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Subject: FW: E2 Shear Key and IERBY CCO Tracking XLS
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Attachments: [image001.png](#)
[IERBY E2ShearKeyTracking July122013.pdf](#)

From: Shewit.Semere@CH2M.com [mailto:Shewit.Semere@CH2M.com]
Sent: Friday, July 12, 2013 4:12 PM
To: Casey, Bill S@DOT
Cc: Traina, Christopher L@DOT; Haack, Angela@DOT; Schram, Darryl K@DOT
Subject: E2 Shear Key and IERBY CCO Tracking XLS

Attached is the latest E2 Shear Key and IERBY CCO costs.

Please note new EWB for CCO 314 are currently being submitted for this pay estimate and will be included in the accounting next week.

Regards,

Shewit Semere, PE



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E2 Shear Key S1/S2 and Anchor Rod CCO Tracking Status

CCO NO.	Description	Reference	Work Performed By	Method of Payment	Rough Order of Magnitude	CCO Net Dollar Amount (Add's & Credits)	Date of TBPOC Approval	ATP Letter to ABF	Executed Date	EWB Submitted	ABFJV Spent to Date July 7, 2013 (Info known as of 7/12/13)	Notes to ABFJV Spent To Date	Amount ABFJV has currently spent/committed to (includes ABFJV MU) As of 7/12/2013	Notes to Spent/Committed Costs
Field Work														
320	Temporary Bearing Shimming	Install steel shim plates between the temporary bearing foot and a temporary jacking lug welded to the temporary bearing base plate. (RFI 3242)	ABFJV	LS	\$ 100,000	\$ 100,000		5/21/13						
325	Concrete Demolition	- E-2 Concrete Demolition - Surface prep. (bush hammering) - Concrete Mock-up at Pier 7 - Fabricate, Install and remove E2 access platform (wooden frame) -Drilling of dowels	Conco	EWFA	\$ 750,000	\$ 750,000		5/21/13			\$ 470,078	ABF Est Costs based on timesheets to 7/7/13	\$ 470,078	Remaining work is mockup removal and platform removal
329	E2 Shear Key Concrete	Forming, placing, curing, and finishing concrete. Includes creep test for 1 year	Conco	EWFA	\$ 1,300,000	\$ 1,300,000					\$ 46,394	current costs are for Conco's formwork	\$ 1,164,074	Conco ROM \$957,920 + thermal control \$130K (install \$100K and design \$30K)=
326	Concrete Coring	E-2 Concrete Coring + Keyway saw cutting + water disposal	Penhall	EWFA	\$ 500,000	\$ 500,000		5/28/13			\$ 351,611	Work is nearly complete. Rain for Rent will be off the project within 2 weeks.	\$ 437,211	-Penhall (concrete sawing and keying) and Eco Bay work complete -Rain For Rent- \$40K/month
327	ABFJV Field Work	All ABFJV Field work and subcontractor support, incl.: - Mob. and Demob. access/falsework/platforms, etc. -Field work and subcontractor support -Survey, Testing, and QC -Install Steel Saddle (set, grout into place, etc.) -Final Field paint and touch-up -A490 bolts -Fabricate, Install and Remove falsework for E2 concrete -Bevel and Machine Shear Keys (In Place Machining) -Shop drawing detailing (Finnoe)	ABFJV	EWFA	\$ 5,200,000	\$ 5,200,000		5/21/13			\$ 1,978,403	ABF Est Costs based on EWB up to 7/7/13 estimated subcontract work	\$ 1,978,403	ABFJV forecast to complete is \$5.2; which does not include E2 elevator installation costs for access to E2 Shear Key work platform and OBG deck needed when bridge opens to traffic
328	Bar Reinforcing Steel	Furnish and place rebar	Harris Salinas	EWFA	\$ 760,000	\$ 760,000							\$ 760,000	Harris Salinas Original Cost Proposal based on early set of plans= \$308,157 Per ABFJV 7/3/13 email-HSR original quote was only for 1 shear key. A revised estimate is due shortly. \$760K includes a 15% contingency for increased cost due to revised plans
330	Post Tensioning	Furnish strand/anchors, install, stress, grout, etc	Schwager Davis	EWFA	\$ 1,000,000	\$ 1,000,000							\$ 840,495	SDI Quote based on June 10 dwg=785,509+MU. Estimate may increase to reflect steel ducts
331	Pier E2 Plans	Plan Sheets for all Pier E2 Work (Zero cost CCO)			Compensation included in CCOs above									
333	Pier E2 CCO Credit	Pier E2 Shear Key S1/S2 Work Credit- See CSR #3			\$ (3,000,000)	\$ (3,000,000)								
338	Fabricate and Install E2 Permanent Bearing Interim Shimming				\$ 200,000									
Subtotal					\$ 6,610,000	\$ 6,610,000					\$ 2,846,486		\$ 5,650,261	
Fabrication														
313	Shear Key Materials	Procuring the necessary long lead time materials for Pier E2 Shear Keys 1 & 2 Steel Saddle.	Leeco, XKT Evraz	EWFA	\$ 1,500,000.00	\$ 1,500,000.00		4/19/2013 5/21/13			\$ 1,425,137.00	-Only \$353,705 of \$1.4M of material ordered will be used for saddle Includes wedge plates	\$ 1,425,137	-EVRAZ- \$625,831; -Leeco \$138,728 (\$97K credit for cancelling material) -XKT \$510,781 (inc tax) -\$116K wedge plates, saddle tie plates (inc tax, freight, MU)
319	E2 Shear Key Fabrication	Fabricate Steel Saddle	XKT Steward Machine	EWFA	\$ 5,000,000.00	\$ 5,000,000.00							\$ 5,217,186	XKT quote is based on Submittal 2859R3 (2,620,884.00 plus tax) SMC price is subject to change based on shop drawings revised on June 28
Subtotal					\$ 6,500,000	\$ 6,500,000					\$ -	\$ 1,425,137		\$ 6,642,323
Subtotal (Field Work & Fabrication)					\$ 13,110,000	\$ 13,110,000					\$ -	\$ 4,271,623		\$ 12,292,584
*TBPOC Approved Expenditure (Field Work & Fabrication)						\$ 18,000,000					\$ 18,000,000	\$ 18,000,000		\$ 18,000,000
Remaining Funds from TBPOC Approved Expenditure (Field Work & Fabrication)						\$ 4,890,000					\$ 18,000,000	\$ 13,728,377		\$ 5,707,416
Testing/ Rod Replacement														
312	Furnish Anchor Rods	Furnishing twenty (20) replacement ASTM A354 Grade BD anchor bolt assemblies for the Pier E2 Crossbeam Shear Keys and Orthotropic Box Girder (OBG) Bearings. Performing one embrittlement test per anchor bolt lot on the full size diameter threaded section.	Dyson	EWFA	\$ 175,000.00	\$ 175,000.00		4/19/13 4/24/13					\$ 171,858.50	Dyson 6/25/13 Estimate = \$156,235 (does not include embrittlement test)
314	Remove, Replace & Test Sample Rods	-Removing anchor rods from Pier E2 shear keys and bearings. Retensioning the selected rods to 0.75 Fu, re-securing the nut, and then letting the rods sit for a period of 24 hours prior to removal. At an independent testing laboratory, loading the removed rods to failure. -Removing galvanizing from the top of shear key and bearing rods. After the Department has performed hardness tests on the rods, replacing the galvanizing that was removed with inorganic zinc primer. -Removing and test anchor rod from Tower -Wet Test -Removal of the following rods: S3 Rod D2, S4 Rod E2,B1 Rod F4, B2 Rod F5 -Removing galvanizing from the top of 194/388 3" tower anchor rods and 36/36 4" tower rods -Procure and fabricate materials for the test rig for wet test as detailed in the attached plan sheets	ABFJV + subs (Carpenter Rigging, etc)	EWFA	\$ 5,000,000.00	\$ 500,000.00		4/19/13 5/3/13 (email) 5/6/13 5/7/13 5/21/13 5/23/13 (2ATPs)	6/19/2013	\$ 196,648	\$ 3,913,326	based on EWB and subs (Carpenter Rigging, Dyson, VGO)	\$ 3,913,326.30	-ABFJV EWB up to #37 -Includes labor, materials, and subcontractor required for tests 1-11 and testing of 2013 rods
314S1	Additional Funds													
337	Procure, Install & Remove Temp Rods At E2		Dyson ABFJV											
Subtotal					\$ 5,175,000	\$ 675,000					\$ 196,648	\$ 3,913,326		\$ 4,085,185
**TBPOC Approved Expenditure						\$ 1,000,000					\$ 1,000,000	\$ 1,000,000		\$ 1,000,000
Remaining Funds from TBPOC Approved Expenditure						\$ 325,000					\$ 803,352	\$ (2,913,326)		\$ (3,085,185)

*4/11/13 TBPOC Meeting: TBPOC approved an expenditure of up to \$4.3M to (1) purchase replacement rods, (2) secure long lead materials to retrofit strategy B and C, and (3) to keep retrofit strategy A in play, but not to spend any of the approved \$ on it.
6/6/13 TBPOC Meeting: The overall budget request for \$10 M was approved by the TBPOC for a not-to-exceed amount of \$7.5 M with an expectation of a schedule by next week (see meeting minutes).
7/10/13 TBPOC Meeting: The TBPOC approved a total budget request of \$23million- \$18M for capital outlay costs and \$5M for capital outlay support costs.

**5/9/13 TBPOC Meeting: TBPOC Meeting- The TBPOC approved a not-to-exceed amount of \$1 M for the wet test of 2010 bolts, and revised the April 11 approval for the \$4.3 M expenditure to include all E2 shear key anchor bolt activities. See meeting minutes.

Interurban Electric Railway Bridge Yard Shop (IERBYS) CCO Tracking Status

CCO NO.	Description	Reference	Work Performed By	Method of Payment	Rough Order of Magnitude (per ABFJV, 5/17/13)	CCO Net Dollar Amount (Adds & Credits)	TBPOC Approval Amount	Date of TBPOC Approval	ATP Letter to ABF	Executed Date	Status	EWB Paid As of June Pay Estimate	Amount ABFJV has currently spent/committed to (includes ABFJV MU As of 7/12/13)	Notes
295	IERBYS Pile Investigation	As directed by the Engineer, performing foundation investigation at the Interurban Electric Railway Bridge Yard Shop (IERBYS) to determine existing pile diameters, depths, and conditions.	Zaccor Dutra Althouse	EWFA	\$ 100,000	\$ 200,000	\$ 200,000	6/6/13	N/A	2/26/13	A	\$ 33,460.29	\$ 35,839	Althouse & Dutra submitted costs 3 addtl months of road plate rental
295S1	IERBYS Pile Investigation (Supplemental)	Changes CCO 295 \$ amount from \$500,000 to \$200,000							N/A	5/23/13	A			
296	IERBYS Relocation	Assisting Caltrans maintenance personnel with relocation from Interurban Electric Railway Bridge Yard Shop (IERBYS) to Pier 7 Warehouse. Disassembling and packing the machines, tools, and tables at IERBYS maintenance shops. Disconnecting hard wired whips from the wall/ground boxes. Moving the contents of the maintenance shops at IERBYS to the Pier 7 Warehouse and reassemble. Modifying electrical in the Pier 7 Warehouse in order to accommodate relocated welding and cabinet shops.	Chapman Relocations RK Electric	EWFA	\$ 175,000	\$ 200,000	\$ 200,000	6/6/13	N/A	3/13/13	A	\$ 175,460.00	\$ 175,000	\$ committed to: costs submitted in EWB + Althouse Temp Elec shutoff within IERBYS building- \$28,362.03
297	IERBYS Demolition	Performing Phase One Demolition at Interurban Electric Railway Bridge Yard Shop (IERBYS) including removing designated building equipment, materials, and fixtures, removing existing non-structural facilities to accommodate new construction, and disconnecting and capping identified utilities.	Althouse	EWFA	\$ 175,000	\$ 300,000	\$ 300,000	6/6/13	N/A	3/29/13	A	\$ 270,619.00	\$ 283,017	\$ committed to are related to Althouse Bid for IERBYS Demo Package-\$205,997.98 Althouse Phase 2 Abatement and Soft Demo- \$51,289.92
298	IERBYS Planning	As directed by the Engineer, perform Advanced Planning and Constructability work and Storm Water Pollution Prevention Plan (SWPPP) development for construction at Interurban Electric Railway Bridge Yard Shop (IERBYS).	ABFJV	EWFA	\$ 175,000	\$ 100,000	\$ 100,000	6/6/13	N/A	4/18/13	A	\$ 23,063.85	\$ 23,064	\$ committed to are related to submittals and material & product info related to renovation plan
321	IERBYS Building Work	Renovation Package	Althouse	EWFA	\$ 2,400,000	\$ 600,000	\$ 600,000	6/6/13	5/20/13	5/23/13	A	\$ 332,501.88	\$ 2,302,545	-Althouse Bid for IERBYS Temp Improvements \$2,007,201.09 less \$51,289.92 (inc in CCO 297) and less \$15K (inc in CCO 298) -ABFJV has made \$561K available to Althouse per partial CCO 321 ATP -Additional Work=\$150K (\$75K new roof+ \$25K window safety film+ \$50K contingency) Added \$61K since safety film=\$86K
321S1	IERBYS Building Work Additional Funds					\$ 1,800,000	\$ 1,600,000	6/6/13						
334	IERBYS Building - Lead Abatement	Perform lead paint abatement on Interurban Electric Railway Bridge Yard Shop (IERBYS) 1. as shown on Attachment A on pages 2 through 6 of this change order 2. welding connections as identified in Contract Change Order 298 S1 "IERBYS Planning Revised" Attachment A sheets S601 and S602 Clean and decontaminate the lead dust from all floor and horizontal surfaces		EWFA	\$ 300,000	\$ 300,000							\$ 218,041	Temp Improvement=\$39,745.23 Seismic Retrofit of Construction Area= \$55,523.16 Clean Up of Contaminated Surfaces (Emergency Floor Clean Up and Industrial Hygenist Testing)=\$108,508 Additional lead abatement is expected- cost proposal for this work is expected this week
335	IERBYS Site Work	Site Work Package		EWFA	\$ 3,200,000	\$ 3,200,000	\$ 3,200,000	6/6/2013					\$ 2,889,000	ABFJV sent out bid package for exterior site work and received one full bid for \$2.7M, but have yet to accept/committ to agreement. Conco is adjusting bid..some adds & deducts. Will know final \$\$ week of 24th
Subtotal					\$ 6,525,000	\$ 6,700,000	\$ 6,200,000					\$ 835,105	\$ 5,926,506	
*TBPOC Approved Expenditure													\$ 6,200,000	
Remaining Funds from TBPOC Approved Expenditure													\$ 273,494	

*2/6/13 TBPOC Meeting: Apporoved \$1.4M for CCOs 295, 296, and 297.
5/13/13 PMT Meeting: The\$1.4M TBPOC approved funds are to be wisely used for all IERBYS-related CCOs
6/6/13 TBPOC Meeting: Approved Additional \$1.6M NTE for CCO 321S1 and \$3.2M NTE for Sawtooth Outdoor Site Improvements.
Total of \$6.2M has been approved by TBPOC for IERBYS work.