO) 99 "Bikepath Details" revised bikepath panels' fabrication. This change order will provide for the additional field work needed to install the revised bikepath panels.

1)Shims will be installed and studs will be field welded on bikepath panels, additional internal stiffeners and bolted connections will be installed on traveler rail connection plates, and a trial fit-up will be performed in order to adjust the placement of the SAS bikepath during installation to align with the as-built Skyway bikepath.

2)The threaded stud weld size was increased to improve the behavior under a seismic event. This work was implemented at PP 9-47. However CCO 186 "Bikepath Stud Issue" redesigned the studs in the cantilever beams. This change order will pay for increased stud welds at PP 9-47 that were installed before CCO 186 removed and replaced the studs in the cantilever beams.

3)PTFE sheeting was added between the bikepath bearing pads and the panels to decrease friction in order to reduce wear by enabling the panels to move with the bridge. PTFE sheeting was installed at PP 9-51 before PTFE sheeting was removed by the CCO 211 "Bikepath Pad Revision" redesign.

4)Extra nuts and hardened washers will be furnished to strengthen the bikepath to cantilever connection. CCO 211 revises the method of tensioning the anchor studs, therefore installation costs for the extra nuts and hardened washers are included in CCO 211.

5)The size of the bikepath anchor studs at the East end belvedere (PP 177 and 121) is increased to strengthen the bikepath to cantilever connection. CCO 186 included cost to furnish and install 30 mm studs at PP 117 and 121, this work was never performed. The Contractor, through RFI 3000R0, requested to furnish and install 32 mm (1 ¼" imperial size) at PP 117 and 121 in lieu of the 30 mm studs. Therefore there is no additional cost to furnish and install 32 mm studs at PP 117 and 121.

Additional studs are added to PP 127 and 128 cantilever beams to improve performance of the bikepath.

6)CCO 186 increased the bottom hole diameters for the bikepath anchor studs and installed elastomeric sleeves to reduce the ductility demand on the studs. Since the stud size is increased in this change order, larger elastomeric sleeves are needed for PP 117 and 121. Smaller elastomeric sleeves were furnished but not installed for PP 117 and 121 in CCO 186, so new sleeves will need to be furnished. CCO 186 pays to install the sleeves and CCO 303 pays to furnish the material.

7)CCO 186 stated that payment for furnishing and installation of hardened plastic sleeves on the studs at PP 127 cantilever beams would be provided for in CCO 99 S1. This work will be paid for under CCO 303 instead of CCO 99 S1.

8)Ring plates are added to the cantilever beam connection with the bikepath panels to strengthen the connection. Bumpers are added to protect the cantilever beams during seismic movement. Shims are added to level and align the bikepath panels with the Skyway.

9)Grout will be injected between the bikepath panel bottom and cantilever top plate in order to level bikepath panel PP 128 and align the panel with the Skyway. After grout injection is complete, the grout tubes will be cut off, ground flush with the bikepath panel top plate, and cover plates will be installed over holes in the top plate from grout tubes.

10)CCO 195 S1 "Bikepath Railing Tolerances (Field)" installed shims under the bikepath railing to provide an aligned profile. This change order will install shims under emergency access gates in order to align the gates with the revised bikepath railing profile.

11)The traveler rail will be caulked at the top and bottom seams to prevent debris from entering connection.

12)New steel items will be painted white to match the rest of the bridge.

The total cost of this change order is $360,767.00 lump sum, which can be financed from the contingency fund. A detailed cost analysis is on file.

No time adjustment is warranted as this change order does not affect the controlling operation.

This change order has concurrence from William Casey (Supervising TE), Rich Foley (HQ Oversight), Wenyi Long (Bridge Design), and Lina Ellis (Maintenance).

CONCURRED BY:			
Construction Engineer:	William Casey, Sup TE	Date	12/4/14
Bridge Engineer:		Date	
Project Engineer:	CT Oversight, Wenyi Long, P.E.	Date	12/2/14
Project Manager:		Date	
FHWA Rep.:		Date	
Environmental:		Date	
Other (specify):	HQ, Rich Foley	Date	12/5/14
Other (specify):	Struct. Maint, Lina Ellis	Date	12/2/14
District Prior Approval By:		Date	
HQ (Issue Approve) By:		Date	
Resident Engineer's Signature:		Date	12/5/14

ESTIMATE OF COST

	THIS REQUEST	TOTAL TO DATE
ITEMS	$0.00	$0.00
FORCE ACCOUNT	$0.00	$0.00
AGREED PRICE	$0.00	$0.00
ADJUSTMENT	$360,767.00	$360,767.00
TOTAL	$360,767.00	$360,767.00

FEDERAL PARTICIPATION

☐ PARTICIPATING ☐ PARTICIPATING IN PART ☑ NONE
☐ NON-PARTICIPATING (MAINTENANCE) ☐ NON-PARTICIPATING

FEDERAL SEGREGATION (if more than one Funding Source or P.I.P. type)
☐ CCO FUNDED PER CONTRACT ☐ CCO FUNDED AS FOLLOWS

FEDERAL FUNDING SOURCE	PERCENT