

CONTRACT CHANGE ORDER MEMORANDUM

TO: Tony Anziano, Program Manager /			FILE: E.A. 04 - 0120F4	
FROM: William Casey, Supervising TE			CO-RTE-PM SF-80-13.2/13.9	
FED. NO.				
CCO#: 216	SUPPLEMENT#: 0	Category Code: BZZZ	CONTINGENCY BALANCE (incl. this change) \$115,123,654.58	
COST: \$28,550,000.00			INCREASE <input checked="" type="checkbox"/> DECREASE <input type="checkbox"/>	
SUPPLEMENTAL FUNDS PROVIDED: \$0.00			HEADQUARTERS APPROVAL REQUIRED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
CCO DESCRIPTION: Hinge K Milestone Issues			PROJECT DESCRIPTION: CONSTRUCT SELF-ANCHORED SUSPENSION BRIDGE	
Original Contract Time: 2490 Day(s)	Time Adj. This Change: 0 Day(s)	Previously Approved CCO Time Adjustments: 501 Day(s)	Percentage Time Adjusted: (including this change) 20 %	Total # of Unreconciled Deferred Time CCO(s): (including this change) 3

THIS CHANGE ORDER PROVIDES FOR:

The construction of the SFOBB reinforced concrete superstructure section known as Hinge K. This section connects the Yerba Buena Island Transition Structures (YBITS) to the Self Anchored Suspension Span (SAS).

Hinge K lies at the interface between the SAS and the YBITS 1 Structures. As originally planned, the Hinge K work was to be performed in several stages under the YBITS 1 Contract (04-0120M4). Areas for Contractor's use access milestones were incorporated into both the SAS and YBITS 1 Contracts. However, with the execution of CCO 160 on this contract, internal milestone and job completion dates were deleted and/or revised. Through an incentive/disincentive provision, a new seismic safety opening milestone was established for the SAS Contract only, August 28, 2013. CCO 160 also deleted the SAS milestone for the turnover of the Hinge K area to the YBITS 1 Contract. This was done with knowledge that it would be necessary in the future to re-establish a milestone, and that there would be a cost associated with this. At the time not enough information was available to allow agreement to effectively re-establish a new SAS turnover milestone that did not adversely affect the SAS seismic safety milestone. This was a necessary step in maintaining and possibly accelerating project completion.

Sufficient information now exists to re-establish the milestone. In order to achieve SFOBB seismic safety as soon as possible a corridor wide schedule risk analysis was performed. This analysis revealed that the risk to the overall corridor schedule would be minimized by transferring the Hinge K work from the YBITS 1 Contract to the SAS Contract. Here, the SAS Contractor has the ability to more efficiently incorporate the Hinge K work into the SAS schedule while continuing to meet the CCO 160 established seismic safety opening milestone date. This course of action was presented to the Toll Bridge Program Oversight Committee receiving conceptual approval on December 1, 2011. It is also noted, that separate from this Contract, with the re-sequencing of the work at the Oakland Touchdown work, the Hinge K work became a corridor wide controlling operation.

Additionally, the Department explored many other Contractual options to address the Hinge K work. They all had advantages and disadvantages. Some options were less expensive but resulted in a much later corridor wide seismic safety opening date. In transferring the work from the YBITS 1 Contract and incorporating it into the SAS Contract, the Hinge K work is placed under the control of a single Contractor allowing for an earlier start and a reduction in schedule risk. This solution also minimizes the effort needed to coordinate the work of multiple Contractors over multiple Contracts thereby reducing the Department's exposure to schedule delay risks.

This change order provides compensation for the direct and indirect costs of the work including impacts to other operations, revisions to means and methods, inefficiencies, and additional supervision. In incorporating the Hinge K work into the current schedule, the Contractor will need to compress other operations including painting and MEP work that may result in other inefficiencies. Additionally, there are provisions for incentives to be earned for early completion. The incentives are coordinated with but exclusive of other incentives provided for in CCO 160. A force account analysis is on file in the project records.

Coordination between contractors at Hinge K is an identified risk, with risk in a range of \$13 million to \$38.5 million (the 50% probable risk is \$21.5 million) and an additional \$8 million in risk was included in supplemental funds devoted to contract coordination, for a total range of \$21 million to \$46.5 million and a 50% probable cost of \$29.5 million. Risk register items include Program Risk #61 and SAS risk EEendM3. This issue involves more than one contract so there are

CONTRACT CHANGE ORDER MEMORANDUM

risk items in the corridor register as well as the YBITS and SAS Registers. Since the Hinge K work will be performed under this contract, Program Risk ID #61 - Coordination of YBITS #1 and SAS contracts on YBI (50% probable = \$17.5M) in conjunction with SAS risk EEendM3 (50% probable \$4.0 million) and supplemental funds can be used to analyze the cost of this change. Remaining risks associated with this scope of work be reassessed/retired or used to address the resolution of issues on the YBITS contract.

Compensation for furnishing and installing bar reinforcing steel and non-skid coating as shown on the Hinge K Contract Plans will be provided for in a separate change order.

The total cost of this change order is \$21,050,000.00 lump sum and \$7,500,000.00 maximum incentive unit price for a total of \$28,550,000.00 for this change, 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 Tony Anziano (Program Manager), William Casey (Supervising TE), Rich Foley (HQ Oversight), Ken Terpstra (Proj. Manager), Wenyi Long (Bridge Design), Lina Ellis (Maintenance), and Jing Chen (District Design).

TBPOC approved this change order on December 1, 2011.

CONCURRED BY:			ESTIMATE OF COST		
Construction Engineer:	William Casey, Sup TE	Date 1/12/12		THIS REQUEST	TOTAL TO DATE
Bridge Engineer:	CT Oversight, Wenyi Long, P.E.	Date 1/12/12	ITEMS	\$0.00	\$0.00
Project Engineer:	District Design, Jing Chen	Date 1/12/12	FORCE ACCOUNT	\$0.00	\$0.00
Project Manager:	Proj Manager, Ken Terpstra	Date 1/18/12	AGREED PRICE	\$28,550,000.00	\$28,550,000.00
FHWA Rep.:	HQ, Rich Foley	Date 1/12/12	ADJUSTMENT	\$0.00	\$0.00
Environmental:		Date	TOTAL	\$28,550,000.00	\$28,550,000.00
Other (specify):	TB Program Manager, Tony Anzian	Date 1/17/12	FEDERAL PARTICIPATION		
Other (specify):	Struct. Maint, Lina Ellis	Date 1/12/12	<input type="checkbox"/> PARTICIPATING <input type="checkbox"/> PARTICIPATING IN PART <input checked="" type="checkbox"/> NONE <input type="checkbox"/> NON-PARTICIPATING (MAINTENANCE) <input type="checkbox"/> NON-PARTICIPATING		
District Prior Approval By:		Date	FEDERAL SEGREGATION (if more than one Funding Source or P.I.P. type)		
HQ (Issue Approve) By:		Date	<input type="checkbox"/> CCO FUNDED PER CONTRACT <input type="checkbox"/> CCO FUNDED AS FOLLOWS		
Resident Engineer's Signature:		Date	FEDERAL FUNDING SOURCE	PERCENT	
 1-19-12					

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 216 Suppl. No. Contract No. 04 – 0120F4 Road SF-80-13.2/13.9 FED. AID LOC.:

The Contractor shall pay the State of California the sum of \$100,000.00 per day as a disincentive, for each and every day delayed in completing "Readiness for Seismic Safety Opening" after November 30, 2013. Neither an incentive nor disincentive shall apply if the Contractor achieves 'Readiness for Seismic Safety Opening' between October 20, 2013, and November 30, 2013. The total amount of 1) disincentives payable by the Contractor, and 2) liquidated damages payable by the Contractor for delay in completing the 'Contract Completion Date,' shall not exceed the sum of \$100,000.00 per day and the aggregate total sum of which will not exceed \$125,000,000.00."

Incentive associated with this added Extra Work..... increase up to a maximum of \$ 7,500,000.00

3) Limits of Work and Insurance Provisions

The revised "Begin Construction" limit is as specified in Appendix 4, "Limits of Work Drawing, page 1 of 2".

Section 5-1.39, "Insurance" of the Special Provisions, is revised as provided in this paragraph strictly for the performance of the work associated with the Hinge K Concrete work, in this CCO:

"Payment for Repair Work -- When the Occurrence that caused the damage was an earthquake, the State will pay the cost of repair determined as provided in Subsection E".

4) Contract Time Considerations

There will be no adjustment of Contract Time by reason of this CCO 216.

If (i) the "Area and Timelines for Contractor's Use", for constructing Hinge K Concrete, as indicated on Appendix No. 2 of this CCO 216, is not available for the Contractor's use on the dates specified, or (ii) other changes are subsequently caused or directed by the Department, a commensurate adjustment of time will be made to the "Readiness for Seismic Safety Opening" incentive dates specified herein (i.e., October 20, 2013, and August 28, 2013) and the Contract Completion Date in accordance with Section 8-1.07, "Liquidated Damages," of the Standard Specifications and the Section 10-1.13, "Progress Schedule (Critical Path Method)" of the Special Provisions. Additional compensation, as a result of the potential events (i) and (ii) above, will be provided in accordance with Section 4-1.03, "Changes," and Section 8-1.09, "Right of Way Delays," of the Standard Specifications, and Section 10-1.14, "Time Related Overhead," of the Special Provisions and, as applicable, other Contract provisions.

5) Schedule Provisions

The Contractor shall, within 30 days of the approval of this CCO 216, submit a "Revised Baseline Schedule" consistent with the provisions of this CCO 216 and in accordance with Section 10-1.13, "Progress Schedule (Critical Path Method)" of the Special Provisions. The "Revised Baseline Schedule" shall incorporate the Contractor's plans to construct Hinge K Concrete and to achieve "Readiness for Seismic Safety Opening".

6) Progress Payment Provisions

The Contractor shall submit, for approval by the Engineer, a schedule of values detailing the cost breakdown of the agreed lump sum payment provided under this CCO 216. The schedule of values shall reflect the items, work, quantities, and costs required to perform the work provided under this CCO 216. The Contractor shall be responsible for the accuracy of the quantities and costs used in the schedule of values submitted for approval. The sum of the amounts for the items and work listed in the schedule of values shall be equal to the agreed lump payments provided under this CCO 216. When approved in writing by the Engineer, the schedule of values will be used to determine progress payments for the work provided under this CCO 216.

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Change Requested by: Engineer

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Total Extra Work at Agreed Lump Sum Cost of this CCO.....	\$21,050,000.00
Total Maximum Incentive associated with this added Extra Work.....	\$ 7,500,000.00

Appendices to this CCO:

- 1: Specifications and Plan Sheets (Sheet No 4 to Sheet No 47)
- 2: Areas and Timelines for Contractor's Use (Sheet No.48 to Sheet No. 50)
- 3: Hinge K Scope Matrix (Sheet No. 51 to Sheet No. 53)
4. Limit of Work Drawing (Sheet No. 54 to Sheet No.55)

Estimated Cost: Increase Decrease max \$28,550,000.00

By reason of this order the time of completion will be adjusted as follows: 0 Days

Submitted by			
Signature	Resident Engineer	William Casey, Sup T.E.	Date 1-19-12

Approval Recommended by			
Signature	Principal Transportation Engineer	Jon Tapping, Prin. T.E.	Date 1-20-12

Engineer Approval by			
Signature	Program Manager	Tony Anziano, Program Manager	Date

We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.

Contractor Acceptance by			
Signature	(Print name and title)		Date