


Memorandum

CS Memorandum No. 1401

To: Distribution

From: Beverly Ward, CMB/Risk Management Assistant 

Date: March 27, 2013

Reference: Project No. M544.1, Contract No. CS-149
Task No. 1-8.02, Change Control

Subject: Configuration Management Board Meeting No. 118

Attached please find minutes for Configuration Management Board Meeting No. 118 held on March 20, 2013.

Attachments: CMB Meeting No. 118 Rev. 0 Minutes with attachments

Cc: David Kuehn, STV (w/attachments) david.kuehn@stvinc.com
Shahnam Farhangi, SFMTA (w/attachments)
Joon Park, SFMTA (w/attachments)
Arthur Wong, SFMTA (w/attachments)
Roger Nguyen, SFMTA (w/attachments)
Jane Wang, SFMTA (w/attachments)
Aileen Read, CSDG (w/attachments)
CS File No. M544.1.5.0890

Distribution:

Brad Lebovitz, STV bradley.lebovitz@stvinc.com
Luis Zurinaga, SFCTA luis.zurinaga@sfcta.org
John Funghi, SFMTA
Albert Hoe, SFMTA
Richard Redmond, CSP
Ross Edwards, CSP
Sarah Wilson, CSP
Eric Stassevitch, CSP
Brian Kelleher, SFMTA
Mark Latch, CSP
Mark Benson, CSP
Mun Leong, CSP
Beverly Ward, CSP

CMB Meeting Minutes #118

DATE: March 22, 2013

MEETING DATE: **March 20, 2013**

LOCATION: 821 Howard St, Main Conference Room

TIME: 3:00 PM

ATTENDEES: J Funghi (JF), A. Hoe (AH), R. Edwards (RE), M. Benson (MB), S. Wilson (SW), R. Redmond, M. Leong (ML), (RR), E. Stassevitch (ES), B. Ward (BW), B. Lebovitz (BL), M. Latch (ML), L. Zurinaga (LZ)

COPIES TO: Attendees: S. Farhangi (SF), A. Wong (AW), J. Park (JP), R. Nguyen (RN), J. Wang (JW), A. Read (AR), D. Kuehn (DK)
File No. M544.1.5.0890

REFERENCE: Project No. M544.1, Contract No. 149 Task 1-8.02
Final Design

SUBJECT: Configuration Management Board Meeting # 118 – Rev. No. 0

RECORD OF MEETING *(Italicized text indicates status update of open items)*

ITEM #	DISCUSSION	ACTION BY DUE DATE
1 – 02/20/13	<p>Action Items Review:</p> <p>1252 – COR 033 – Retrieval Shaft – 20” Water Line – An update to the current condition will be given at next CMB meeting. Status: <i>03/20 Due to the Relocation of TBM Retrieval Shaft this COR is no longer valid and is considered closed.</i> CLOSED</p> <p>1300 – WP 1254 – SF Planning Request – Planning department requested 5 street trees along Stockton Street. The ECP will be brought back to the CMB along with an estimate. The CMB recommended a response be drafted to Service Planning of what the cost will be from a design standpoint and that they identify a funding source. Status: <i>03/20 No update was provided to this action item as it relates to the drawing package cost. As requested by the CMB verification was confirmed The Planning Department request for five (5) Street trees and additional sidewalk bulb-out at Stockton Street is included in Addendum #3 of the 1300 Contract.</i></p> <p>1252 – Validation that 1300 docs include as built information on asbestos pipe – As built information has yet to be included in 1300 Contract documents, 1252 as built drawings will be included in Addendum #5. Status: <i>03/20 Material was submitted verifying as built information was included in addendum #5. The CMB questioned if California Class 1 facilities was correct for disposal site of the hazardous waste. An investigation will be done to find out how the 1252 Contractor is handling the removal, abatement and disposal of asbestos laden transite pipe. This item is considered closed as it relates to 1252 as built information included in 1300 docs.</i></p>	<p>RE 04/03/13</p> <p>RE/QC 04/03/13</p>

ITEM #	DISCUSSION	ACTION BY DUE DATE
5- 03/13/13	E. Stassevitch presented information for the two utility relocation contracts 1250 and 1251 final net cost to the Program to address questions raised at last week's meeting. A comparison of each contract's budget against the final contract closeout was presented. CN1250 cost to the Program including utility reimbursements is \$9,692,731. CN1251 cost to the Program including utility reimbursements is \$13,176,469. See Attached Status: <i>03/20 Additional information was presented demonstrating the two Utility Contracts budget in June 2011 combined was \$32,366,144 and at Contract closeout the two Contracts combined totaled \$22,868,901 including form B reimbursable, \$9,497,243 under budget. See Attached</i>	
1 -	1252 – S. Wilson presented Evaluation of Merit of; COR 070 – Jet Grout Quantity – Contractor installed a quantity of 3,929 CY of Soilcrete (Jet Grout) for ground treatment in excess of the Bid Item ES-3 estimated quantity of 2,831 CY. The minimum dimensions were not adequate enough to produce a large enough Soilcrete breakout zoned for a safe TBM breakout, due to the TBM shield and cutterhead exceeds the minimum length shown in the Contract drawings. CMB agreed with merit for change of quantity variation. In addition the CMB requested follow up action information be provided: 1) Quantity calculation of CY of Jet Grout, 2) Where was the issue of designing as a lump sum instead of a unit price?	
2 -	1252 – S. Wilson presented Evaluation of Merit of; COR 076 – Moscone South – 16 th Unmarked Steel Pipe – Contractor discovered and removed an abandoned 16" pipe in the trench of the proposed 12" low pressure waterline. 12" waterline could not be installed until the pipe was removed. CMB agreed with merit for differing site condition work associated with removal of the 16" pipe.	
3 -	1252 – S. Wilson presented Evaluation of Merit of; COR 078 – Compensation Grout – Whole Foods and AT&T – The Contractor performed potholing activities in advance of compensation grout hole drilling and encountered numerous buried obstructions. Due to the quantity and unknown contents of the buried obstructions, the Contractor modified the designed proximal points, relocating them to avoid hitting additional buried obstructions. CMB agreed with no merit due to required notice not being provided in conformance with the contract, and not giving SFMTA the opportunity to participate in the design modification or provide a determination of the issue.	
4 -	1252 – S. Wilson presented Evaluation of Merit of; COR 079 – Compensation Grout – Old Navy (between Market Street and Stevenson Street on 4th. – Contractor performed potholing activities in advance of compensation grout hole drilling and encountered numerous buried obstructions. Investigation by PG&E and additional pot-holing activities, determined there was not sufficient room between existing utilities to drill the compensation grout holes as designed. CMB agreed with merit for differing site condition work. Due to the numerous buried obstructions. This difference in site condition may result in the Contractor's subconsultant having equipment on standby or additional demobilization /remobilization costs. The CMB requested the RE notify the Engineer of Record of the potential cost to the Program due to the redo of the compensation grouting program by the Contractor's designer affected by the Designers E&O issue requiring realignment to the tunnel profile of the pin piles. This change will be pursued as a Form B reimbursable .	
5-	1252 – Precast Tunnel Segment Liner - M. Latch provided and update of what the segment liners presently look like which are being cast. Reporting that current casting looks a great deal better than previously reported. Precast Management Corporation (PMC) is working on a repair procedure for the four and five feet long segments. In addition it was reported a review of the Segment Spalls Repair Procedure is missing language about depth and needs to be better defined for the Inspectors. The Construction Manager suggested that a separate meeting with the Contractor and PMC be setup to discuss SFMTA's concerns.	
6-	1252 COR 008 - Final unit cost for indirects – R. Redmond reported SFMTA and the Contractor have reached a final agreement on indirects for compensable delays. Final unit cost breakdown of the categories negotiated is back in the court of the RE and the	


ITEM #	DISCUSSION	ACTION BY DUE DATE
	Estimating team. This is item will be brought back to the CMB at a later date. CLOSED	
7-	The Program Trend/Change Control Log dated 03/20/13 was not viewed at this week's meeting. The log is updated to include most recent changes and trends for 1252. The log is attached for distribution with these meeting minutes.	

ACTION ITEMS

ITEM #	MTG DATE	MTG ACTION DATE	DESCRIPTION	BIC	DUE DATE	STATUS
1	11/07/12	11/07/12	1300 – WP 1254 – SF Planning Request	RE	04/03/13	Open
3	11/14/12	11/14/12	1252 – COR 033 – Retrieval Shaft – 20" Water Line	SW	03/20/13	CLOSED
2	12/12/12	12/12/12	1252 – Validation 1300 docs include as built information regarding Asbestos Pipes	RE/QC	04/03/13	CLOSED
4	01/30/13	02/20/13	1252 – COR 008 - Final unit cost for indirects	RR	03/20/13	CLOSED
4	01/30/13	02/27/13	1252 – Merit response letter for COR 008	MB/SW	03/20/13	CLOSED
1	02/20/13	02/27/13	1252 – Update on Micro Pile	ML/RE	04/03/13	Open
2	12/12/12	03/20/13	1252 – Verification of California Class1 correct site for disposal of hazardous material from 1252 as built information included in 1300 docs.	RE/QC	04/03/13	Open

Meeting adjourned at 5:25pm

These meeting minutes have been prepared by B. Ward and reviewed by, E. Stassevitch and are the preparer's interpretation of discussions that took place. If the reader's interpretation differs, please contact the author in writing within four (4) days of receipt of these minutes.

Signed:  [initials of preparer & reviewer] Date: 27 Mar 13 [Date review completed]

Meeting Agenda

Project No. M544.1, Contract No. CS-149
Program/Construction Management
Configuration Management Board (CMB) Meeting No. 118
March 20, 2013
3:00pm – 5:00pm
 Central Subway Project Office
 821 Howard St. 2nd Floor
 Main Conference Room

Attendees:

Mark Benson	Albert Hoe	Roger Nguyen	Sarah Wilson
Ross Edwards	Jim Kelly	Joon Park	Arthur Wong
Shahnam Farhangi	David Kuehn	Richard Redmond	Luis Zurinaga
John Funghi	Mark Latch	Eric Stassevitch	
John Haley	Brad Lebovitz	Beverly Ward	

1. **1252** – COR 070 – LB – Jet Grout Quantity Overrun - *Merit & Cost*
 - COR 076 – MOS 16" Pipe removal @ SW Headwall - *Merit*
 - COR 078 – Comp Grout – Whole Foods & ATT- *Merit*
 - COR 079 – Comp Grout – Old Navy- *Merit*

2. **Trend/Change Log** – 03/20/13

3. **Other Business** – Action Items - updates

Meeting Attendance Sheet

Project No. M544.1, Contract No. 149
Program/Construction Management
Configuration Management Board Meeting No. 118
March 20, 2013
3:00 p.m. – 5:00 p.m.
 Central Subway Project Office
 821 Howard, 2nd Floor
 Main Conference Room

Deliver Meeting Attendance Sheet with original signatures/initials to Document Control.

NAME	AFFILIATION	PHONE	E-MAIL (for minutes)	INITIALS
Please enter initials if your name is listed below. Please enter name, affiliation, phone number and email address if your name is not listed below.				
Benson, Mark	CSP	(415) 701-4295	Mark.Benson@sfmta.com	MB
Edwards, Ross	CSP	(415) 701-5296	Ross.Edwards@sfmta.com	
Farhangi, Shahnám	SFMTA	(415) 554-0721	Shahnám.Farhangi@sfmta.com	
Funghi, John	SFMTA	(415) 701-4299	John.Funghi@sfmta.com	JF
Haley, John	SFMTA		John.Haley@sfmta.com	
Hoe, Albert	SFMTA	(415) 701-4289	Albert.Hoe@sfmta.com	
Kelleher, Brian	SFMTA	(415) 701-5289	Kelleher.Brian@sfmta.com	KB
Kelly, Jim	SFMTA		Jim.Kelly@sfmta.com	
Kuehn, David	STV/PMOC	(510) 464-8053	David.kuehn@stvinc.com	
Latch, Mark	CSP	(415) 701-5294	Mark.Latch@sfmta.com	ML
Lebovitz, Brad	STV/PMOC	(510) 464-8052	Bradley.lebovitz@stvinc.com	BL
Nguyen, Roger	SFMTA	(415) 701-4312	Roger.Nguyen@sfmta.com	

SFMTA Contract No. 1252

Contractor: Barnard Impregilo Healy JV (BIH)

EVALUATION OF MERIT**COR 070**

Recommendation: Accept justification of Merit for COR 070, Jet Grout Quantity Greater than Bid Item ES-3 Quantity. Recommend payment for an additional ground treatment quantity of 886 CY in excess of the quantity listed for Bid Item ES-3 (Ground Treatment TBM Launch Box Breakouts) on the Schedule of Bid Prices. There is no time extension requested or recommended for this work.

Facts: Bid Item ES-3 has an estimated quantity of 2,831 CY of in-situ treated ground. The Contractor has currently installed 3,929 CY of Soilcrete (Jet Grout) for ground treatment which has been verified by Quality Control Reports. This translates to an additional quantity of 1,098 CY of ground treatment beyond the quantity listed for Bid Item ES-3. By subtracting 212 CY for the "scallop" portion of the columns the total is 886 CY.

Justification: Bid Item ES-3 of Section 01 20 00 Price and Payment Procedures states that "Estimates for progress payment purposes will be made based on the extent of ground treatment performed, measured by the in-situ cubic yard to the dimensions indicated for work compensable under this item, and multiplied by the unit price bid."

Contract Drawing ES-163 Rev. 1 provides minimum dimensions for the extent of the ground treatment for the TBM launch box. A note on the plan and section view of the drawing also indicates that the TBM Breakout Ground Treatment is "Designed by Contractor." Note 8 on the same drawing states, "Grout to be designed by the Contractor. The Contractor shall develop the proposed grouting plans based on the conditions at the TBM Launch Box and the requirements shown on this sheet. The Contractor shall submit the proposed grouting plans to Engineer for review and approval."

The main purpose for having a Soilcrete breakout zone is to provide relatively impermeable ground for the TBMs to start mining within. The minimum dimensions were not sufficient to produce a large enough Soilcrete breakout zone for a safe TBM breakout because the overall length of the TBM shield and cutterhead exceeds the minimum length shown in the Contract Drawings (see attached drawings). The zone must be sized to allow installation and backfill grouting of at least one ring of the tunnel liner to provide a watertight seal to develop between the treated impermeable ground and the tunnel liner. Once a satisfactory seal has been developed, the TBM may safely exit the improved ground with a reduced risk of water and soil inflow into the tunnel/TBM Launch Box interface. The lack of a sufficient seal in un-improved ground would result in water and soil inflow which would likely cause significant and potentially catastrophic ground settlement at the breakout (i.e. the intersection of 4th and Harrison). The Contractor has designed the minimum jet grout layout to provide for the development of a sufficient seal. The design allows for the encapsulation of the TBM and one ring with

SFMTA Contract No. 1252

Contractor: Barnard Impregilo Healy JV (BIH)

only 1.8' of cover between the TBM cutterhead and edge of jet grout. The Contractor will also provide additional protection by installing a breakout seal prior to mining.

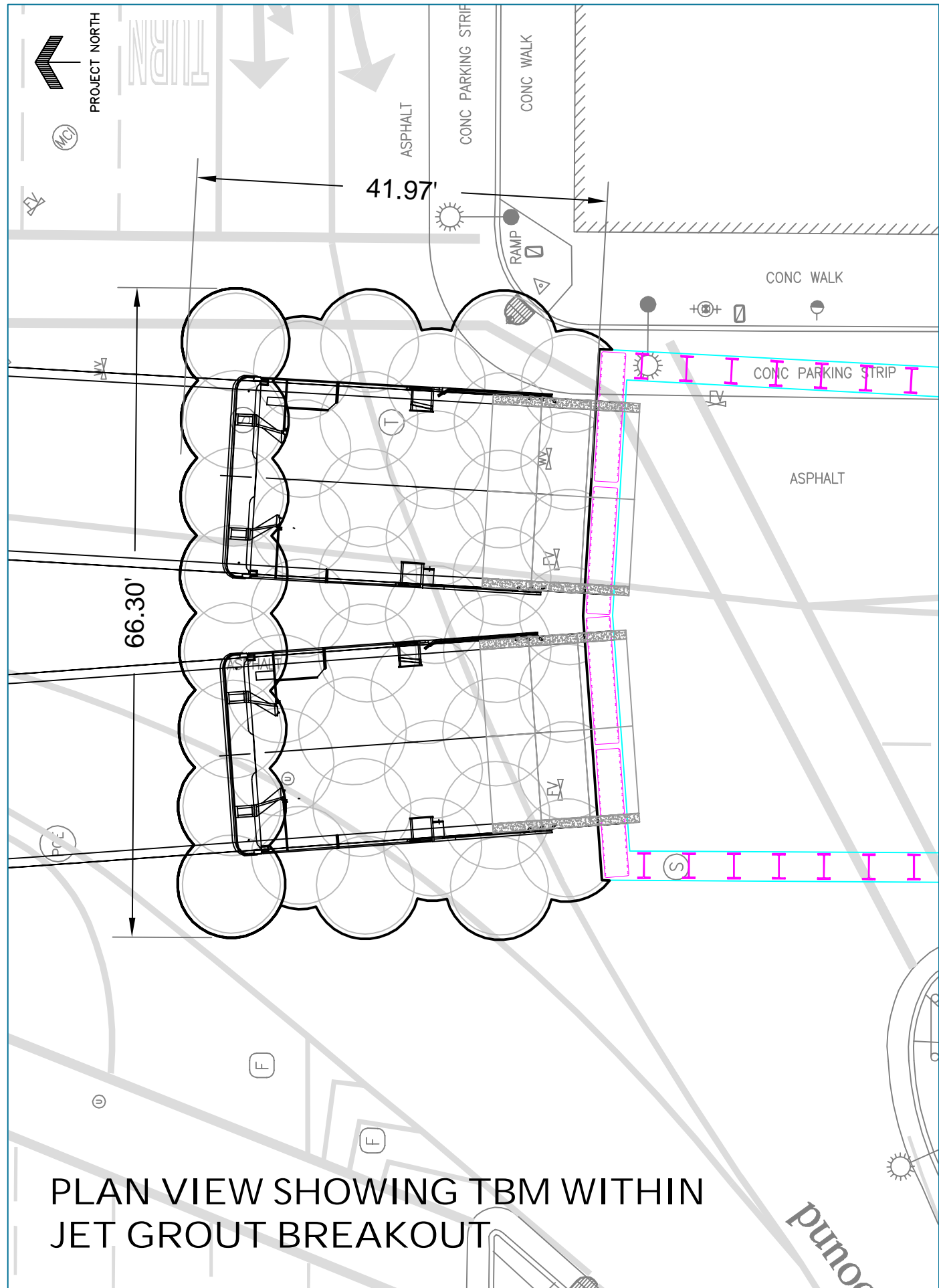
Payment shall be made in accordance with the Contract Documents including Specification Section 01 20 00 for Price and Payment Procedures and General Provision Section 9.04 for Unit Price Work.

Change Type: (4) Quantity Variation

By: *Sarah Wilson* 3/20/13
Sarah Wilson Date
Resident Engineer

[Signature] 3-20-13
Configuration Management Board Date
Approval

PLEASE PROVIDE 1) QUANTITY CALCULATION
2) HOW DID A LUMP SUM DESIGN BECOME A UNIT PRICE QUANTITY.



PLAN VIEW SHOWING TBM WITHIN
JET GROUT BREAKOUT



SECTION TAKEN THROUGH
NORTHBOUND TUNNEL

REVISION:

TBMs Shown Within
Jet Grout Breakout

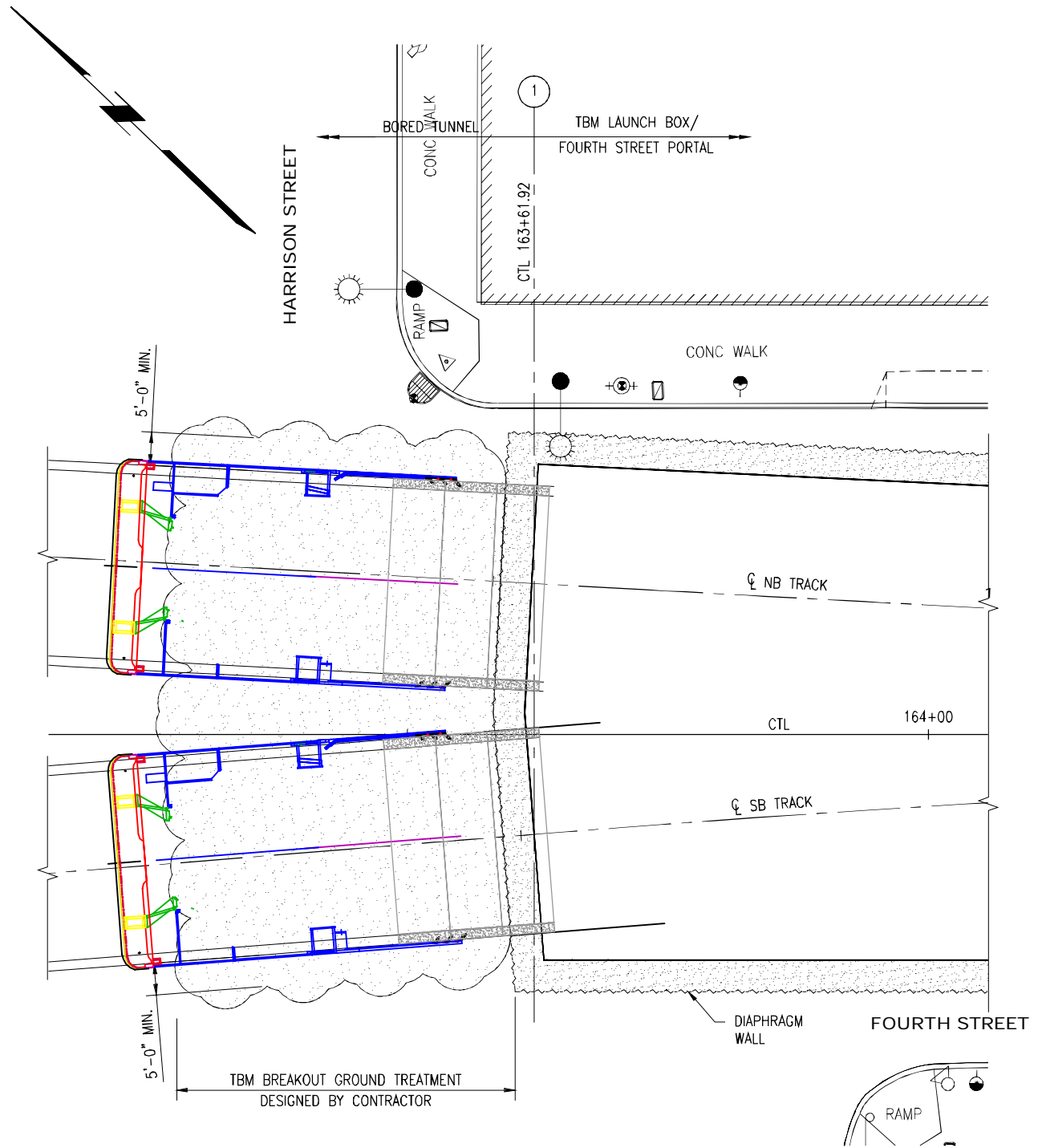
LAUNCH BOX
JET GROUTING

**BARNARD CONSTRUCTION
COMPANY, INC.**
701 GOLD AVE.
BOZEMAN, MT 59715
PHONE: (406) 586-1995
www.barnard-inc.com



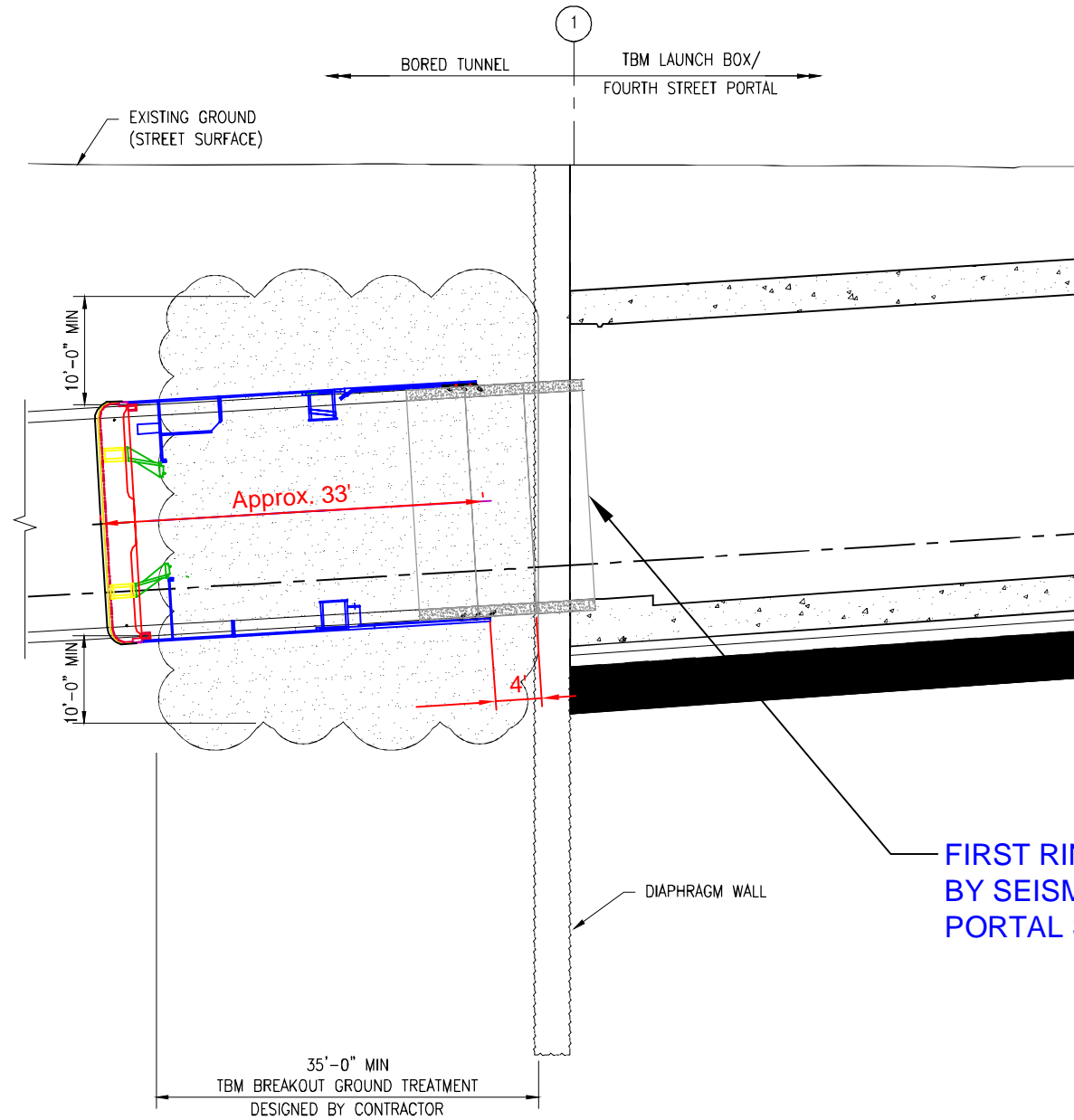
JET
GROUT
QTY

SHEET
JG-04



PARTIAL PLAN OF LAUNCH BOX / FOURTH STREET PORTAL

TBM'S SHOWN MINED TO A POSITION WHICH ALLOWS FOR ONE FULLY GROUTED RING WITHIN THE IMPROVED GROUND

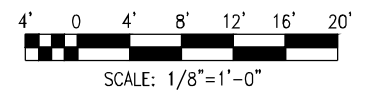


SECTION A-A

NOTES:

1. UTILITY LOCATIONS TO BE VERIFIED BY POTHOLING BEFORE GROUTING.
2. SEE UTILITIES DRAWINGS FOR UTILITY DIVERSIONS DURING CONSTRUCTION.
3. SEE SPECIFICATIONS FOR RESTRICTIONS ON ROAD OCCUPATION INCLUDING MUNI TROLLEY OPERATION REQUIREMENTS.
4. ALL GROUTING SHOWN SHALL BE PERFORMED AND COMPLETED BEFORE START OF TBM TUNNEL. SEE SPECIFICATION.
5. MAINTAIN AND PROTECT VEHICULAR AND PEDESTRIAN TRAFFIC AT ALL TIMES DURING DRILLING AND GROUTING.
6. IMPLEMENT ENVIRONMENTAL CONTROL TO CONTAIN DRILLING AND GROUT SPOILS AND PROTECT AGAINST SPOIL ENTRY INTO SEWERS, ROADS, WATERCOURSES AND WATERWAYS.
7. STAGE WORK TO MINIMIZE ROAD CLOSURES.
8. GROUT TO BE DESIGNED BY THE CONTRACTOR. THE CONTRACTOR SHALL DEVELOP THE PROPOSED GROUTING PLANS BASED ON THE CONDITIONS AT THE TBM LAUNCH BOX AND THE REQUIREMENTS SHOWN ON THIS SHEET. THE CONTRACTOR SHALL SUBMIT THE PROPOSED GROUTING PLANS TO ENGINEER FOR REVIEW AND APPROVAL.
9. CENTERLINES AND SPRINGLINES SHOWN ARE THE PLANNED OR DESIGN LOCATIONS.
10. INSTALL JET GROUTING IN SEQUENCE WITH DIAPHRAGM WALLS BEFORE EXCAVATION BELOW ROAD DECK STARTS.

FIRST RING POSITION DICATED BY SEISMIC JOINT OF FINAL PORTAL STRUCTURE



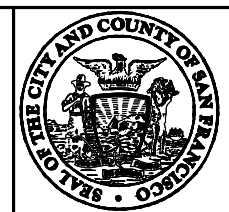
FOR ORIGINAL SIGNATURES, SEE CL-18168, REV. 0.

DATE	DESCRIPTION	REV. NO.	BY	CHECKED	APPROVED
06/06/2011	ISSUED FOR ADDENDUM 5	1	MH	MEF	RE
01/21/2011	ISSUED FOR BID	0	---	---	---

PB TELAMON
PB AMERICAS, INC.

DESIGNED
M. HUDSON
DRAWN
T. MARASIGAN
CHECKED
I. SMIRNOFF
REVIEWED
M. HUDSON
RECOMMENDED
M. FOWLER
APPROVED
R. EDWARDS
DATE
JAN 21, 2011

REV. 0
SEALED BY
M. FOWLER



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
APPROVED
CARTER R. ROHAN
EXECUTIVE DIRECTOR/CEO

THIRD STREET LIGHT RAIL PROGRAM
PHASE 2 - CENTRAL SUBWAY TUNNELS
**EXCAVATION AND GROUND SUPPORT
TBM LAUNCH BOX
GENERAL ARRANGEMENT - GROUND TREATMENT**

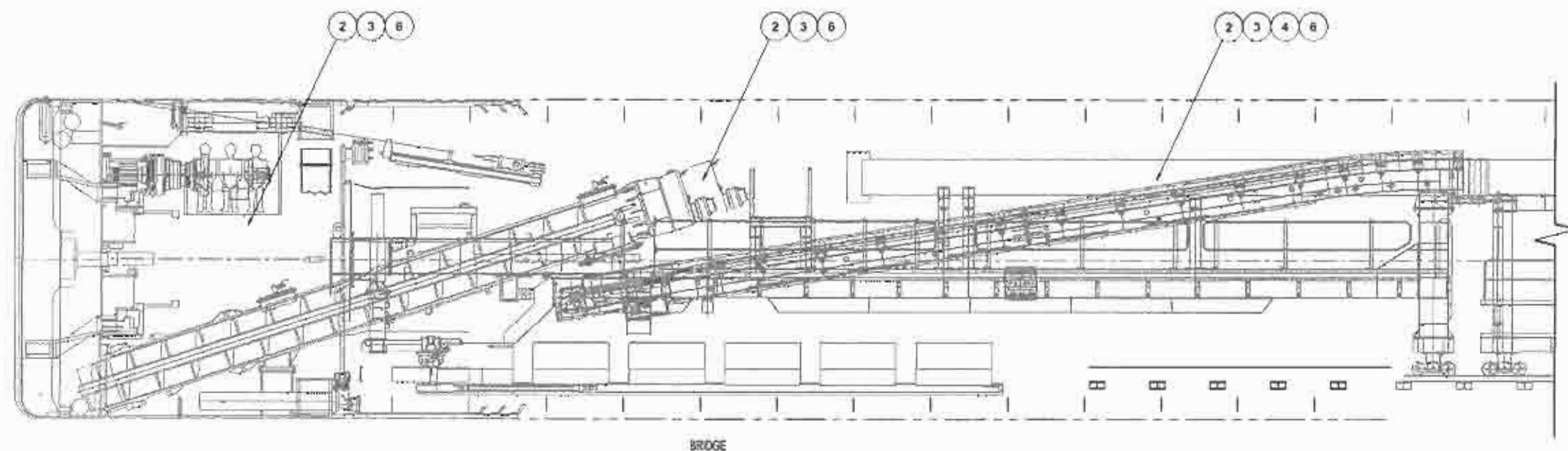
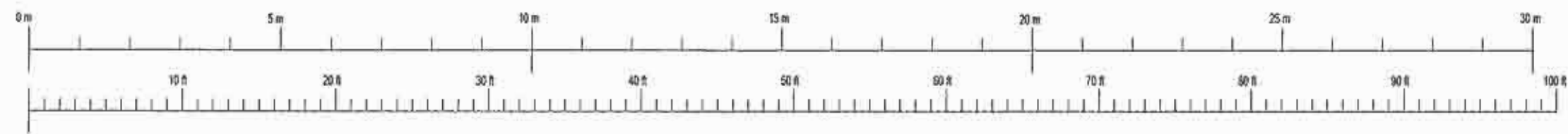
CONTRACT NO. 1252	REVISION
SFMTA CONTROL NO. CL-18168	
DRAWING NO. ES-163	1
SHEET NO.	

QTY	PART No.	DESCRIPTION	DWG No.	Component/Vendor ID	ITEM
1	A104481-1	FIRE ALARM CONTROL PANEL 10 ZONE			1
20	1050538-1	FIRE ALARM STATION, XP			2
16	1050538-2	STROBEMORN, XP			3
14	A104495-1	END OF LINE RESISTOR			4
2	A104487-1	BATTERIES FOR FIRE ALARM PANEL			5
17	1050538-3	HEAT DETECTOR, 93°C (200°F), XP			6
10007	A122216-1	CABLE, FIRE ALARM, 2C X 16AWG			7
1	D71683-48	BOX, JUNCTION, 36 X 24 X 8			8
1	D71683-45	PANEL			9
1	1050588	WINDOW KIT, ENCLOSURE			10

NOTE:

1. MOUNT FIRE ALARM PANEL (ITEM 1) ON TO CENTER OF ENCLOSURE PANEL (ITEM 9). INSTALL WINDOW KIT (ITEM 10) TO ENCLOSURE (ITEM 8) DOOR, PER MANUFACTURER INSTRUCTIONS. PUT ENCLOSURE PANEL (ITEM 9) INTO ENCLOSURE (ITEM 8) AND MOUNT ENCLOSURE (ITEM 8) NEAR EZAN STATION AND PLUM IN TO PURGE SYSTEM. SEE DRAWING 1049751 FOR PURGING LAYOUT.

2. SEE SHEET 5 OF 5 FOR COMPONENT LOCATIONS



FIRE ALARM SYSTEM ASSY SAN FRANCISCO		1050572		0 1 3 1 50	
DATE: 07/20/03 DRAWN BY: F. BRENNAN CHECKED BY: D. HOBBS		DATE: 07/20/03 DRAWN BY: F. BRENNAN CHECKED BY: D. HOBBS		DATE: 07/20/03 DRAWN BY: F. BRENNAN CHECKED BY: D. HOBBS	

Robbins

SFMTA Contract No. 1252

Contractor: Barnard Impregilo Healy JV (BIH)

EVALUATION OF MERIT

COR 076

Recommendation: Accept justification of Merit for COR 076 – Moscone South - 16" Unmarked Steel Pipe. There is no time extension requested or recommended for this work.

Facts: The Contractor encountered an abandoned 16" pipe located in the trench of the proposed 12" low pressure waterline. The 12" waterline could not be installed until the abandoned 16" pipe was removed. The 16" steel pipe was removed at the 12" water tie-in location at the north side of the Moscone southeast headwall. See attached Drawing CS 1252 - 31.

Justification: The contract drawings, specifically WD-403 rev.0 and UD-403 rev.0, did not show the abandoned 16" pipe which constitutes a differing and unforeseen site condition. The 16" pipe was at the same elevation as the proposed 12" waterline and therefore needed to be removed. SFTMA inspectors have verified that additional labor and equipment resources were required to facilitate removal of the 16" abandoned pipe.

Change Type – (2) Unforeseen Condition

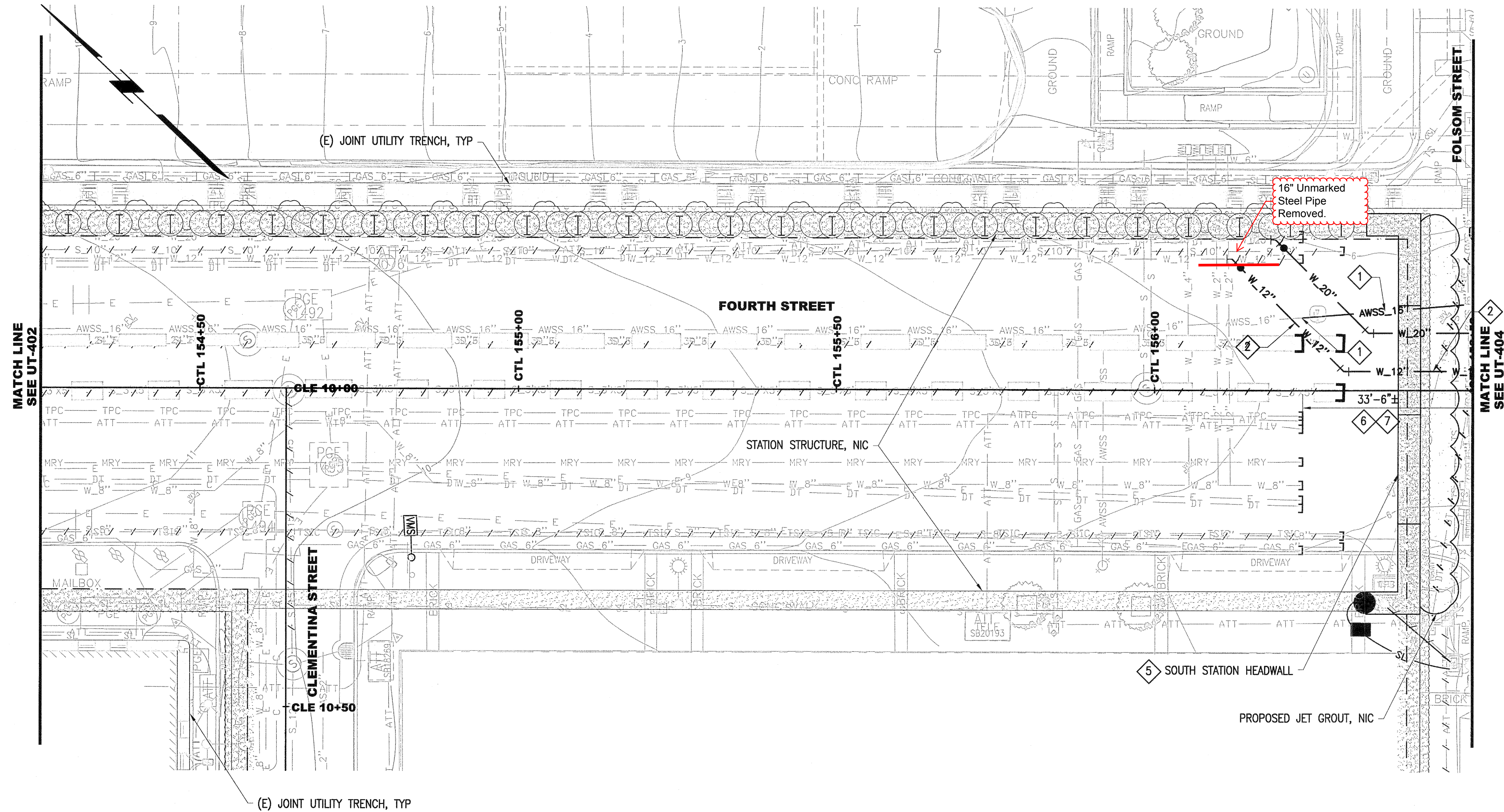
By: 
Sarah Wilson
Resident Engineer

3/20/13
Date


Configuration Management Board
Approval

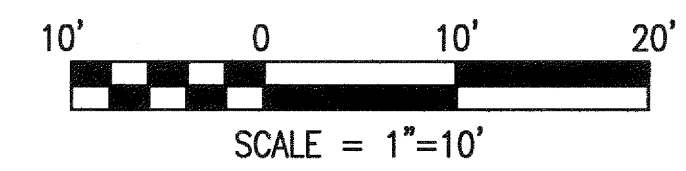
3-20-13
Date

S:\6nos003\m544.1\FinalDesign\Drawing-821\2-Civil\Utility Composites\Sheet Files CP03\Utility Composite\M54423UT403.dwg fbayani Thu Jan 27, 2011 10:14 am UT-403



- NOTES:**
1. SEE AWSS (AW) DRAWINGS FOR DESIGN.
 2. SEE WATER DISTRIBUTION (WD) DRAWINGS FOR DESIGN.
 3. SEE JOINT TRENCH (JT) DRAWINGS FOR DESIGN.
 4. SEE SEWER (SW) DRAWINGS FOR DESIGN.
 5. SEE (ES) DRAWINGS.
 6. REMOVE (E) 3' X 5' BRICK SEWER AND TEMPORARILY REMOVE (E) 18" PEP SEWER (INSIDE 3' X 5' SEWER) FOR STATION HEADWALL CONSTRUCTION. CONTRACTOR SHALL REPLACE ANY REMOVED OR DAMAGED PIPE AND MAKE CONNECTIONS IN ACCORDANCE WITH SFDPW STANDARD SPECIFICATION 322.03 "JOINTS FOR PEP SEWER" (SEE REFERENCE DRAWING 69412 FOR EXISTING CONDITION).
 7. BYPASSING OF MAIN SEWER FLOW SHALL BE PER SEWER SPECIFICATIONS SECTION 33 31 00.

DRAWING NO. CS 1252 - 031
COR 076



CONFORMED

								CITY AND COUNTY OF SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY		THIRD STREET LIGHT RAIL PROGRAM PHASE 2 - CENTRAL SUBWAY TUNNELS		CONTRACT NO. 1252	
TELAMON ENGINEERING CONSULTANTS INC.				DESIGNED: M. DEFORGE DRAWN: F. BAYANI CHECKED: P. WILSON REVIEWED: M. CHAN RECOMMENDED: M. FOWLER APPROVED: R. EDWARDS DATE: JAN 21 2011		APPROVED EXECUTIVE DIRECTOR/CEO		UTILITY COMPOSITE MOSCONE STATION CTL 154+25 TO 156+50		SFMTA CONTROL NO. CL-17990		DRAWING NO. UT-403	
01/21/2011 ISSUED FOR BID				REV. NO. 0		DATE: JAN 21 2011		SHEET NO. 66		REVISION 0			

BORDER REVISED 05/18/2009

16" Unmarked
Steel Pipe
Removed.

The drawing shows a structural layout with several steel beams labeled W-4", W-2", W-12", W-20", and AWSS-16". A red line indicates a removed 16-inch unmarked steel pipe. A red arrow points from a callout box to this pipe. Other features include a ramp, a diamond-shaped marker with the number 1, and various dimensions and annotations like 'GAS 6"', 'W 6"', and 'W 3"'. The drawing uses standard architectural symbols for steel beams and pipes.

16" Steel Pipe
Removed



2013/03/07 08:43:25



03/08/2013 11:31



03/08/2013 11:23

SFMTA Contract No. 1252

Contractor:

Barnard Impregilo Healy JV (BIH)

EVALUATION OF MERIT

COR 078

Recommendation: Accept justification of No Merit for COR 078 – (Comp Grout – Whole Foods and AT&T) - DSC / Design Modifications.

Facts: From February 6th, 2013 through March 7th, 2013 the Contractor performed potholing activities in advance of compensation grout hole drilling at the Whole Foods and AT&T location (between Folsom St. and Harrison St. on 4th Street) and encountered numerous buried obstructions. Various methods of potholing were implemented including the excavation of a pre-trench and the utilization of a vacuum truck near the proposed compensation grout holes. After further field investigation, the Contractor determined that it would be more feasible and cost effective to modify the designed proximal points of these drill holes in lieu of removing /demolishing the buried obstructions discovered in the compensation grout zone.

A 3' wide pre-trench was excavated at the Whole Foods and AT&T compensation grout hole location. It served as an initial potholing effort in order to identify obstructions ahead of the compensation grout hole installation. Numerous buried obstructions were encountered at this time including, but not limited to, concrete/brick debris, abandoned pipe utilities, and live utilities. A vacuum truck was also mobilized to the site in order to continue the investigation of the unknown buried obstructions.

Due to the quantity and unknown content of the buried obstructions, the Contractor proposed a modified compensation grout hole design to their designer. The Contractor's designer approved the proposed design modifications of the proximal points which consisted of relocating them to avoid hitting additional buried obstructions.

Justification: The range of dates the Contractor discovered the buried obstructions and completed the work started on February 6th, 2013 and extended through the March 7th, 2013. The Contractor notified SFMTA that the original compensation grouting design needed modification on March 7th, 2013 via Letter No. 97 by which time the work had already been completed. The required notice was not provided in conformance with the contract, and as a result, no opportunity was given to the SFMTA to participate in the design modification or provide a determination, therefore COR 078 is without Merit.

Change Type – None.

/ TYPE 2 UNFORESEEN CONDITION

By:

Sarah Wilson
Sarah Wilson
Resident Engineer

3/20/13
Date

[Signature]

3-20-13

SFMTA

Municipal Transportation Agency

821 Howard Street
San Francisco, Ca 94103

415.701.5262 Phone
415.701.5222 Fax

SFMTA Contract No. 1252

Contractor:

Barnard Impregilo Healy JV (BIH)

EVALUATION OF MERIT

COR 079

Recommendation: Accept justification of Merit for COR 079 – (Comp Grout – Old Navy) - DSC / Design Modifications. There is no time extension recommended for this work.

Facts: The Contractor performed potholing activities in advance of compensation grout hole drilling at the Old Navy location (between Market St. and Stevenson St. on 4th Street) and encountered numerous buried obstructions. The obstructions were first encountered on March 1, 2013.

After further field investigation with PG&E and additional pot-holing efforts, it was determined that there was not sufficient room between existing utilities (known and unknown) to drill the compensation grout holes as designed. Field investigations remain on-going, are coordinated daily with SFMTA's inspectors and the Contractor also continues its coordination efforts with PG&E in order to determine buried obstruction demolition/removal alternatives and acceptable drill hole locations.

There are numerous issues that have led to the differing site condition described herein.

1. There is not sufficient clearance between the existing PG&E lines per the original contact design to drill the compensation grout holes as designed.
2. Numerous unknown buried obstructions were also encountered including, but not limited to tile duct banks, concrete of unknown contents, and steel pipes. These DSC's may result in CJA-NCC having equipment on stand-by or have additional demobilization/remobilization costs.

Justification: The buried obstructions constitute a differing and unforeseen site conditions as they were not shown in the Contract Drawings, specifically Reference Drawings UE-127 and UE-128. Demolition and removal of existing utilities and relocation of drill hole locations may be necessary in order to mitigate impacts and proceed with the compensation grouting at this location. In order to proceed with mitigation efforts additional use of a vacuum truck, additional saw cutting and additional engineering will be required.

2" conduit empty

4-4" abandoned PG&E conduits
with wire and tar still inside,
Verified by Tom Riemier(PG&E)

03/08/2013



03/11/2013



03/12/2013





03/12/2013



Duct bank under PG&E
lines removed

03/12/2013



03/13/2013



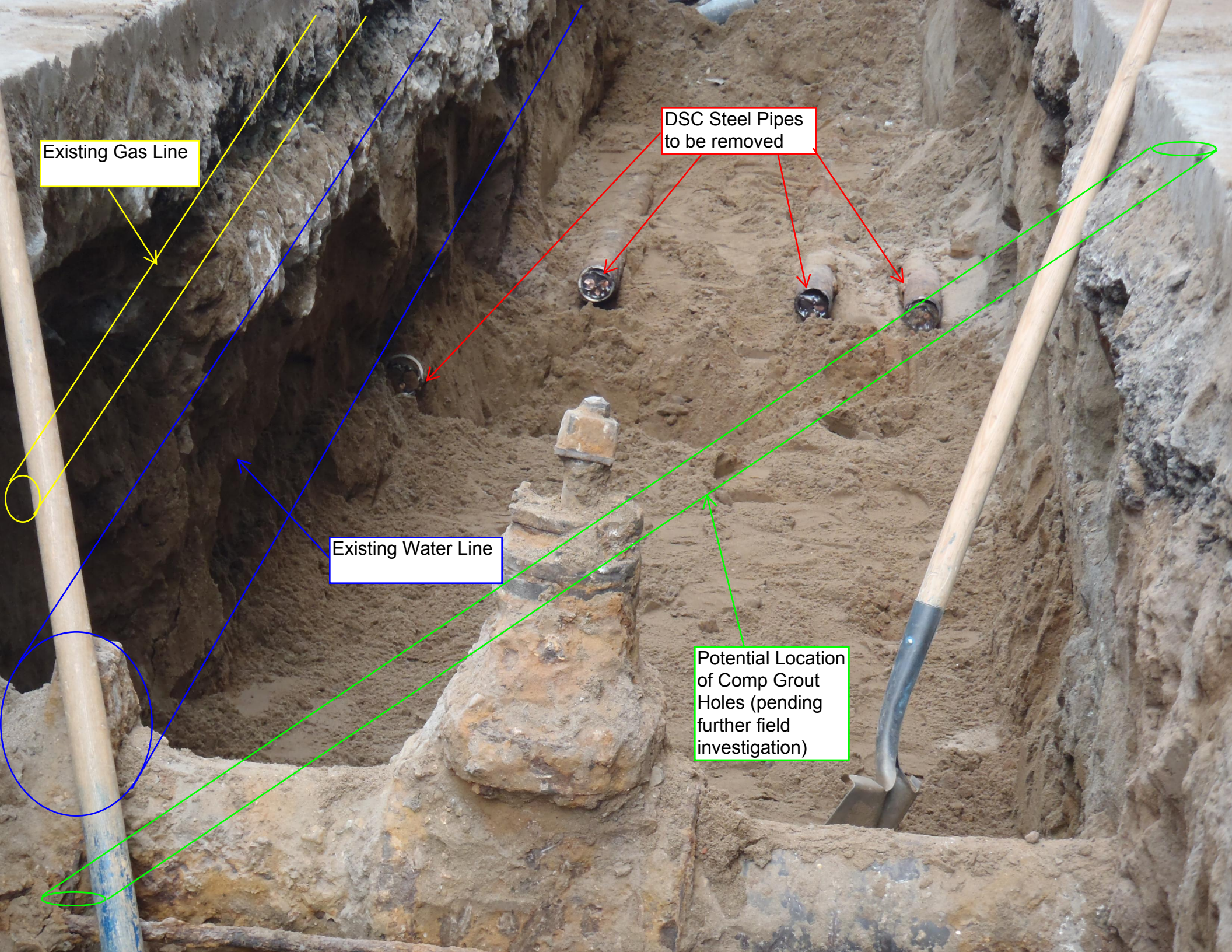
03/14/2013

Existing Gas Line

DSC Steel Pipes
to be removed

Existing Water Line

Potential Location
of Comp Grout
Holes (pending
further field
investigation)



ACTION ITEMS

ITEM #	MTG DATE	MTG ACTION DATE	DESCRIPTION	BIC	DUE DATE	STATUS
1	11/07/12	11/07/12	1300 – WP 1254 – SF Planning Request	RE	03/13/13	Open
3	11/14/12	11/14/12	1252 – COR 033 – Retrieval Shaft – 20” Water Line	SW	03/13/13	Open
2	12/12/12	12/12/12	1252 – Validation 1300 docs include as built information regarding Asbestos Pipes	RE	03/20/13	Open
4	01/30/13	02/20/13	1252 – COR 008 - Final unit cost for indirects	RR	03/13/13	Open
4	01/30/13	02/27/13	1252 – Merit response letter for COR 008	MB/SW	03/13/13	Open
1	02/20/13	02/27/13	1252 – Update on Micro Pile	ML/RE	04/03/13	Open



Connecting people. Connecting communities.

CMB Meeting Minutes #115

DATE: February 28, 2013

MEETING DATE: **February 27, 2013**

LOCATION: 821 Howard St, Main Conference Room

TIME: 3:00 PM

ATTENDEES: J Funghi (JF), A. Hoe (AH), S. Farhangi (SF), R. Edwards (RE), M. Benson (MB), M. Latch (ML), R. Redmond (RR), E. Stassevitch (ES), B. Ward (BW), S. Wilson (SW), M. Leong (ML), L. Zurhaga (LZ)

COPIES TO: Attendees: J. Park (JP), A. Hoe (AH), R. Nguyen (RN), A. Wong (AW), J. Wang (JW), A. Read (AR), B. Lebovitz (BL), D. Kuehn (DK)
File No. M544.1.5.0890

REFERENCE: Project No. M544.1, Contract No. 149 Task 1-8.02
Final Design

SUBJECT: Configuration Management Board Meeting # 115 – Rev. No. 0

RECORD OF MEETING *(Italicized text indicates status update of open items)*

ITEM #	DISCUSSION	ACTION BY DUE DATE
4- 01/30/13	<p>1252 – R. Redmond presented for information an issue escalation write up as discussed between the Contractor (BIH) and SFMTA regarding the unresolved issue of payment of indirect costs for Time related changes. Using COR 008 TIA of 7days related to (COR 001, 002 and 003) as an approach for setting precedence where time is involved the proposed Joint Resolution: SFMTA agrees to review and payment of "Time Related/variable Indirect Cost Only and OH cost as outline in the General Provision – Article 6.04B and 6.04C that are time related cost. BIH will revise their submittal of indirect costs to align with recent discussions at the RE level regarding acceptable categories of costs. The concept as laid out (see attached) will go forward provided the indirects can be substantiated. A review of the Contractor's revised categories will be reviewed by the SFMTA Contract Administrator prior to approval given to the Contractor. In addition the SFMTA's Contract Administrator suggested the language in the "Joint Resolution" section be revised to be more consistent "SFMTA agrees; SFMTA disagrees..." This item will be brought back to the CMB at a later date. 02/13: Informational material was submitted outlining the categories considered for agreement for the Contractor's indirect costs related to impacts/delays. The RE has agreed to the categories but agreement to components of those categories is still pending. The CMB directed the RE to meet with the Contractor to obtain a final agreement on indirects for compensable delays and bring back to the CMB the final unit cost information of the change following the guidelines presented. Status: 02/27 This item was not discussed at this week's meeting.</p>	RR 03/06/13

Ward, Beverly

From: Redmond, Richard
Sent: Wednesday, March 13, 2013 10:27 AM
To: Ward, Beverly; Hembd, Matthew; Wilson, Sarah H (SFMTA)
Cc: Benson, Mark
Subject: RE: Action Item updates - CMB 03/13

Redmond and Schall have come to agreement on the elevation ladder for this item, it is now back with the field office and estimating to come to conclusion on the actual items and cost breakdown

From: Ward, Beverly
Sent: Wednesday, March 13, 2013 9:52 AM
To: Hembd, Matthew; Wilson, Sarah H (SFMTA)
Cc: Benson, Mark; Redmond, Richard
Subject: RE: Action Item updates - CMB 03/13

All,

Excerpt from CMB mtg #115 regarding COR 008.

-Beverly

From: Hembd, Matthew
Sent: Wednesday, March 13, 2013 8:50 AM
To: Wilson, Sarah H (SFMTA)
Cc: Benson, Mark; Redmond, Richard; Ward, Beverly
Subject: RE: Action Item updates - CMB 03/13

Sarah,

I spoke to Beverly about the attached action items and the only three you need to handle are the following:

3. 1252 – COR 033 – Retrieval Shaft – 20” Water Line
 - Issue closed due to PCC 10. BIH has removed this from their COR log.
4. 1252 – COR 008 - Final unit cost for indirects
 - We are currently drafting a response for indirect cost categories. CJ is still reviewing my comments. Once he is finished we will send to you for approval.
4. 1252 – Merit response letter for COR 008 RR/SW.
 - The attached is the last letter we have for COR 008. Beverly and I are not sure what letter is expected. I suspect it may be letter stating that 7 days are granted and/or what indirect costs are warranted. I attached meeting minutes as a reference. There is no mention of having to write a letter.

Let me know if you have questions.

Thanks,

Matt

From: Wilson, Sarah H (SFMTA)
Sent: Tuesday, March 12, 2013 11:17 AM
To: Hembd, Matthew
Subject: FW: Action Item updates - CMB 03/13

Can you help me prepare?

Thanks,
Sarah

Sarah H. Wilson, PE
Resident Engineer – Tunnel Contract
SFMTA Central Subway Project
420 4th Street
San Francisco, CA 94107
Direct: (415) 243-0950
Mobile: (415) 312-9167
Email: Sarah.Wilson@sfmta.com

From: Ward, Beverly
Sent: Tuesday, March 12, 2013 10:01 AM
To: Edwards, Ross; Redmond, Richard; Wilson, Sarah H (SFMTA); Benson, Mark
Cc: Leong, Mun; Chin, H.Quon; Hembd, Matthew; Stassevitch, Eric
Subject: Action Item updates - CMB 03/13

All,

Just a friendly reminder tomorrow's agenda will include a request for information on follow up action for the listed items (see attached).

Regards,

Beverly A. Ward
SFMTA | Central Subway Project
821 Howard Street, 2nd Fl.
Tel: 415.701.5291
Email: beverly.ward@sfmta.com

ITEM #	DISCUSSION	ACTION BY DUE DATE
1	1252 - Sarah Wilson presented Evaluation of Merit of, COR 17 – MOS - Standby Time at south headwall due to Live Traffic Signal lines. Three live traffic signal lines were discovered which ran lengthwise through the headwall construction (not shown on dwg UD-403). The Contractor was unable to perform utility demolition and guidewall installation work as planned and is seeking compensation for standby by time while a resolution to relocate the traffic signal was received from SFMTA. RE is recommending rejecting this COR. Justification for rejection of merit is due to other work the Contractor could have performed while waiting for a response to RFI #110 – Proposal to Permanently Reroute Traffic Lines. A letter will be sent to the Contractor rejecting the COR's merit.	
2-	1252 - Sarah Wilson presented Evaluation of Merit of, COR 18 – MOS South Headwall re-design previously presented to the CMB in August (mtg #93). The Contractor contents that end stops are not required at the end of the return wall depicted on contract drawing (ES-421 Rev 0). RE is recommending a possible compensation value of \$135K. Based on the information presented the CMB found some merit for labor and material cost but were unclear from the COR, what element of work actually constituted the change. The RE is to proceed with a scoping meeting with a special emphasis on obtaining description of work as bid by Contractor so that the change can be better defined and quantified.	S. Wilson 11/21/12
3-	1252 - Sarah Wilson presented Evaluation of Merit of, COR 33 Ret Shaft - 20" Water Line Conflict – Contract drawings depict 20" water line being installed further east to the Muni (MRY) electrical duct bank instead of to the side as depicted on the contractor drawings to be installed to the side. Due to the proximity of MRY duck bank the Contractor must excavate and shore a larger hole in order to demolish the concrete around the duct bank to allow for 18" for welding all around the pipe. Based on the information presented the CMB found some merit for additional labor and material costs but were unable to clearly establish what element of work constituted the change as presented in the COR. RE will proceed with scoping the work to better define and quantify the change.	S. Wilson 11/21/12
4-	A. Ayres presented a change in the Schedule overall duration of the CN1300 Critical Path. Changes made to work calendars for the UMS station garage to include work during the moratorium, removed the garage work from the critical path. The NTP date has moved from May 1 to May 15 (Addendum 1). UMS pile installation changed from 115 – 100 days. Substantial completion has gone from 1736 calendar days to 1700 calendar days. These changes in the overall UMS schedule duration has resulted in an additional 15 working days of Muni float for a total of 83 working days.	

SFMTA Contract No. 1252

Contractor: Barnard Impregilo Healy JV (BIH)

EVALUATION OF MERIT

COR 033

Recommendation: Accept justification of Merit for costs associated with COR 033. The contract documents do not accurately depict the correct location of an existing 20" water line. The water line's location and position underneath a MUNI (MRY) electrical duct bank will impact the contract work associated with the installation of the new low pressure water line. Additional effort will be required to mitigate impacts to the contract work. No additional time will be granted as this work will not affect the critical path of the project.

Facts: The relevant contract drawings are UD-701 Rev.0, UT-701 Rev.1 and UT-721 Rev.1. WD-701 Rev.0.

The existing MRY duct bank which runs south to north at the intersection of Columbus Ave. and Union St. is shown in the contract drawings to have been installed to the side of an existing 20" low pressure water line. During the excavation required for the contract water line removal and relocation work BIH's subcontractor, Synergy Project Management (Synergy or SPM), discovered that the existing water line was actually further east than was indicated in the drawings which positioned the tie-in connection for the new water line directly underneath the MRY duct bank.

Rationale for COR: SPM states that they originally intended on excavating a 5' x 5' tie-in hole to enable the water department to cap the existing line then backfill after the water department completed its work. Due to the close proximity of the existing water line to the MRY duct bank, SPM is now required to excavate and shore a larger hole in order to demolish the concrete around the duct bank and allow room for the water department to stub the existing 20" water line out from underneath the MUNI lines. SPM states that they must demolish more of the duct bank than was anticipated so that they can lift the MUNI electrical lines out of the way. After the tie-in is complete SPM will install a split duct to cover existing cables and restore the concrete encasement around the MUNI duct. As a result of having a larger excavation more shoring, steel plates, backfill and paving will be required than was originally anticipated. SPM claims that they will not be able to achieve the same production rates as assumed during the time of bid due to the presence of live electrical lines within the ductbank.

Justification: The contract drawings do not accurately depict the correct location of the 20" water line and therefore the additional costs that will be incurred to mitigate impacts to the installation of the new low pressure water line should be made compensable. The appropriate dimensions of the original excavation will be confirmed and compared to the revised excavation dimensions.

1. ECP FD-038 Sidewalk bulbouts - SF Planning (estimate)
2. Response letter to Service Planning (design)



ITEM #	DISCUSSION	ACTION BY DUE DATE
1.	<p>A review of the outstanding action items requiring follow-up action was discussed. As noted on the Action Item list, one action was completed and is now Closed. The remaining Open action items “due by date” has been extended as noted in the “due date” column. Action items updates were reported as follows:</p> <p><u>1252 - PCC 02 UMS Headwalls</u> – Changing the reinforcement layout of the interior piles. PCC was withdrawn; CSL tube rebar cage will be removed by the stations contractor.</p> <p><u>1252 – COR 033 – Retrieval Shaft – 20” Water Line</u> – An update to the current condition will be given at next CMB meeting.</p> <p><u>1300 – WP 1254 – SF Planning Request</u> – Planning department requested 5 street trees along Stockton Street. The ECP will be brought back to the CMB along with an estimate. The CMB recommended a response be drafted to Service Planning of what the cost will be from a design standpoint and that they identify a funding source.</p> <p><u>1252 – Validation 1300 docs include as built information on asbestos pipe</u> – As built information has yet to be included in 1300 Contract documents, 1252 as built drawings will be included in Addendum #5.</p> <p><u>1252- Micropiles – As built condition explanation</u> – As built material was provided as requested. M. Latch reported the error in the 21 pin piles being installed at the 60ft height was a design error. The CMB requested the findings be communicated to the Designer as an E&O they be put on notice that a corrective action needs to take place with the alignment. In addition (ML) will incorporate the updated information into the as built.</p>	<p>MB 02/27/13</p> <p>RE 03/06/13</p> <p>RE 03/20/13</p> <p>ML 03/06/13</p>
2-	<p>The Program Trend/Change Control Log version 02/20/13 was viewed at this week’s meeting. Discussions took place regarding trends and potential changes requested by the 1252 Contractor as follows:</p> <p><u>Relocation of TBM Retrieval Shaft</u> – Cost analysis has been completed, information expected to be received on 03/04/13. Potential cost is outside of the project scope, funding will be through Capital Project for Transportation (CPT690), potentially costing \$6M for this change.</p> <p><u>Segment Measuring Frequency</u> – Contractor proposes to assemble ring at 500th ring cast instead of what is the required in the specs of a minimum gauging of every 100th segment cast. The spec requirement will remain until further evaluation of the process is done. Potential cost exposure is \$(1.3M).</p> <p><u>F21 and Old Navy Instrumentation Proposal</u> – Property owner would like a modification to the testing instrumentation, requesting fewer sensors be attached to the buildings. This is a no cost change.</p> <p><u>COR 72 – Ellis Shaft Jet Grout Obstruction</u> – Contractor’s subconsultant reported while drilling column R3 of Ellis Shaft hitting an obstruction 52ft below existing grade resulting in the jet grout monitor breaking off. At this time obstruction is unknown. Potential cost exposure is \$54K.</p> <p><u>COR 73 – MOS – Unknown 16" Pipe removal @ northwest headwall</u> – Contractor encountered a 16" pipe not shown on Contract plans while installing the 12" waterline at the north headwall of Moscone. Potential cost exposure is \$2K.</p>	
3-	<p>1251 – Approval was given for processing the final CMod and interim payment. Unilateral COR’s will be routed to the Contract Administrator today, 02/20/13 for signature. The</p>	

STEP 1

Title: Elongated Sidewalk Bulb-out at Chinatown Station		ECP #: FD-0XX
Submitted By: H. Quon Chin Contract#: CS155.2/1300; Package CTS-1254R Task #: 15.20 Task Name: Post-Design Services	Date: 11/07/2012	Signature:

STEP 2

Change Affects: FEIS/FEIR: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Design Criteria: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> PE Package: Drawings, Specifications Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Safety or Security: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Multiple Disciplines: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Muni or DPT O&M: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Other Tasks/ Disciplines Affected: Sustainable Streets (Traffic) Civil Architecture Landscape Architecture SFMTA OCS DPW
Construction Schedule Impact (if any):	None Identified (at the present time)
*Design Schedule Impact (if any):	Include in Contract 1300 Addendum
Construction Cost Impact (if any):	To be determined
*Design Cost Impact (if any):	To be determined

Description of Change:

To bring the Central Subway Project – Chinatown Station in closer conformance with the City’s General Plan, SF Planning Department in its May 7, 2012 GPR Letter (recommends) making design changes, specifically the extension of the sidewalk bulb-out at Stockton Street to help create a “station plaza”. This elongated bulbout on the southwest corner (SWC) of Stockton and Washington Streets in front of the station headhouse would also include bike racks, benches, trees and other landscape features.

Street trees are a requirement of Planning Code Section 138.1: requiring one street tree for every 20 feet of frontage, with an additional tree required for every remaining 10 feet of frontage. See reference document “Tree Planting and Protection Check List” cited below. Pursuant to Planning Code section 138.1, the Planning Department has required the installation of five (5) street trees along Stockton Street adjacent to the Chinatown Station (and 3 trees along Washington). Installation of these street trees is a provision of the Planning Department’s Notice of Special Restrictions and a condition of the Planning Department’s building permit approval.

Design modification from implementation of proposed change will require revision to the traffic drawings, additional sidewalk legislation, sidewalk pavement design (DPW), roadway drainage and catch basins (DPW), location of the OCS pole, architecture, landscape architecture, civil and possibly utility relocations (AT&T ductbank, W-6” and cable). Utility relocations mentioned were not in Final Design scope of work,

hence additional depth and location information (potholing) will be new required work.

It should be noted that the proposed elongated bulb-out is a change from the Preliminary Engineering (PE) design which formed the basis of the Final Design documentation and completion of the work.

From a broader perspective, incorporation of the elongated bulb-out will also provide the opportunity for Central Subway to coordinate a bus stop relocation proposal from SFMTA Service Planning to a location in front of the new station headhouse for an enhanced intermodal connection. The existing southbound bus stop on Stockton Street is presently located mid-block between Jackson and Washington Streets or approximately half a block distance for the connection. If this design element is an acceptable change to incorporate in conjunction with Planning design recommendations, the coexistence of a bus stop, SFMTA/Muni bus shelter, proposed trees, bike racks and other features will also need to be coordinated between SFMTA and SF Planning.

Reason and Justification for Change:

Conditions to SF Planning Department approvals of:

1. General Plan Referral (GPR) application – Case No. 2011.1202R;
2. Conditional Use Application – Case No. 2012.0641C and adoptions noted in
3. Planning Commission Motion No. 18699, September 06, 2012
4. Improvement to the future intermodal connection between the 8x, #30, #45 buses and Central Subway T-Line service.

- Reference Documents:**
1. **SF Planning Department** GPR Case No. 2011.1202R, Central Subway Project-Chinatown Station, *May 7, 2012*
 2. **SF Planning Department** Planning Commission Motion No. 18699, Case No. 2012.0641C, 933-949 Stockton Street, *September 6, 2012*
 3. **SF Planning Department** Tree Planting and Protection Checklist, Case No. 2012.0403.7405 – Completed w/DBI Building Permit Application.
 4. **Exhibit CTS Trees1** – w/package to Planning Commissioners
 5. **Contract 1300/Package CTS-1254R** Architectural Site Plan Drawing AR-100, Rev. 0, *October 22, 2012*
 6. **Contract 1300/Package CTS-1254R** Floor Plan, Surface Level – 4, Rev. 2, *October 22, 2012*

STEP 3

Reviewed By ECP Submittal Design Package Project Manager:	Date:	Signature:
Comments:		
Change Recommended: Yes <input type="checkbox"/> No <input type="checkbox"/>		

*Design schedule and/or cost impacts provided here are for reference only and acceptance of the subject design change does not constitute acceptance of either the design schedule or design cost impacts.

STEP 4

Reviewed By Project Controls Manager (Cost and Schedule): Eric Stassevitch	Date:	Signature:
Comments:		

STEP 5

Approved for Distribution By Discipline Lead:	Date:	Signature:
Comments:		
Change Recommended: Yes <input type="checkbox"/> No <input type="checkbox"/>		

STEP 6

Reviewed By Impacted Contract/Design Package Project Manager:	Date:	Signature:
Comments:		
Change Recommended: Yes <input type="checkbox"/> No <input type="checkbox"/>		

Add as many Contract/Design Package Project Manager review blocks as necessary

STEP 7

Reviewed By SFMTA Design Manager:	Date:	Signature:
Comments:		
Change Recommended (If yes, forward to Project Manager): Yes <input type="checkbox"/> No <input type="checkbox"/>		

STEP 8

Reviewed By Project Controls Manager (Cost and Schedule): Eric Stassevitch	Date:	Signature:
Comments:		
Change Recommended: Yes <input type="checkbox"/> No <input type="checkbox"/>		

STEP 9

Reviewed By Program Manager Project Development: Ross Edwards	Date:	Signature:
---	--------------	-------------------

Comments:
Change Approved: Yes <input type="checkbox"/> No <input type="checkbox"/> Change to be forwarded to CMB: Yes <input type="checkbox"/> No <input type="checkbox"/>

Verification of Design Change Implementation
The undersigned verifies that changes have been made to all documents impacted by the above approval design change.
Design Package: <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> 1 2 3
Design Package QC Manager: <div style="text-align: right;"><hr/>Print</div> <div style="text-align: right;"><hr/>Signature</div> <div style="text-align: right;"><hr/>Date</div>



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3-	<p>1251 – Approval was given for processing the final CMod and interim payment. Unilateral COR’s will be routed to the Contract Administrator today, 02/20/13 for signature. The</p>	

<p>01 20 00-9</p>	<p>Price and Payment procedures, Issued for Addendum No. 4 dated February 15, 2013:</p> <p><u>DELETE</u> paragraph 1.04.A.9.a in its entirety and <u>REPLACE</u> with the following:</p> <p>“a. The unit price for California Class I (Non-RCRA) Excavated Hazardous Wastes Mitigation and Disposal Work shall be full payment for the cost of Work and Materials necessary for the handling and disposal of excavated soils containing California Class I hazardous wastes, for the YBM-1255 package Work.</p> <p>Removal, abatement and disposal of asbestos laden transite pipe and debris identified on the drawings is incidental to the Work of this Bid Item.”</p>
<p>01 27 00.92-6</p>	<p>Dispute Review Board, Issued for Bid dated October 22, 2012:</p> <p><u>DELETE</u> Article 1.08.B.1 in its entirety and <u>REPLACE</u> with the following:</p> <p>“1. Referral by the Contractor: The Contractor may initiate Dispute Review only as to certified Contract Claims presented to and rejected by the Engineer and the Director of Transportation (or other SFMTA representative designated by the Department Head).”</p>
<p>01 31 03.92-1</p>	<p>Partnering, Issued for Bid dated October 22, 2012:</p> <p><u>DELETE</u> Article 1.01.B in its entirety and <u>REPLACE</u> with the following:</p> <p>“B. The Contractor is not obligated to enter into Partnering with the City. There will be no penalties of any kind imposed if the Contractor elects not to participate in Partnering with the City.”</p> <p><u>ADD</u> the following new paragraph after Article 1.01.B:</p> <p>“C. The Contractor shall establish a partnering process to resolve any dispute between the Contractor and any Subcontractor of any tier concerning the performance of or payment for the Work where the dispute does not involve the City. A partnering session shall be held upon request by any Subcontractor or the Contractor. A Subcontractor shall bear its own costs of participating in such partnering sessions, and Contractor shall pay all other costs of such partnering sessions. The City has no liability for the cost of such partnering.”</p>

INDEX OF DRAWINGS

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GENERAL

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4	CL-21602	GE-013	3	DRAWING INDEX SHEET 3 OF 6
5	CL-21603	GE-014	3	DRAWING INDEX SHEET 4 OF 6
6	CL-21609	GE-015	4	DRAWING INDEX SHEET 5 OF 6
7	CL-21618	GE-016	3	DRAWING INDEX SHEET 6 OF 6
8	CL-21604	GE-031	0	GENERAL ARRANGEMENT PLAN
9	CL-21610	GE-041	0	PROJECT CONTROL LINE DEFINITIONS SHEET 1 OF 2
10	CL-21611	GE-042	0	PROJECT CONTROL LINE DEFINITIONS SHEET 2 OF 2
11	CL-21605	GE-051	0	TOPOGRAPHIC SURVEY INDEX SHEET AND LEGEND
12	CL-21606	GE-052	0	MAIN SURVEY SHEET 1 OF 3
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14	CL-21608	GE-054	0	MAIN SURVEY SHEET 3 OF 3

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16	CL-21613	CV-011	0	DEMOLITION PLAN LOT AT 4TH AND FOLSOM
17	CL-21614	CV-021	1	GRADING AND DRAINAGE PLAN LOT AT 4TH AND FOLSOM
18	CL-21615	CV-022	1	DRAINAGE PROFILES LOT AT 4TH AND FOLSOM
19	CL-21616	CV-023	0	DRAINAGE DETAILS LOT AT 4TH AND FOLSOM STREETS

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21	TR-002	0	PLAN A-PHASE 1 (WEST SIDE WORK AREA) FOURTH ST - MISSION ST TO FOLSOM ST
22	TR-003	0	PLAN A-PHASE 2 (EAST SIDE WORK AREA) FOURTH ST - MISSION ST TO FOLSOM ST
23	TR-004	0	PLAN A-PHASE 2 (EAST SIDE WORK AREA) FOURTH ST - MISSION ST TO FOLSOM ST
24	TR-005	0	PLAN A-PHASE 3 (HEAD HOUSE WORK AREA) FOURTH ST - MISSION ST TO FOLSOM ST
25	TR-006	0	PLAN A-PHASE 3 (HEAD HOUSE WORK AREA) FOURTH ST - MISSION ST TO FOLSOM ST
26	TR-007	0	PLAN B-PHASE 1 (WEST SIDE WORK AREA) FOURTH ST - MISSION ST TO FOLSOM ST
27	TR-008	0	PLAN B-PHASE 1 (WEST SIDE WORK AREA) FOURTH ST - MISSION ST TO FOLSOM ST
28	TR-009	0	PLAN B-PHASE 2 (EAST SIDE WORK AREA) FOURTH ST - MISSION ST TO FOLSOM ST
29	TR-010	0	PLAN B-PHASE 2 (EAST SIDE WORK AREA) FOURTH ST - MISSION ST TO FOLSOM ST
30	TR-011	0	PLAN B-PHASE 3 (HEAD HOUSE WORK AREA) FOURTH ST - MISSION ST TO FOLSOM ST
31	TR-012	0	PLAN B-PHASE 3 (HEAD HOUSE WORK AREA) FOURTH ST - MISSION ST TO FOLSOM ST
32	TR-013	0	TRAFFIC DETOUR PLAN STOCKTON STREET

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33	TR-014	0	TRAFFIC DETOUR PLAN FOURTH ST AND HOWARD ST
34	TR-015	0	TRAFFIC DETOUR PLAN FOLSOM STREET
35	TR-016	0	EXISTING PAVEMENT MARKINGS AND STRIPING FOURTH ST - MARKET TO FOLSOM STS
36	TR-017	0	EXISTING PAVEMENT MARKINGS AND STRIPING FOURTH ST - MARKET TO FOLSOM STS
37	TR-018	0	EXISTING PAVEMENT MARKINGS AND STRIPING FOLSOM, CLEMENTINA AND FIFTH STS
37A	TR-019	0	EXISTING PAVEMENT MARKINGS AND STRIPING FOURTH ST - HOWARD TO FOLSOM STS
37B	TR-020	0	FINAL PAVEMENT MARKINGS AND STRIPING FOURTH ST - HOWARD TO FOLSOM STS
37C	TR-021	0	4TH STREET AND FOLSOM STREET EXISTING TRAFFIC SIGNAL PLAN
37D	TR-022	0	TEMPORARY TRAFFIC SIGNAL PLAN FOURTH ST AND CLEMENTINA ST
37E	TR-023	0	PEDESTRIAN CROSSWALK THROUGH CONSTRUCTION ZONE
37F	TR-024	0	DELINEATORS, CHANNELIZERS AND BARRICADES

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38	CL-21620	UD-001	0	GENERAL NOTES
39	CL-21621	UD-002	0	LEGEND AND ABBREVIATIONS
40	CL-21622	UD-003	0	SHEET LAYOUT
41	CL-21623	UD-401	0	CTL 149+75 TO 152+00
42	CL-21624	UD-402	0	CTL 152+00 TO 154+25
43	CL-21625	UD-403	0	CTL 154+25 TO 156+42
44	CL-21626	UD-411	0	CLE 10+60 TO 12+85
45	CL-21627	UD-413	0	FOL 9+40 TO 11+65

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46	CL-21631	JT-001	0	GENERAL NOTES
47	CL-21632	JT-002	0	LEGEND AND ABBREVIATIONS
48	CL-21633	JT-003	0	SHEET LAYOUT
49	CL-21634	JT-401	0	CTL 149+75 TO 152+00
50	CL-21635	JT-402	0	CTL 152+00 TO 154+25
51	CL-21636	JT-403	0	CTL 154+25 TO 156+42
52	CL-21637	JT-411	0	CLE 10+60 TO 12+85
53	CL-21638	JT-413	0	FOL 9+40 TO 11+65

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54	SW-1	0	GENERAL NOTES, LEGEND AND ABBREVIATIONS FOR SEWER WORK
55	SW-2	0	DETAILS
56	SW-3	0	MOSCONE STATION PLAN CLE 11+31 TO CLE 10+40
57	SW-4	0	MOSCONE STATION INTERSECTION FOLSOM AND 4TH STREETS

FOURTH STREET FORCE MAIN

58	SW-12.0	0	GENERAL NOTES, LEGEND AND ABBREVIATIONS
59	SW-13.0	0	KEY MAP, LOCATIONS OF WORK AND PLAN LIST
60	SW-14.0	0	LOCATION 1 REMOVAL WORK - PLAN
61	SW-14.1	0	LOCATION 2 REMOVAL WORK - PLAN
62	SW-15.0	0	LOCATION 1 NEW WORK - PLAN
63	SW-15.1	0	LOCATION 2 NEW WORK - PLAN
64	SW-16.0	0	LOCATIONS 1 AND 2 REMOVAL WORK - FOURTH STREET PROFILES

FOR ORIGINAL SIGNATURES, SEE CL-21600, REV. 0.

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65	SW-16.1	0	LOCATIONS 1 AND 2 NEW WORK - FOURTH STREET PROFILES
66	SW-17.0	0	DETAILS I
67	SW-17.1	0	DETAILS II
68	SW-17.2	0	DETAILS III
69	SW-17.3	0	DETAILS IV
70	SW-17.5	0	LOCATION 1 GENERAL NOTES
71	SW-17.6	0	LOCATION 1 GENERAL NOTES
72	SW-17.7	0	LOCATION 1 GENERAL NOTES AND TYPICAL DETAILS
73	SW-17.8	0	LOCATION 1 DEMOLITION PLAN, SECTION
74	SW-17.9	0	LOCATION 1 NEW WORK - PLAN
75	SW-17.10	0	LOCATION 1 NEW WORK - SECTIONS

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76	CL-21642	WD-001	1	GENERAL NOTES
77	CL-21643	WD-002	0	LEGEND AND ABBREVIATIONS
78	CL-21644	WD-003	0	SHEET LAYOUT
79	CL-21645	WD-004	0	DETAILS
80	CL-21646	WD-402	1	CTL 152+00 TO 154+25
81	CL-21647	WD-403	1	CTL 154+25 TO 156+42
82	CL-21648	WD-411	0	CLE 10+60 TO 12+85
83	CL-21649	WD-413	1	FOL 9+40 TO 11+65

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84	AW-101	0	GENERAL NOTES, LEGEND, AND ABBREVIATIONS
85	AW-102	0	KEY MAP, LOCATIONS OF WORK AND PLAN LIST
86	AW-201.1	0	LOCATION 1 REMOVAL WORK 1 - PLAN
87	AW-201.2	0	LOCATION 1 REMOVAL WORK 2 - PLAN
88	AW-201.3	0	LOCATION 2 REMOVAL WORK 1 - PLAN
89	AW-201.4	0	LOCATION 2 REMOVAL WORK 2 - PLAN
90	AW-201.5	0	LOCATION 2 REMOVAL WORK 3 - PLAN
91	AW-201.6	0	LOCATION 1 TEMPORARY WORK - PLAN
92	AW-201.7	0	LOCATION 2 TEMPORARY WORK - PLAN
93	AW-201.8	0	LOCATION 1 NEW WORK 1 - PLAN
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95	AW-201.10	0	LOCATION 2 NEW WORK 1 - PLAN
96	AW-201.11	0	LOCATION 2 NEW WORK 2 - PLAN
97	AW-201.12	1	LOCATION 2 NEW WORK 3 - PLAN
98	AW-201.13	0	LOCATIONS 1 AND 2 NEW WORK - FOURTH STREET PROFILES
99	AW-201.14	0	LOCATION 2 NEW WORK - FOLSOM STREET PROFILES
100	AW-201.15	0	12" GATE VALVE AND VALVE VAULT ARRANGEMENT - PLAN AND SECTIONS
101	AW-201.16	0	DETAILS
102	AW-201.17	1	SECTIONS
103	AWSS 1	0	AWSS STANDARD DRAWING I
104	AWSS 2	0	AWSS STANDARD DRAWING II
105	AWSS 3	0	AWSS STANDARD DRAWING III
106	AWSS 4	0	AWSS STANDARD DRAWING IV
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109	AWSS 7	0	AWSS STANDARD DRAWING VII
110	AWSS 8	0	AWSS STANDARD DRAWING VIII
111	AWSS 9	0	AWSS STANDARD DRAWING IX
112	AWSS 10	0	AWSS STANDARD DRAWING X

PAVEMENT RENOVATION

113	RP-001	0	LEGEND, ABBREVIATIONS, AND GENERAL NOTES
114	RP-101	1	MOSCONE STATION PLAN CTL 149+50 TO 155+00
115	RP-102	1	MOSCONE STATION PLAN CTL 155+00 TO 159+00
116	RP-103	0	PLAN CLEMENTINA STREET; FOURTH TO FIFTH
117	RP-201	0	MOSCONE STATION VERTICAL ALIGNMENT CTL 150+00 TO 155+00
118	RP-202	1	MOSCONE STATION VERTICAL ALIGNMENT CTL 155+00 TO 159+50
119	RP-301	0	CURB RAMP DETAILS FOURTH AND HOWARD STREETS
120	RP-302	0	CURB RAMP DETAILS FOURTH AND CLEMENTINA STREETS
121	RP-303	1	CURB RAMP DETAILS NE CORNER FOURTH AND FOLSOM STREETS
122	RP-304	1	CURB RAMP DETAILS NW CORNER FOURTH AND FOLSOM STREETS
123	RP-305	0	CURB RAMP DETAILS FOURTH AND FOLSOM STREETS - SW CORNER CLEMENTINA ST BETWEEN FOURTH ST AND GALLAGHER LN
124	RP-306	0	CURB RAMP DETAILS CLEMENTINA STREET AND GALLAGHER LANE
125	RP-401	1	SECTIONS
126	RP-402	1	SECTIONS
127	RP-403	1	DETAILS

TRACK

128	CL-21650	TC-001	0	GENERAL NOTES, LEGEND AND ABBREVIATIONS
129	CL-21651	TC-014	0	ALIGNMENT SUMMARY SB 137+50 TO 161+50
130	CL-21652	TC-111	0	PLAN AND PROFILE SB 150+00 TO 157+50
131	CL-21653	TC-136	0	NORTHBOUND PROFILE NB 150+00 TO 157+50
132	CL-21654	TC-301	0	CONSTRUCTION DETAILS

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133	CL-21661	UT-001	0	GENERAL NOTES
134	CL-21662	UT-002	0	LEGEND AND ABBREVIATIONS
135	CL-21663	UT-003	0	SHEET LAYOUT
136	CL-21664	UT-401	0	CTL 149+75 TO 152+00
137	CL-21665	UT-402	1	CTL 152+00 TO 154+25
138	CL-21666	UT-403	1	CTL 154+25 TO 156+42
139	CL-21667	UT-411	1	CLE 10+60 TO 12+85
140	CL-21668	UT-413	1	FOL 9+40 TO 11+65
141	CL-21669	UT-421	0	CROSS SECTION AT CTL 153+50 UTILITY PHASING
142	CL-21670	UT-422	1	CROSS SECTION AT CLE 10+75 UTILITY PHASING
143	CL-21671	UT-423	0	CROSS SECTION AT CTL 156+40 UTILITY PHASING
144	CL-21672	UT-424	0	CROSS SECTION AT CTL 153+10 UTILITY PHASING

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okumoska Thu Feb 28, 2013 9:21 am INDEX OF DRAWINGS

03/01/2013	ISSUED FOR CONTRACT 1300 ADDENDUM NO. 5	6	SAR	DPA	FRE
02/15/2013	ISSUED FOR CONTRACT 1300 ADDENDUM NO. 4	5	SAR	DPA	FRE
01/18/2013	ISSUED FOR CONTRACT 1300 ADDENDUM NO. 3	4	SAR	DPA	FRE
12/14/2012	ISSUED FOR CONTRACT 1300 ADDENDUM NO. 2	3	SAR	DPA	FRE
11/15/2012	ISSUED FOR CONTRACT 1300 ADDENDUM NO. 1	2	SAR	DPA	FRE
08/20/2012	ISSUED FOR BID	1	HQC	SAR	FRE
02/15/2012	ISSUED FOR BID	0			
DATE	DESCRIPTION	REV. NO.	BY	CHECKED	APPROVED

DESIGNED
L. AVESTEDT

DRAWN
L. AVESTEDT

CHECKED
A. READ

REVIEWED
J. TUSING

RECOMMENDED
A. READ

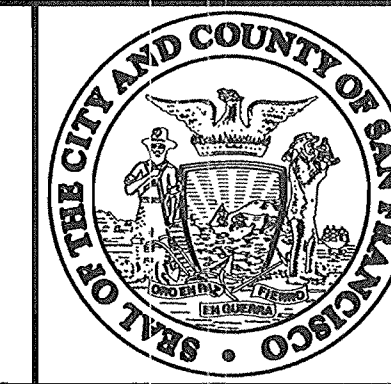
APPROVED
R. EDWARDS

DATE
02/15/2012

central subway design group

Michael Willis Architects

REV. 0 SEALED BY S. AILEEN READ



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED

EDWARD D. REISKIN
DIRECTOR OF TRANSPORTATION

THIRD STREET LIGHT RAIL PROGRAM
PHASE 2 - CENTRAL SUBWAY
MOSCONE STATION

GENERAL INDEX OF DRAWINGS
SHEET 1 OF 6

CONTRACT NO.
1255

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CL-21600

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GE-011

REVISION
6

SHEET NO.
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613	CL-22199	MV-001	0	GENERAL NOTES LEGEND AND ABBREVIATIONS
614	CL-22200	MV-010	0	EVS AIRFLOW DIAGRAM
615	CL-22201	MV-063	0	REFERENCE PLAN-LVL 3.0 MEZZANINE
616	CL-22202	MV-241	0	PLAN - LVL 3.0 MEZZANINE - SECTOR 1
617	CL-22203	MV-242	0	PLAN - LVL 3.0 MEZZANINE - SECTOR 2
618	CL-22204	MV-243	0	PLAN - LVL 3.0 MEZZANINE - SECTOR 3
619	CL-22205	MV-344	0	SECTIONS EW - BAY 06 - VENTILATION SHAFT
620	CL-22206	MV-801	0	DETAILS SHEET 1 OF 4
621	CL-22207	MV-802	0	DETAILS SHEET 2 OF 4
622	CL-22208	MV-803	0	DETAILS SHEET 3 OF 4
623	CL-22209	MV-804	0	DETAILS SHEET 4 OF 4
624	CL-22210	MV-810	0	EQUIPMENT SCHEDULE

ACCESS CONTROL

625	CL-22214	AC-001	0	ABBREVIATIONS
626	CL-22215	AC-002	1	LEGEND AND NOTES
627	CL-22216	AC-100	0	SITE PLAN
628	CL-22217	AC-123	1	LVL 4.0 SURFACE - SECTOR 3
629	CL-22218	AC-141	1	LVL 3.0 MEZZANINE - SECTOR 1
630	CL-22219	AC-142	1	LVL 3.0 MEZZANINE - SECTOR 2
631	CL-22220	AC-143	0	LVL 3.0 MEZZANINE - SECTOR 3
632	CL-22221	AC-151	0	LVL 2.0 CONCOURSE - SECTOR 1
633	CL-22222	AC-152	0	LVL 2.0 CONCOURSE - SECTOR 2
634	CL-22223	AC-153	1	LVL 2.0 CONCOURSE - SECTOR 3
635	CL-22224	AC-161	1	LVL 1.0 PLATFORM - SECTOR 1
636	CL-22225	AC-162	1	LVL 1.0 PLATFORM - SECTOR 2
637	CL-22226	AC-173	0	LVL 0.0 INVERT - SECTOR 3
638	CL-22227	AC-501	2	RISER DIAGRAM
639	CL-22228	AC-502	0	BLOCK DIAGRAM
640	CL-22229	AC-701	0	ACCESS CONTROL DETAILS

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641	CL-22233	TV-001	0	LEGEND AND NOTES
642	CL-22234	TV-002	0	ABBREVIATIONS
643	CL-22235	TV-021	0	CCTV SYSTEM BLOCK DIAGRAM
644	CL-22236	TV-031	0	CCTV CONDUIT INFRASTRUCTURE RISER DIAGRAM
645	CL-22237	TV-032	1	CCTV RISER DIAGRAM
646	CL-22238	TV-123	0	PLAN - SURFACE LEVEL - SECTOR 3
647	CL-22239	TV-141	0	PLAN - MEZZANINE LEVEL - SECTOR 1
648	CL-22240	TV-142	0	PLAN - MEZZANINE LEVEL - SECTOR 2
649	CL-22241	TV-143	1	PLAN - MEZZANINE LEVEL - SECTOR 3
650	CL-22242	TV-151	0	PLAN - CONCOURSE LEVEL - SECTOR 1
651	CL-22243	TV-152	0	PLAN - CONCOURSE LEVEL - SECTOR 2
652	CL-22244	TV-153	0	PLAN - CONCOURSE LEVEL - SECTOR 3
653	CL-22245	TV-161	0	PLAN - PLATFORM LEVEL - SECTOR 1
654	CL-22246	TV-162	0	PLAN - PLATFORM LEVEL - SECTOR 2
655	CL-22247	TV-173	0	PLAN - INVERT LEVEL - SECTOR 3
656	CL-22248	TV-201	0	MAIN COMMUNICATION ROOM EQUIPMENT LAYOUT
657	CL-22250	TV-701	1	CAMERA SCHEDULE SHEET 1 OF 2

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658	CL-22251	TV-702	0	CAMERA SCHEDULE SHEET 2 OF 2
659	CL-22252	TV-850	0	MOUNTING DETAILS
660	CL-22253	TV-860	0	EQUIPMENT DETAILS

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661	CL-22258	CO-001	0	LEGEND AND NOTES
662	CL-22259	CO-002	0	ABBREVIATIONS
663	CL-22260	CO-031	0	TELEPHONE CONDUIT INFRASTRUCTURE RISER DIAGRAM
664	CL-22261	CO-032	1	EMERGENCY TELEPHONE RISER DIAGRAM
665	CL-22262	CO-033	1	FIRE DEPARTMENT TELEPHONE RISER DIAGRAM
666	CL-22263	CO-034	1	FACILITY COURTESY PUBLIC & MTS RISER DIAGRAM
667	CL-22264	CO-035	0	METS TELEPHONE RISER DIAGRAM
668	CL-22266	CO-037	1	FACILITY SCADA CONDUIT INFRASTRUCTURE RISER DIAGRAM
669	CL-22267	CO-123	1	PLAN - SURFACE LEVEL - SECTOR 3
670	CL-22268	CO-141	0	PLAN - MEZZANINE LEVEL - SECTOR 1
671	CL-22269	CO-142	0	PLAN - MEZZANINE LEVEL - SECTOR 2
672	CL-22270	CO-143	1	PLAN - MEZZANINE LEVEL SECTOR 3
673	CL-22271	CO-151	0	PLAN - CONCOURSE LEVEL - SECTOR 1
674	CL-22272	CO-152	1	PLAN - CONCOURSE LEVEL - SECTOR 2
675	CL-22273	CO-153	0	PLAN - CONCOURSE LEVEL - SECTOR 3
676	CL-22274	CO-161	2	PLAN - PLATFORM LEVEL - SECTOR 1
677	CL-22275	CO-162	2	PLAN - PLATFORM LEVEL - SECTOR 2
678	CL-22276	CO-173	3	PLAN - INVERT LEVEL - SECTOR 3
679	CL-22277	CO-201	0	MAIN COMMUNICATION ROOM EQUIPMENT LAYOUT
680	CL-22278	CO-701	1	TELEPHONE AND DATA SCHEDULE SHEET 1 OF 4
681	CL-22279	CO-702	1	TELEPHONE AND DATA SCHEDULE SHEET 2 OF 4
682	CL-22280	CO-703	0	TELEPHONE AND DATA SCHEDULE SHEET 3 OF 4
683	CL-22281	CO-704	0	TELEPHONE AND DATA SCHEDULE SHEET 4 OF 4
684	CL-22282	CO-850	0	DETAILS SHEET 1 OF 2
685	CL-22283	CO-851	0	DETAILS SHEET 2 OF 2
686	CL-22284	CO-852	1	MOUNTING DETAILS EMERGENCY TELEPHONE
687	CL-22285	CO-853	1	MOUNTING DETAILS AREA OF RESCUE EMERGENCY TELEPHONE
688	CL-22286	CO-854	0	MOUNTING DETAILS COURTESY AND FIRE DEPARTMENT TELEPHONE

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689	CL-22292	EL-001	0	ABBREVIATIONS
690	CL-22293	EL-002	0	LEGEND AND NOTES
691	CL-22294	EL-003	2	FIXTURE SCHEDULE
692	CL-22295	EL-100	0	SITE PLAN
693	CL-22296	EL-123	2	LVL 4.0 SURFACE - SECTOR 3
694	CL-22297	EL-141	1	LVL 3.0 MEZZANINE - SECTOR 1
695	CL-22298	EL-142	1	LVL 3.0 MEZZANINE - SECTOR 2

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ELECTRICAL LIGHTING (CONT.)

696	CL-22299	EL-143	0	LVL 3.0 MEZZANINE - SECTOR 3
697	CL-22300	EL-151	0	LVL 2.0 CONCOURSE - SECTOR 1
698	CL-22301	EL-152	1	LVL 2.0 CONCOURSE - SECTOR 2
699	CL-22302	EL-153	0	LVL 2.0 CONCOURSE - SECTOR 3
700	CL-22303	EL-161	0	LVL 1.0 PLATFORM - SECTOR 1
701	CL-22304	EL-162	0	LVL 1.0 PLATFORM - SECTOR 2
702	CL-22305	EL-173	1	LVL 0.0 INVERT - SECTOR 3
703	CL-22306	EL-401	0	ENLARGED LIGHTING PLAN
704	CL-22307	EL-402	0	STAIR 1 - EGRESS LIGHTING
705	CL-22308	EL-403	0	STAIR 4 - EGRESS LIGHTING
706	CL-22309	EL-404	0	STAIR 5 - EGRESS LIGHTING
707	CL-22310	EL-405	0	STAIR 6 - EGRESS LIGHTING
708	CL-22311	EL-501	0	LIGHTING CONTROL DIAGRAM AND CONTROL SCHEDULES

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709	CL-22316	EP-001	0	GENERAL NOTES AND ABBREVIATIONS
710	CL-22317	EP-002	0	LEGEND
711	CL-22318	EP-062	0	REFERENCE PLAN - LVL 4.0 SURFACE
712	CL-22319	EP-063	0	REFERENCE PLAN - LVL 3.0 MEZZANINE
713	CL-22320	EP-064	0	REFERENCE PLAN - LVL 2.0 CONCOURSE
714	CL-22321	EP-065	0	REFERENCE PLAN - LVL 1.0 PLATFORM
715	CL-22322	EP-066	2	REFERENCE PLAN - LVL 0.0 INVERT
716	CL-22323	EP-123	2	LVL 4.0 SURFACE - SECTOR 3
717	CL-22324	EP-141	0	LVL 3.0 MEZZANINE - SECTOR 1
718	CL-22325	EP-142	0	LVL 3.0 MEZZANINE - SECTOR 2
719	CL-22326	EP-143	0	LVL 3.0 MEZZANINE - SECTOR 3
720	CL-22327	EP-151	1	LVL 2.0 CONCOURSE - SECTOR 1
721	CL-22328	EP-152	0	LVL 2.0 CONCOURSE - SECTOR 2
722	CL-22329	EP-153	1	LVL 2.0 CONCOURSE - SECTOR 3
723	CL-22330	EP-161	1	LVL 1.0 PLATFORM - SECTOR 1
724	CL-22331	EP-162	1	LVL 1.0 PLATFORM - SECTOR 2
725	CL-22332	EP-173	1	LVL 0.0 INVERT - SECTOR 3
726	CL-22333	EP-401	0	ENLARGED PLAN - MAIN ELECTRICAL ROOM
727	CL-22334	EP-402	0	ENLARGED PLANS
728	CL-22335	EP-403	0	ENLARGED STATION AGENT BOOTH
729	CL-22336	EP-404	0	TCU CONDUIT DETAILS
730	CL-22337	EP-405	0	PG&E POWER / SMART METER CONDUIT
731	CL-22338	EP-501	1	PRIMARY POWER SINGLE-LINE DIAGRAM
732	CL-22339	EP-502	2	SECONDARY POWER SINGLE-LINE DIAGRAM PART 1
733	CL-22340	EP-502A	0	SECONDARY POWER SINGLE-LINE DIAGRAM PART 2
734	CL-22341	EP-503	0	POWER STATION AUTOMATIC THROWOVER DESCRIPTION
735	CL-22342	EP-504	0	RISER DIAGRAM
736	CL-22343	EP-505	0	GROUNDING RISER DIAGRAM
737	CL-22344	EP-506	0	JET FAN CONDUIT BLOCK DIAGRAM
738	CL-22345	EP-507	0	TUNNEL POWER AND LIGHTING CONDUIT BLOCK DIAGRAM
739	CL-22346	EP-508	0	TRAIN CONTROL ROOM CONDUIT BLOCK DIAGRAM
740	CL-22347	EP-509	1	PLATFORM DISPLAY SYSTEM (PDS) CONDUIT BLOCK DIAGRAM
741	CL-22348	EP-510	0	RADIO ANTENNA CONDUIT BLOCK DIAGRAM
742	CL-22349	EP-551	0	FEEDER SCHEDULE SHEET 1 OF 3

SHT CTRL DWG REV DRAWING
NO. NO. NO. NO. TITLE

ELECTRICAL POWER (CONT.)

743	CL-22350	EP-552	0	FEEDER SCHEDULE SHEET 2 OF 3
744	CL-22351	EP-553	1	FEEDER SCHEDULE SHEET 3 OF 3
745	CL-22352	EP-560	0	MECHANICAL EQUIPMENT FEEDER SCHEDULE
746	CL-22353	EP-601	0	PANEL SCHEDULES SHEET 1 OF 6
747	CL-22354	EP-602	1	PANEL SCHEDULES SHEET 2 OF 6
748	CL-22355	EP-603	0	PANEL SCHEDULES SHEET 3 OF 6
749	CL-22356	EP-604	1	PANEL SCHEDULES SHEET 4 OF 6
750	CL-22357	EP-605	2	PANEL SCHEDULES SHEET 5 OF 6
751	CL-22358	EP-606	1	PANEL SCHEDULES SHEET 6 OF 6
752	CL-22359	EP-607	1	SCADA I/O LIST SHEET 1 OF 3
753	CL-22360	EP-608	0	SCADA I/O LIST SHEET 2 OF 3
754	CL-22361	EP-609	0	SCADA I/O LIST SHEET 3 OF 3

TRAFFIC SIGNALS

755	CL-22367	ET-001	0	GENERAL NOTES LEGEND AND ABBREVIATIONS
756	CL-22368	ET-101	0	4TH STREET AND FOLSOM STREET
757	CL-22369	ET-102	0	WIRING AND CONDUIT SCHEDULE
758	CL-22371	ET-103	0	4TH STREET AND HOWARD STREET
759	CL-22370	ET-106	0	DETAILS

FIRE ALARM AND DETECTION

760	CL-22376	FA-001	0	ABBREVIATIONS
761	CL-22377	FA-002	0	LEGEND AND NOTES
762	CL-22378	FA-100	0	SITE PLAN
763	CL-22379	FA-123	1	LVL 4.0 SURFACE - SECTOR 3
764	CL-22380	FA-141	1	LVL 3.0 MEZZANINE - SECTOR 1
765	CL-22381	FA-142	1	LVL 3.0 MEZZANINE - SECTOR 2
766	CL-22382	FA-143	1	LVL 3.0 MEZZANINE - SECTOR 3
767	CL-22383	FA-151	1	LVL 2.0 CONCOURSE - SECTOR 1
768	CL-22384	FA-152	1	LVL 2.0 CONCOURSE - SECTOR 2
769	CL-22385	FA-153	2	LVL 2.0 CONCOURSE - SECTOR 3
770	CL-22386	FA-161	1	LVL 1.0 PLATFORM - SECTOR 1
771	CL-22387	FA-162	2	LVL 1.0 PLATFORM - SECTOR 2
772	CL-22388	FA-173	1	LVL 0.0 INVERT - SECTOR 3
773	CL-22389	FA-501	0	RISER DIAGRAM
774	CL-22390	FA-502	0	BLOCK DIAGRAM
775	CL-22391	FA-503	2	SEQUENCE OF OPERATION

FOR ORIGINAL SIGNATURES, SEE CL-21609, REV. 0.

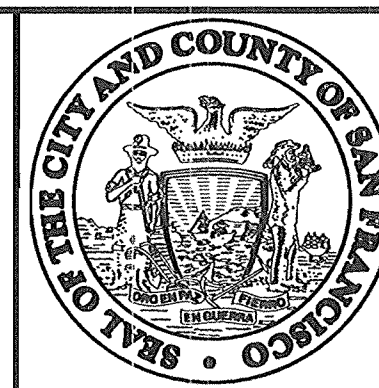
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11/15/2012	ISSUED FOR CONTRACT 1300 ADDENDUM NO. 1	1	SAR	DPA	FRE
02/15/2012	ISSUED FOR BID	0			
DATE	DESCRIPTION	REV. NO.	BY	CHECKED	APPROVED

central subway design group

Michael Willis Architects

DESIGNED L. AVESTEDT
 DRAWN L. AVESTEDT
 CHECKED A. READ
 REVIEWED J. TUSING
 RECOMMENDED A. READ
 APPROVED R. EDWARDS
 DATE 02/15/2012

REV. 0
 SEALED BY
 S. AILEEN READ



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

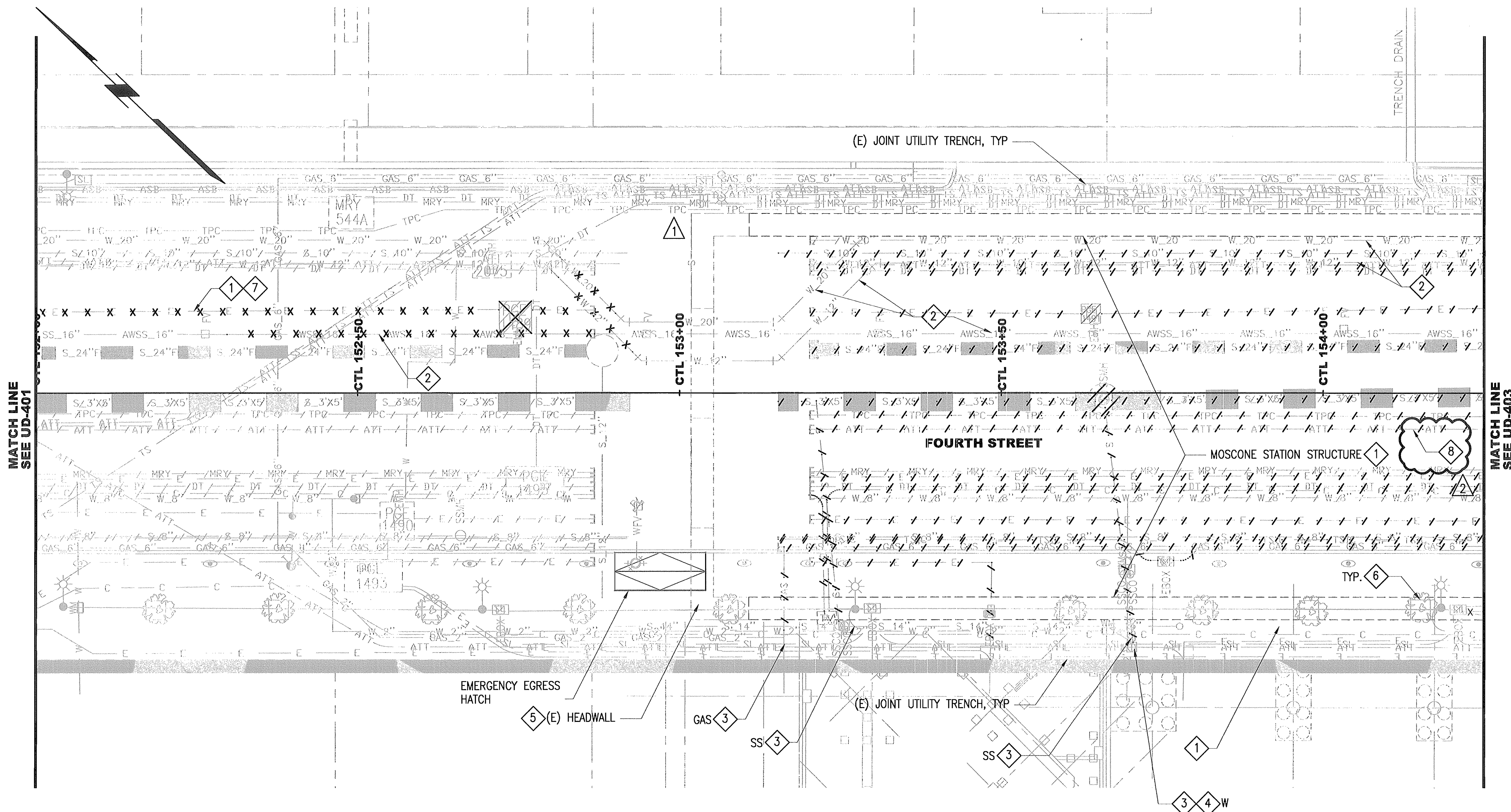
APPROVED
 EDWARD D. REISKIN
 DIRECTOR OF TRANSPORTATION

THIRD STREET LIGHT RAIL PROGRAM
 PHASE 2 - CENTRAL SUBWAY
 MOSCONE STATION

GENERAL
 INDEX TO DRAWINGS
 SHEET 5 OF 6

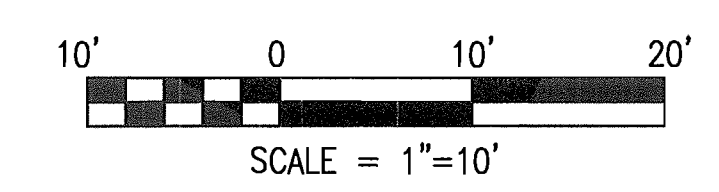
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SMITA CONTROL NO.	CL-21609
DRAWING NO.	GE-015
REVISION	4
SHEET NO.	6

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 okumoska Thu Feb 26, 2013 - 9:12 am GE-015_R2



NOTES:

1. CONTRACTOR SHALL REMOVE ALL ABANDONED UTILITIES & STRUCTURES WITHIN LIMITS OF DEMOLITION & EXCAVATION. SEE GENERAL NOTE 3, UD-001.
2. UTILITY MAINS (12", 20" W, 16" AWSS & 12" SS) SHALL BE MAINTAINED AT ALL TIME, UNLESS NOTED OTHERWISE. CONTRACTOR SHALL COORDINATE DEMOLITION WORK WITH STATION CONSTRUCTION PHASING (SEE ES CONSTRUCTION SEQUENCE DRAWINGS). ACTIVE UTILITIES SHALL BE MAINTAINED UNTIL RELOCATION OR CUT OVER IS COMPLETE, COORDINATE WITH STATION CONSTRUCTION PHASING.
3. CONTRACTOR SHALL PROTECT BUILDING SERVICE LATERALS RELOCATED UNDER CONTRACT NO. 1250 DURING STATION CONSTRUCTION UNTIL CUT OVER.
4. CONTRACTOR SHALL COORDINATE NEW WORK WITH UTILITY AGENCIES AND BUILDING OWNERS.
5. MOSCONE STATION HEADWALL IS CONSTRUCTED UNDER CONTRACT NO. 1252, AND SHALL BE PROTECTED IN PLACE DURING CONSTRUCTION.
6. FOR TREES REMOVAL, SEE RP-SHEETS.
7. REMOVE ABANDONED PG&E CONDUITS AND VAULTS TO FACILITATE (N) SS FORCE MAIN CONSTRUCTION UNDER THIS CONTRACT.
8. CONTRACTOR SHALL ABATE ASBESTOS-LADEN PIPE AND DEBRIS (44-3 1/2" DIA DUCTS, CONCRETE ENCASED) PRIOR TO REMOVAL.



FOR ORIGINAL SIGNATURES, SEE CL-21624, REV. 0.

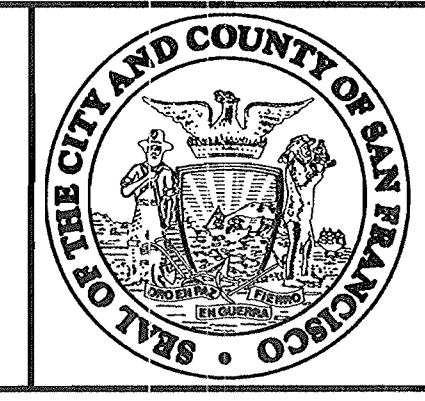
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02/15/2012	ISSUED FOR BID	0			

central subway design group

TELAMON ENGINEERING CONSULTANTS INC.

DESIGNED
D. ZUURING
DRAWN
F. BAYANI
CHECKED
M. CHAN
REVIEWED
J. TUSING
RECOMMENDED
A. READ
APPROVED
R. EDWARDS
DATE
02/15/2012

REV. 0
SEALED BY
M. CHAN



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED

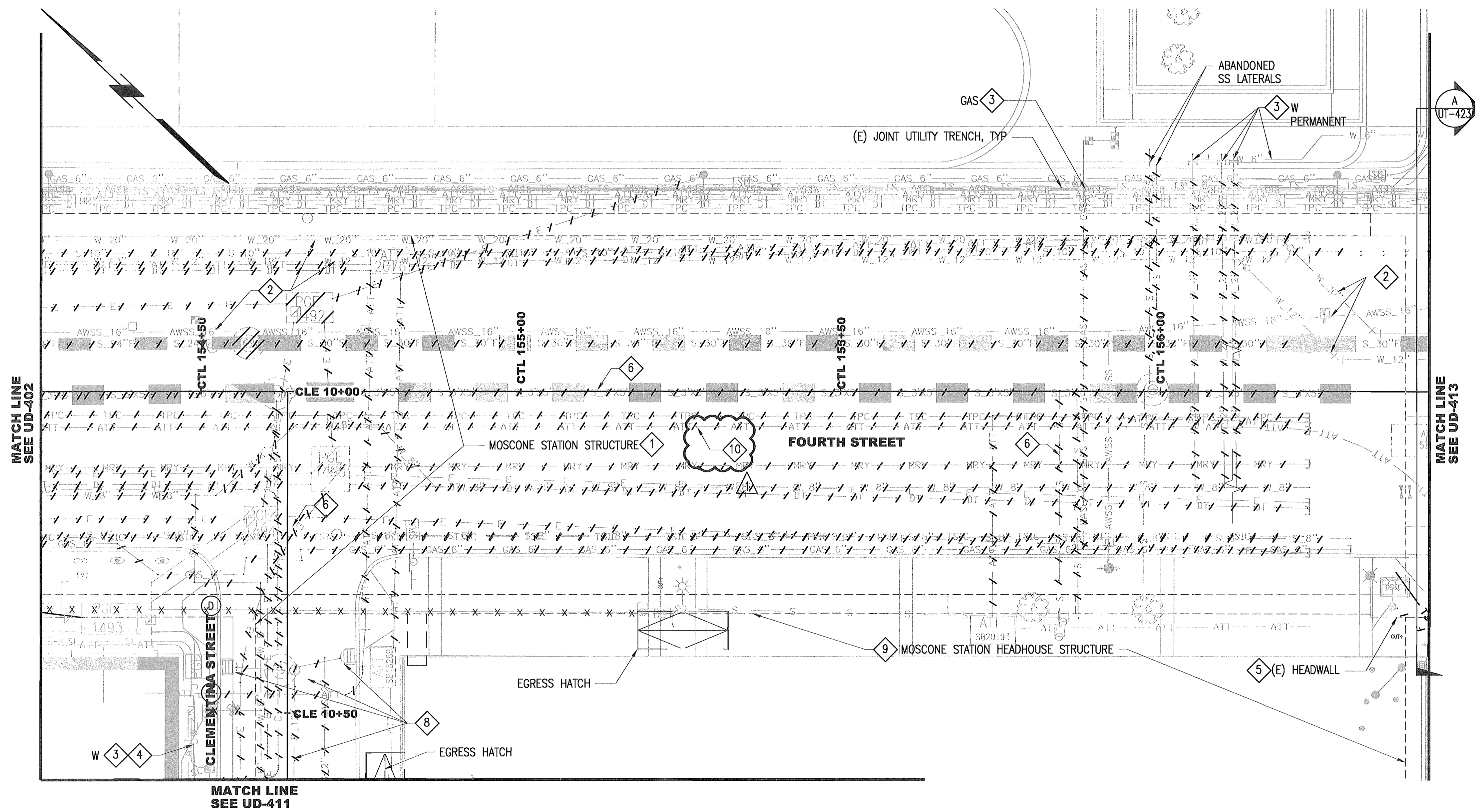
EDWARD D. RESKIN
DIRECTOR OF TRANSPORTATION

THIRD STREET LIGHT RAIL PROGRAM
PHASE 2 - CENTRAL SUBWAY
MOSCONE STATION

UTILITY DEMOLITION
CTL 152+00 TO 154+25

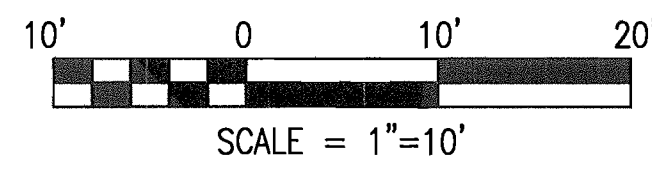
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SFMTA CONTROL NO. CL-21624	
DRAWING NO. UD-402	REVISION
SHEET NO. 42	2

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okumaska Thu Feb 28, 2013 10:08 am UD-402



NOTES:

1. CONTRACTOR SHALL REMOVE ALL ABANDONED UTILITIES & STRUCTURES WITHIN LIMITS OF DEMOLITION & EXCAVATION. SEE GENERAL NOTE 3, UD-001.
2. UTILITY MAINS (12", 20" W, 16" AWSS & 12" SS) SHALL BE MAINTAINED AT ALL TIME, UNLESS NOTED OTHERWISE. CONTRACTOR SHALL COORDINATE DEMOLITION WORK WITH STATION CONSTRUCTION PHASING (SEE ES CONSTRUCTION SEQUENCE DRAWINGS). ACTIVE UTILITIES SHALL BE MAINTAINED UNTIL RELOCATION OR CUT OVER IS COMPLETE, COORDINATE WITH STATION CONSTRUCTION PHASING.
3. CONTRACTOR SHALL PROTECT BUILDING SERVICE LATERALS RELOCATED UNDER CONTRACT NO. 1250 DURING STATION CONSTRUCTION UNTIL CUT OVER.
4. CONTRACTOR SHALL COORDINATE NEW WORK WITH UTILITY AGENCIES AND BUILDING OWNERS.
5. MOSCONE STATION HEADWALL IS CONSTRUCTED UNDER CONTRACT NO. 1252, AND SHALL BE PROTECTED IN PLACE DURING CONSTRUCTION.
6. FOR TREES REMOVAL, SEE RP-SHEETS.
7. REMOVE ABANDONED PG&E CONDUITS AND VAULTS TO FACILITATE (N) SS FORCE MAIN CONSTRUCTION UNDER THIS CONTRACT.
8. REMOVE (E) CBs, MH, SS PIPING AND PROVIDE TEMPORARY BY-PASS FOR DRAINAGE UNTIL CUT OVER PER SW-3.
9. SEE CV DRAWINGS FOR EXTENT OF DEMOLITION FOR MOSCONE STATION HEADHOUSE CONSTRUCTION.
10. CONTRACTOR SHALL ABATE ASBESTOS-LADEN PIPE AND DEBRIS (44-3 1/2" DIA DUCTS, CONCRETE ENCASED) PRIOR TO REMOVAL.



FOR ORIGINAL SIGNATURES, SEE CL-21625, REV. 0.

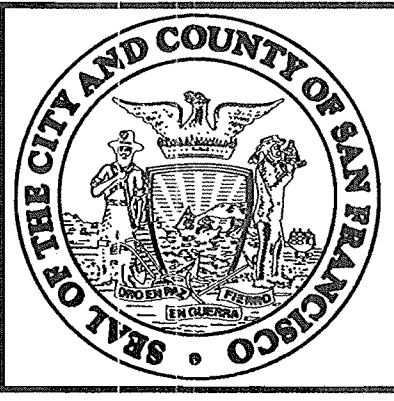
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02/15/2012	ISSUED FOR BID	0			

central subway design group

TELAMON ENGINEERING CONSULTANTS INC.

DESIGNED: D. ZUJURING
 DRAWN: F. BAYANI
 CHECKED: M. CHAN
 REVIEWED: J. TUSING
 RECOMMENDED: A. READ
 APPROVED: R. EDWARDS
 DATE: 02/15/2012

REV. 0
 SEALED BY
 M. CHAN



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED

EDWARD D. RESKIN
 DIRECTOR OF TRANSPORTATION

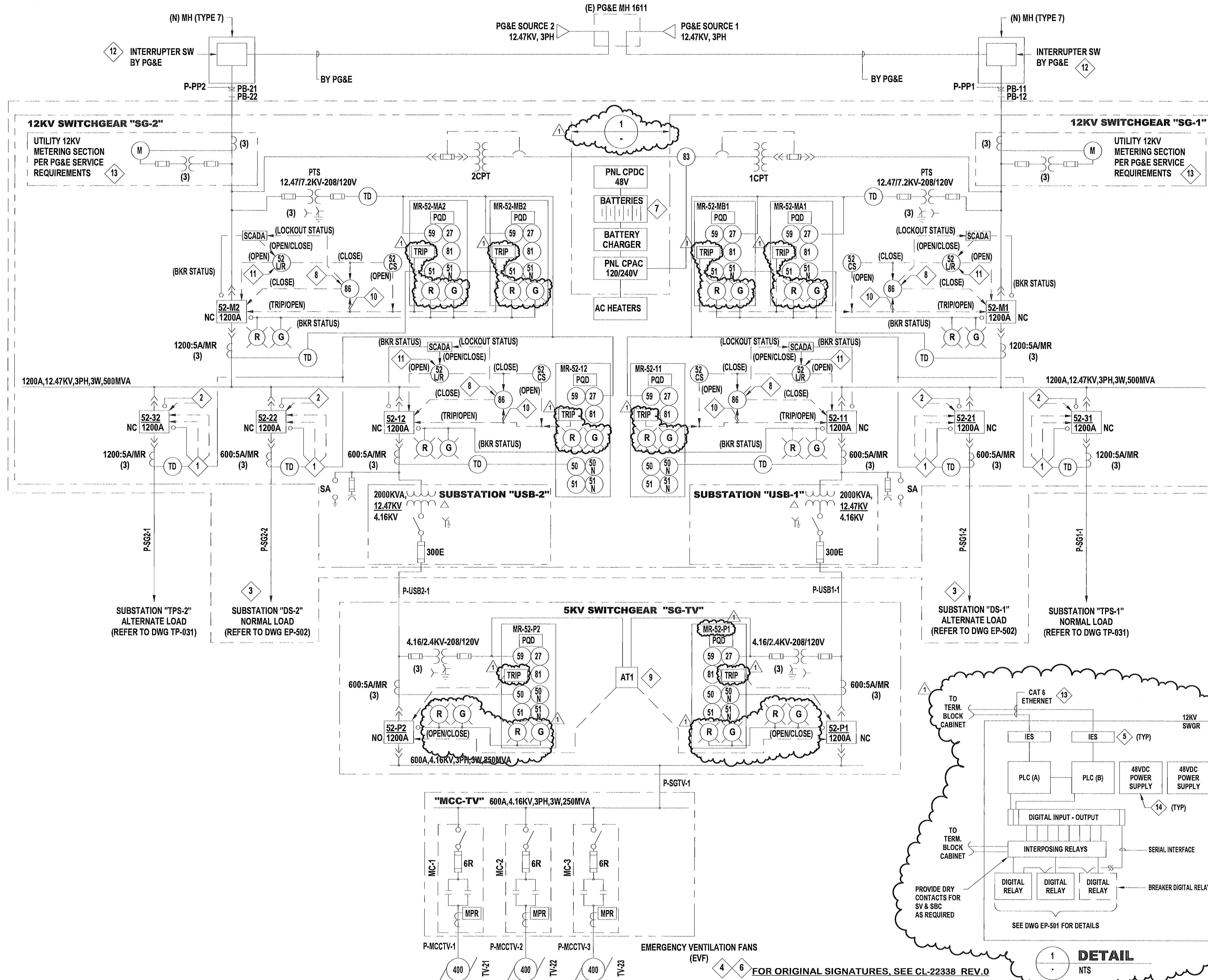
THIRD STREET LIGHT RAIL PROGRAM
 PHASE 2 - CENTRAL SUBWAY
 MOSCONE STATION

UTILITY DEMOLITION
 CTL 154+25 TO 156+42

CONTRACT NO. 1255	
SFMTA CONTROL NO. CL-21625	
DRAWING NO. UD-403	REVISION
SHEET NO. 43	1

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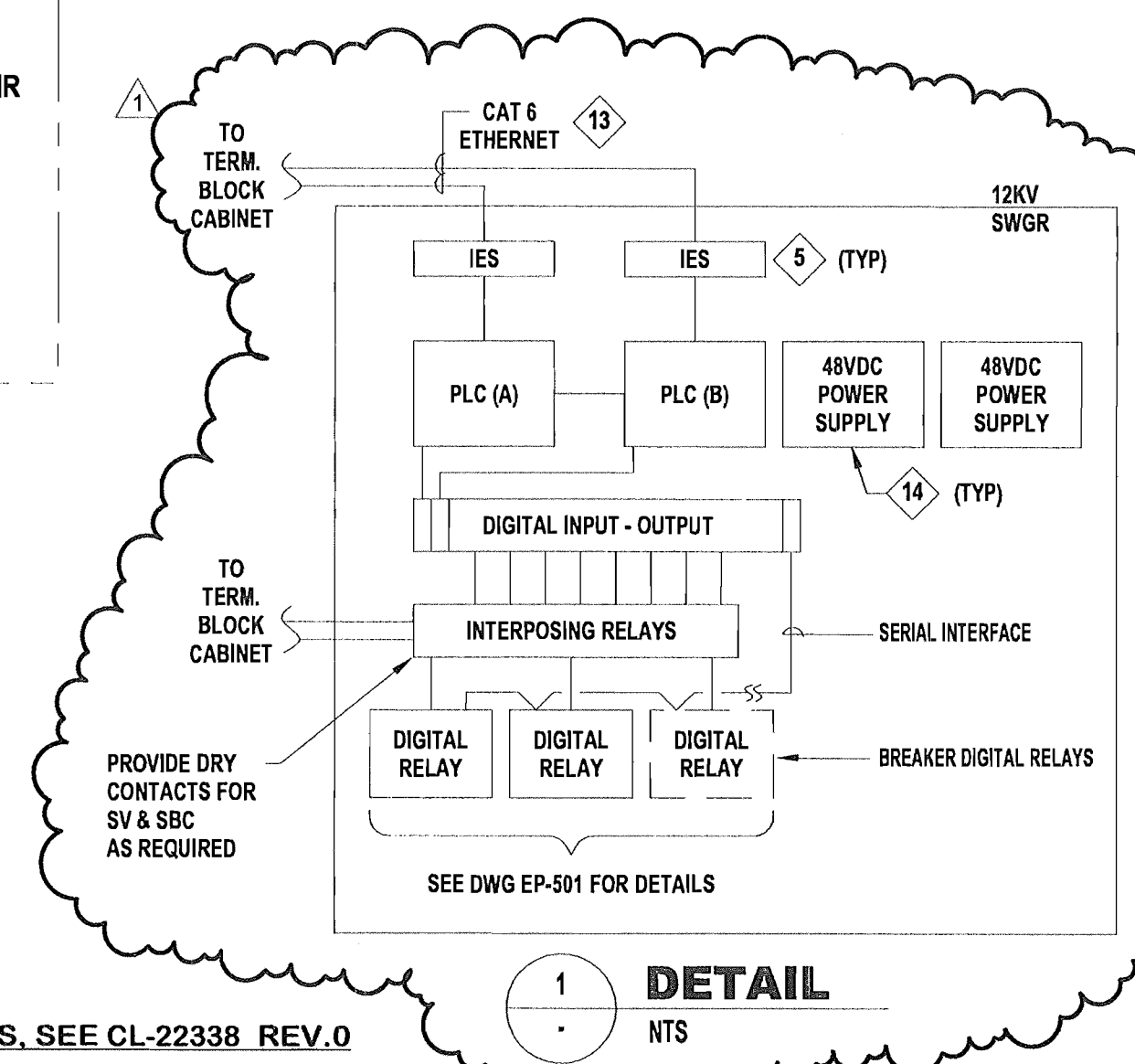
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- GENERAL NOTES:**
- POD FEATURES SHALL INCLUDE A, V, W, WH, VAR, VARH, VA, VAH, HZ, AND PF IN TRUE RMS.
 - ALL METERS AND RELAYS SHALL MEET PG&E APPROVAL.
 - THREE-LINE, AC CONTROL, AND DC CONTROL DIAGRAMS SHALL BE PROVIDED BY CONTRACTOR'S SUPPLIER FOR PG&E APPROVAL.
 - ALL BREAKERS SHALL BE BREAK BEFORE MAKE.

- SHEET NOTES:**
- SAME FEEDER CONNECTIONS TO PROTECTIVE RELAY AS FEEDERS 52-11 AND 52-12.
 - SAME FEEDER CONNECTIONS FOR SCADA AS FEEDERS 52-11 AND 52-12.
 - SUBSTATIONS "DS-1" AND "DS-2" ARE 80% LOADED.
 - ALL THREE EVF ARE 100% LOADED.
 - IES IS AN INDUSTRIAL ETHERNET MANAGED SWITCH.
 - ONLY USED DURING EMERGENCY CASES. REFER TO EV DWGS FOR ADDITIONAL REQUIREMENTS.
 - SWITCHGEAR "SG-1", "SG-2", AND "SG-TV" (THIS DWG) AND SUBSTATION "DS-1" AND "DS-2" (DWG E012) BREAKER TRIP AND CLOSE RELAYS CONTROLLED BY 48VDC LEAD ACID (CALCIUM) BATTERIES.
 - LOCK-OUT RELAY 86 IS USED AS CLOSE PERMISSIVE FOR SWITCHES "52CS" AND "52LR".
 - OPEN TRANSITION.
 - LOCK-OUT TRIGGER.
 - "52LR" IS MANUAL SWITCH USED AS SCADA OPEN/CLOSE PERMISSIVE.
 - PG&E WILL TERMINATE.
 - SEPARATE CONDUIT FOR EACH CAT 6 WIRE.
 - PROVIDE REDUNDANT 48VAC POWER SUPPLIES TO POWER ALL INDUSTRIAL ETHERNET SWITCHES (IES). WIRE TO STATION BATTERY 48VDC SUPPLY.

- SHEET SYMBOLS:**
- AT1 AUTOMATIC THROWOVER OPEN TRANSITION (BREAK BEFORE MAKE)
 - MPR MOTOR PROTECTIVE RELAY
 - POD POWER QUALITY DISPLAY
 - TRIP TRIP OUTPUT
 - G BREAKER OPEN PILOT LIGHT
 - R BREAKER CLOSED PILOT LIGHT
 - M UTILITY METER
 - TD TEST DEVICE
 - 27 UNDERVOLTAGE RELAY
 - 50 INSTANTANEOUS OVERCURRENT RELAY
 - 50N INSTANTANEOUS OVERCURRENT GROUND RELAY
 - 51 AC OVERCURRENT RELAY
 - 51N AC OVERCURRENT GROUND RELAY
 - 52CS MANUAL BREAKER CONTROL SWITCH
 - 52LR MANUAL BREAKER SCADA LOCAL/REMOTE SWITCH
 - 59 OVERVOLTAGE RELAY
 - 81 FREQUENCY RELAY
 - 83 AUTOMATIC SELECTIVE CONTROL
 - 86 LOCK-OUT RELAY



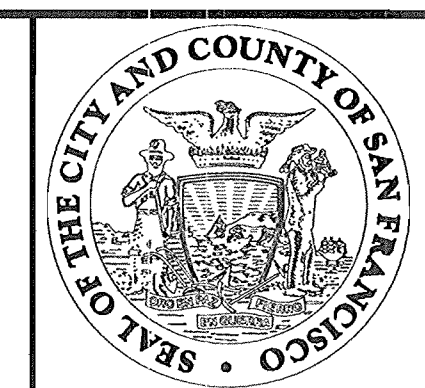
FOR ORIGINAL SIGNATURES, SEE CL-22338 REV.0

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02/15/2012	ISSUED FOR BID	1			

DESIGNED: R. SANTOS
 DRAWN: G. MEURER
 CHECKED: M. GILL
 REVIEWED: J. TUSING
 RECOMMENDED: A. READ
 APPROVED: R. EDWARDS
 DATE: 02/15/2012

SILVERMAN & LIGHT, INC.
 ELECTRICAL ENGINEERS

REV.0 SEALED BY M. GILL



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED
 EDWARD D. REISKIN
 DIRECTOR OF TRANSPORTATION

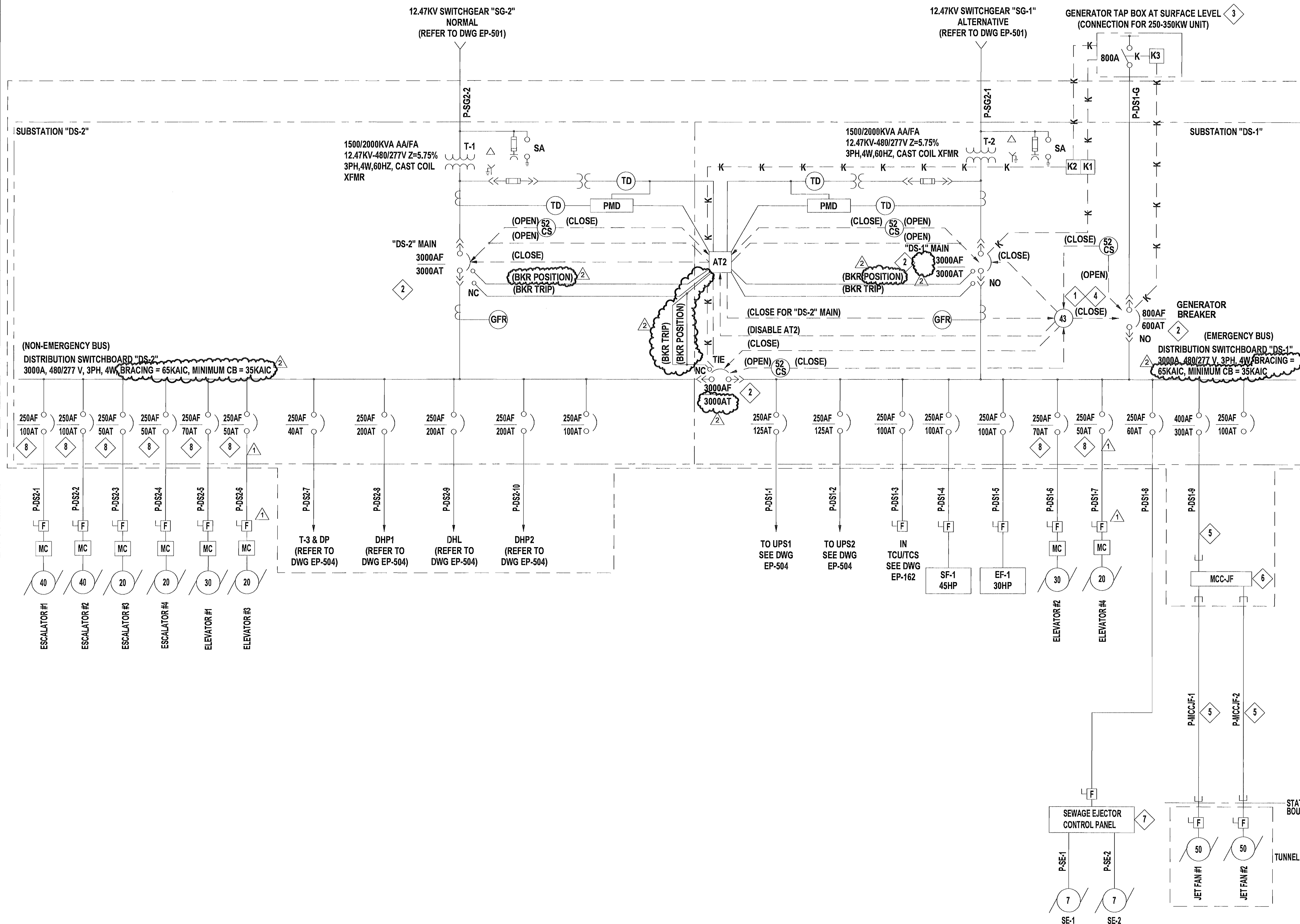
THIRD STREET LIGHT RAIL PROGRAM
 PHASE 2 - CENTRAL SUBWAY
 MOSCONE STATION

**ELECTRICAL POWER
 PRIMARY POWER SINGLE-LINE DIAGRAM**

CONTRACT NO.	1255
SFMTA CONTROL NO.	CL-22338
DRAWING NO.	EP-501
SHEET NO.	731
REVISION	1

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GENERAL NOTES:

1. FOR GENERAL ELECTRICAL POWER LEGEND, ABBREVIATIONS & NOTES, SEE DRAWINGS EP-001 AND EP-002.
2. ALL BREAKERS SHALL BE BREAK BEFORE MAKE.
3. SEE DWG EP-501 FOR ADDITIONAL ABBREVIATIONS.
4. THREE-LINE, AC CONTROL, AND DC CONTROL DIAGRAMS WILL BE PROVIDED BY CONTRACTOR FOR PG&E APPROVAL.

NOTES:

1. TRANSFER SWITCH "ATTS" DISABLES AUTOMATIC THROVOVER CONTROLS, OPENS AND PREVENTS CLOSING OF "DS-2" MAIN BREAKER AND TIE BREAKER AND ALLOWS GENERATOR CONTROL SWITCH 52CS TO CLOSE GENERATOR BREAKER.
2. BREAKER CONTROL SWITCH USED IN PLACE OF CLOSE AND TRIP BUTTONS ON FACE OF BREAKER. PROVIDE "PREVENT CLOSE COVER" AND "PREVENT OPEN COVER" FOR CLOSE AND OPEN BUTTONS ON FACE OF BREAKER.
3. F/I POWERTRON 800 QUICK CONNECT/TAP BOX OR APPROVED EQUAL FOR GENERATOR TAP BOX. SEE SHEET EP-062 FOR LOCATION.
4. SEE "TRANSFER TO GENERATOR PROCEDURE" AND "TRANSFER FROM GENERATOR PROCEDURE" ON DWG. EP-503.
5. F/I CONDUIT RACEWAY TO MCC LOCATION AND FROM MCC LOCATION TO STATION/TUNNEL BOUNDARY. SEE SHEET EP-506 FOR DETAIL.
6. MOTOR CONTROL CENTER AND FINAL CONNECTIONS INCLUDING CONDUCTORS PROVIDED UNDER 1256. SEE SHEET EP-506.
7. SEWAGE EJECTOR CONTROL PANEL PROVIDED BY PLUMBING. SEE MP SHEETS FOR DETAIL. F/I FINAL CONNECTIONS FROM PANEL TO PUMPS.
8. FURNISH CIRCUIT BREAKER WITH 120VAC SHUNT TRIP DEVICE.

SHEET SYMBOLS:

- AT2 AUTOMATIC THROVOVER OPEN TRANSITION (BREAK BEFORE MAKE)
- PMD POWER METER AND DISPLAY (LOCATED AT RESPECTIVE BREAKER SECTION)
- GFR GROUND FAULT RELAY
- K1 KIRK-KEY CAN ONLY BE REMOVED WHEN "DS-2" MAIN BREAKER IS OPEN. UNLOCKS GENERATOR TAP BOX.
- K2 KIRK-KEY CAN ONLY BE REMOVED WHEN TIE BREAKER IS OPEN. UNLOCKS GENERATOR TAP BOX.
- K3 KIRK-KEY CAN ONLY BE REMOVED WHEN GENERATOR TAP BOX IS CLOSED. ALLOWS GENERATOR BREAKER TO CLOSE.
- TD TEST DEVICE
- 52 CS BREAKER CONTROL SWITCH (MANUAL PISTOL GRIP TYPE)
- 43 AUTOMATIC THROVOVER TRANSFER DISABLE SWITCH.

FOR ORIGINAL SIGNATURES, SEE CL-22339 REV.0

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02/15/2012	ISSUED FOR BID	0			

DESIGNED: R. SANTOS
 DRAWN: G. MEURER
 CHECKED: M. GILL
 REVIEWED: J. TUSING
 RECOMMENDED: A. READ
 APPROVED: R. EDWARDS
 DATE: 02/15/2012

SILVERMAN & LIGHT, INC.
 ELECTRICAL ENGINEERS

REV.0 SEALED BY M. GILL

CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED
 EDWARD D. REISKIN
 DIRECTOR OF TRANSPORTATION

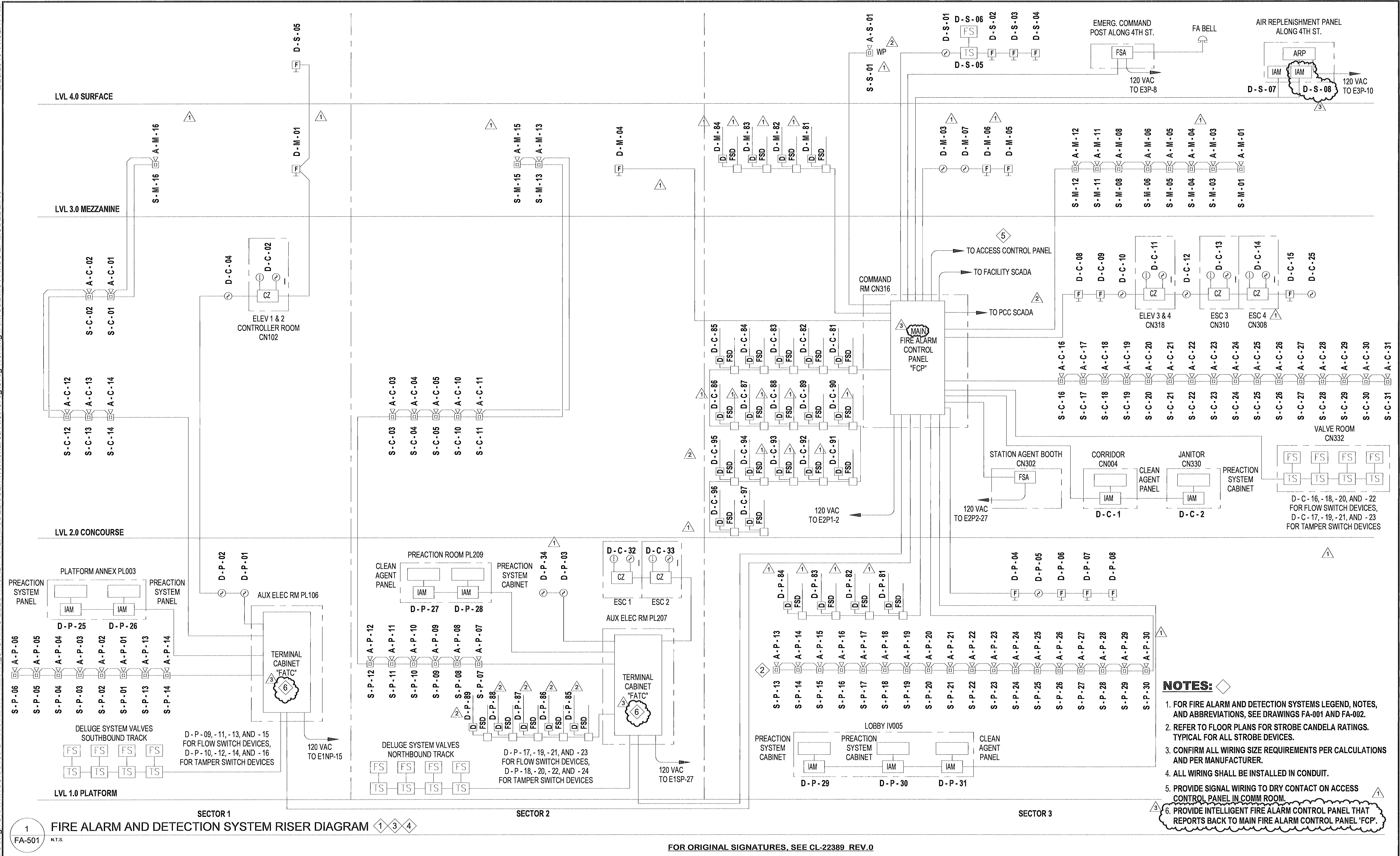
THIRD STREET LIGHT RAIL PROGRAM
 PHASE 2 - CENTRAL SUBWAY
 MOSCONE STATION

**ELECTRICAL POWER
 SECONDARY POWER SINGLE-LINE DIAGRAM
 PART 1**

CONTRACT NO.	1255
SFMTA CONTROL NO.	CL-22339
DRAWING NO.	EP-502
SHEET NO.	732
REVISION	2

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- NOTES:**
1. FOR FIRE ALARM AND DETECTION SYSTEMS LEGEND, NOTES, AND ABBREVIATIONS, SEE DRAWINGS FA-001 AND FA-002.
 2. REFER TO FLOOR PLANS FOR STROBE CANDELA RATINGS. TYPICAL FOR ALL STROBE DEVICES.
 3. CONFIRM ALL WIRING SIZE REQUIREMENTS PER CALCULATIONS AND PER MANUFACTURER.
 4. ALL WIRING SHALL BE INSTALLED IN CONDUIT.
 5. PROVIDE SIGNAL WIRING TO DRY CONTACT ON ACCESS CONTROL PANEL IN COMM ROOM.
 6. PROVIDE INTELLIGENT FIRE ALARM CONTROL PANEL THAT REPORTS BACK TO MAIN FIRE ALARM CONTROL PANEL 'FCP'.

1 FIRE ALARM AND DETECTION SYSTEM RISER DIAGRAM 1 3 4
FA-501 N.T.S.

FOR ORIGINAL SIGNATURES, SEE CL-22389 REV.0

DATE	DESCRIPTION	REV NO.	BY	CHECKED	APPROVED
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12/14/2012	ISSUED FOR CONTRACT 1300 ADDENDUM NO. 2	1	RS	MG	FRE
02/15/2012	ISSUED FOR BID	0			

central subway design group

SILVERMAN & LIGHT, INC.
ELECTRICAL ENGINEERS

DESIGNED
R. SANTOS

DRAWN
G. MEURER

CHECKED
M. GILL

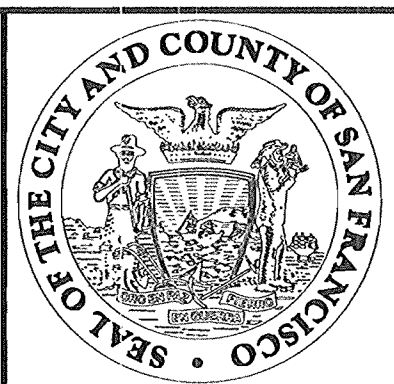
REVIEWED
J. TUSING

RECOMMENDED
A. READ

APPROVED
R. EDWARDS

DATE
02/15/2012

REV.0 SEALED BY
M. GILL



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED
EDWARD D. REISKIN
DIRECTOR OF TRANSPORTATION

THIRD STREET LIGHT RAIL PROGRAM
**PHASE 2 - CENTRAL SUBWAY
MOSCOE STATION**

**FIRE ALARM AND DETECTION SYSTEM
RISER DIAGRAM**

CONTRACT NO. 1255	SEMTA CONTROL NO. CL-22389
DRAWING NO. FA-501	REVISION 3
SHEET NO. 773	











CENTRAL SUBWAY MAJOR LINE ITEM BUDGET - ENTIRE PROJECT

No.	Phase	Major Line Item	Adopted Baseline Budget (March 2009)	Forecast Budget (January 2011)	Forecast Budget (June 2011)	Contract Closeout	
17	Early	Utilities MOS CP01	11,249,591	9,273,939	9,273,939	11,968,150	
18	Construction	Utilities MOS CP01 - Contingency	-	2,051,393	2,051,393	(740,834)	
19	(LONP)	Utilities MOS CP01 - Form B	-	(3,798,016)	(3,798,016)	(2,275,419)	
			11,249,591	11,325,332	11,325,332	9,692,731	
21		Utilities MOS CP02	22,228,098	16,832,650	16,832,650	20,794,581	
22		Utilities MOS CP02 - Contingency		4,208,162	4,208,162	1,405,265	1,405,265
23		Utilities MOS CP02 - Form B		(5,561,787)	(5,561,787)	(7,618,411)	
			22,228,098	21,040,812	21,040,812	13,176,170	
			33,477,689	32,366,144	32,366,144	22,868,901	9,497,243
		Subtotal Early Construction	33,477,689				10,902,508

1250

1251

CENTRAL SUBWAY PROJECT
Project Trend/Change Control Log

Trend Log

ent Cost Estimate and Allocated Contingencies											
Item #	Date Initiated		Change Description	Change Type	CMB No.	Change Status		Projected Cost Impact +Exposure/(Benefit)	Comments	Contract Modification Number	Utility Reimbursements
						Approval Action	Approval Date	Actual/Forecast			
CONSTRUCTION TRENDS											
Contract 1250 - Utilities Relocation #1 (Portal & MOS)											
1250-0001	04/15/10	081-0001	Delete Option MF-OPT1 "Fire Protection Sprinkler System"	1	N/A			(50,000)	Cleared City Attorney's Office; to Shahnam for execution. [In "Current Forecast" - Sep2010 Cost Report.] COMPLETE, NO FURTHER ACTION; CMOD #1	CMOD #1 Approved	
1250-0002	05/07/10	081-0002	Changes to Sewer on 4th between Howard and Folsom	2	CMB-0001	Agree	07/12/10	+107,174	Differing conditions as AWSS is directly over existing sewer; unable to install sewer manhole per plan. [In "Current Forecast" - Sep2010 Cost Report.] No reimbursement from SFPUC Sewer. COR #2-\$34,135; COR #5-\$73,039 COMPLETE, NO FURTHER ACTION; CMOD #2	CMOD #2 Approved	
1250-0003	05/28/10	081-0003	Quantity Adjustment for JT-6 and JT-7	4	CMB-0002	Agree	08/04/10	+192,420	In April 2010 pay app, JT-6 bid qty exceeded by 344% (230 vs 1021) and JT-7 bid qty exceeded by 112% (500 vs. 1060) [In "Current Forecast" - Sep2010 Cost Report.] COMPLETE, NO FURTHER ACTION; CMOD #3	CMOD #3 Approved	
1250-0004	07/02/10	081-0004	Demolition of existing brick and concrete footing on 4th between Howard and Folsom	2	CMB-0003	Agree	07/12/10	+170,000	Unforeseen bricks and concrete footing discovered on east side of 4th Street between Folsom and Howard. [In "Current Forecast" - Sep2010 Cost Report.] COR #3-RFI #76 COMPLETE, NO FURTHER ACTION; CMOD #4	CMOD #4 Approved	
1250-0005	04/20/10	081-0005	Modify AWSS at 4th/Bryant and 4th/Harrison	3	CMB-0004	Agree	08/04/10	+586,000	At 4th/Bryant, AWSS conflict with new 48" sewer and AT&T duct bank. At 4th/Harrison, AWSS conflict with 18" sewer. [In "Current Forecast" - Sep2010 Cost Report.] No reimbursement from SFPUC AWSS. PCC #2: RFI #s 34, 49 & 51 COMPLETE, NO FURTHER ACTION; CMOD #5	CMOD #5 Approved	
1250-0006	04/29/10	081-0006	Install four additional piles and reinforce existing foundation at 401 4th Street	2	CMB-0005	Agree	08/25/10	+130,000	Existing foundation was discovered to be part brick and part concrete, which is different from plan. Also, foundation was unstable and required additional reinforcement. Refer to RFIs #85R1, 88.1, 100, 101, 102 COMPLETE, NO FURTHER ACTION; CMOD #6	CMOD #6 Approved	
1250-0007	10/06/10	081-0007	Additional work to install 48" sewer due to various utility conflicts at 4th/Bryant	2	N/A			+32,964	48" RCP sewer in conflict with existing AT&T duct bank that needs to remain in service until new joint trench is installed to enable switchover. This conflict forced contractor into a more expensive means to install sewer. Also, 48" RCP sewer in conflict with existing 30" force main and 24" steel pipes. No reimbursement from SFPUC Sewer. COMPLETE, NO FURTHER ACTION; CMOD #9	CMOD #9 Approved	
1250-0008	10/06/10	081-0008	Relocate TPC vault on 4th Street between Howard and Folsom	6	N/A			+19,500	Contractor uncovered existing TPC conduits on top of AT&T duct bank on 4th near Howard, a differing site condition. An AT&T intercept vault is to be installed, however, TPC conduits can not reside inside AT&T intercept vault. Joint Trench utilities participation cost TBD. Executed on 10/14/2010. Refer to RFI #62 (\$19,500) Expected Reimbursement from TPC. RE has provided documentation of notification to TPC, July-August '10. See final 1250 Form B actual costs COMPLETE, NO FURTHER ACTION; CMOD #8	CMOD #8 Approved	(19,500)
1250-0009	10/06/10	081-0009	Install additional sewer and provide temporary connections at 4th/Stillman	3	N/A			+47,000	Location of existing sewer to be intercepted differs from where it's shown in the plan, hence additional sewer to be installed. Also, due to optional sewer MH not buildable until (E) AT&T DB is removed, additional sewer is necessary to tie into (E) main as interim. New sewer is supposed to tie into optional MH. No reimbursement from SFPUC Sewer. RFI #91 COMPLETE, NO FURTHER ACTION; CMOD #7	CMOD #7 Approved	
1250-0010	10/06/10	081-0010	Perform AT&T wye cast connection and chipping of existing duct bank at various locations	6	N/A			+48,181	AT&T was supposed to tie-in its own facility. However, AT&T's contractor, who is hired to install vaults, stated it is not in their scope of work. Refer to RFI #82.1. AT&T intercept vault at 4th/Harrison can not be installed at design location due to utility conflicts. AT&T vault to be shifted a few feet instead of vault being on top of existing duct bank. This will cause additional excavation, joint trench and modification to existing duct bank. Joint Trench utilities participation cost TBD. SFMTA and AT&T are negotiating with Contractor. (\$48,181) Expected Reimbursement from AT&T. RE has provided documentation of notification to AT&T, Sept-Oct '10. See final 1250 Form B actual costs. COMPLETE, NO FURTHER ACTION; CMOD #10	CMOD #10 Approved	(48,181)

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- 7 - Other

CENTRAL SUBWAY PROJECT
Project Trend/Change Control Log

Item #	Date Initiated	Change Description	Change Type	CMB No.	Change Status		Projected Cost Impact +Exposure/(Benefit)	Comments	Contract Modification Number	Utility Reimbursements	
					Approval Action	Approval Date					Actual/Forecast
1250-0011	10/06/10	081-0011	Remove existing piles and shoring at 801 Howard	2				-0-	This change order has been incorporated in CMOD #16 (Trend #30) COMPLETE, NO FURTHER ACTION; CMOD #16	CMOD #16 Approved	
1250-0012	10/06/10	081-0012	Additional work related to AT&T facilities due to unforeseen conditions.	6	CMB-0047	Agree	08/03/11	-0-	This is the total of all force account work related to AT&T facility. SFMTA to seek reimbursement from AT&T through the Form B process. (\$67,798) Expected Reimbursement from AT&T. Cost captured in Trend #15 COMPLETE, NO FURTHER ACTION; CMOD #20	CMOD #20 Approved	
1250-0013	10/06/10	081-0013	Additional work related to PG&E facilities due to unforeseen conditions.	6	CMB-0047	Agree	08/03/11	-0-	This is the total of all force account work related to PG&E facility. SFMTA to seek reimbursement from PG&E through the Form B process. (\$30,547) Expected Reimbursement from AT&T. Cost captured in Trend #15 COMPLETE, NO FURTHER ACTION; CMOD #20	CMOD #20 Approved	
1250-0014	10/06/10	081-0014	Remove brick wall at sewer sta 152+94 (west side) on 4th between Howard and Folsom.	2				-0-	This change order has been incorporated in CMOD #16 (Trend #30) COMPLETE, NO FURTHER ACTION; CMOD #16	CMOD #16 Approved	
1250-0015	10/06/10	081-0015	Archaeological Findings - Charges for rental of steel plates, triton barriers, shoring and labor for maintenance.	2				+784,771	Midden deposits were discovered on 4th Street between Howard and Folsom. Contractor stopped work. Contractor requesting payment for rental charges of trench plates, barricades, and shoring, and cost of maintenance. Total cost exposure is projected through end of November 2010. The \$290,703.00 is expected to be the final estimate for the rental of trench plates, barriers and shoring. \$597,000 Arch, \$179,000 DIFF, \$8,500 Traffic COMPLETE, NO FURTHER ACTION; CMOD #20	CMOD #20	
1250-0016	10/06/10	081-0016	Additional AWSS modification at 4th/Harrison	1	CMB-0016	Agree	11/10/10	+156,418	New alignment is proposed by Design team. No reimbursement from SFPUC AWSS. COR #33 Supplemental COMPLETE, NO FURTHER ACTION; CMOD #12	CMOD #12 Approved	
1250-0017	10/06/10	081-0017	Protection Work at PG&E Vault 1611	6				-0-	Expected Reimbursement from PG&E or work to be deferred \$6,400. RE has notified PG&E via email dated 10/29/10 that SFMTA expects full reimbursement for this work if implemented. Follow-up pending. Work was not performed and will need to be addressed in a future contract.		
1250-0018	10/06/10	081-0018	Demolition and Support Work at PG&E Vault 1611	6				-0-	Expected Reimbursement from PG&E or work to be deferred \$25,000. RE has notified PG&E via email dated 10/29/10 that SFMTA expects full reimbursement for this work if implemented. Follow-up pending. Work was not performed and will need to be addressed in a future contract.		
1250-0019	10/06/10	081-0019	Extended overhead delay claim due to Archaeological discoveries	2					Old Note: Potential delay claim if issue extends project duration. Amount is estimated at \$3,000.00 per day for 60 days (\$180K). New Note: By exercising all option work, additional 84 calendar days is added to the contract time. In addition, midden mitigation will start on 10/7/10. As a result, the potential for extended overhead cost is averted. This trend has been superseded by Trend #37. COMPLETE, NO FURTHER ACTION		
1250-0020	10/06/10	081-0020	Sewer modification under I-80 freeway at 2 locations	3				+39,062	Inverts of existing sewer where new sewer will tie into are found to be different than shown in plan and would create a reverse slope. Additional pipe and manhole are required to fix slope. Refer to RFI Nos. 2S01 and 147. No reimbursement from SFPUC Sewer. COMPLETE, NO FURTHER ACTION; CMOD #11	CMOD #11 Approved	
1250-0021	10/06/10	081-0021	Install new AWSS lateral including hydrant at NW 4th/Harrison	2					Existing AWSS lateral at SW 4th/Harrison is in conflict with new 18" sewer. Instead of modifying the lateral to avoid the sewer, a new lateral at NW corner is a preferred solution. CM awaiting design revision from Design team. Trend No. 21 is combined with Trend No. 22.		
1250-0022	10/06/10	081-0022	Install additional 30 feet of DIP and new AWSS at 4th/Harrison	2	CMB-0026	Agree	01/12/11	+160,908	AWSS Point of connection on 4th Street was found to be cast iron instead of ductile iron as shown in DPW as-built. Due to this differing condition, additional length of pipe needs to be replaced and lead joint to be installed in order to install a ductile iron tee. Also, existing AWSS hydrant lateral is in conflict with new 18" sewer. The preferred solution was to install a new ductile iron lateral at a different location rather than installing vertical offsets on an existing cast iron lateral. No reimbursement from SFPUC AWSS. COMPLETE, NO FURTHER ACTION; CMOD #15	CMOD #15 Approved	
1250-0023	10/06/10	081-0023	Steel plates and shoring standby for 2 months due to PG&E delay at Clementina	3				+24,981	Sewer at Clementina was delayed by 2 months due to PG&E vault conflict. PG&E will not pay cost of steel plates and shoring standby because PG&E drawings were sent to MTA during design phase and PG&E was not made aware of the conflict then. COMPLETE, NO FURTHER ACTION; CMOD #13	CMOD #13 Approved	
1250-0024	10/06/10	081-0024	Utility support and work around for AT&T facilities	6	CMB-0048	Agree	08/24/11	+95,311	Contract specs specified AT&T to compensate contractor directly for workaround & support. AT&T refused to pay Synergy. Synergy considers AT&T's refusal as a changed condition to CN 1250 contract. (\$95,311) Reimbursement from AT&T. See Final 1250 Form B actual costs. COMPLETE, NO FURTHER ACTION; CMOD #19	CMOD #19 Approved	(95,311)
1250-0025	10/06/10	081-0025	Utility support and work around for PG&E facilities	6					Contract specs specified PG&E to compensate contractor directly for workaround & support. PG&E negotiated \$100,000 directly with Synergy and will pay synergy directly as well.		

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CENTRAL SUBWAY PROJECT
Project Trend/Change Control Log

Item #	Date Initiated		Change Description	Change Type	CMB No.	Change Status		Projected Cost Impact +Exposure/(Benefit)	Comments	Contract Modification Number	Utility Reimbursements
						Approval Action	Approval Date	Actual/Forecast			
1250-0026	10/06/10	081-0026	Utility support and work around for SFWD facilities	3	CMB-0028	Agree	02/09/11	+66,510	Total cost known to date (10/5/10) of all SFWD support and workaround. See COR #12, 20, 32 and 35. Agreed amount is total of COR #12, 20 and 32. Total exposure is equal to agreed amount plus COR #35. No reimbursement from SFWD. COMPLETE, NO FURTHER ACTION; CMOD #14	CMOD #20 Approved	
1250-0027	10/06/10	081-0027	Trucking and labor support for Archaeological mitigation	2				-0-	Synergy is asked to provide trucking for delivery of midden soil to Sonoma State University lab. Other support work includes traffic control, plating, loading and unloading of midden soil. The amount shown are charges up to end of November 2010 only. Additional charges are expected which will be tracked as Trend No. 28. COMPLETE, NO FURTHER ACTION	CMOD #20 Approved	
1250-0028	12/08/10	081-0028	Trucking and labor support for Archaeological mitigation, Part II	2				-0-	Synergy is asked to provide trucking for delivery of midden soil to Sonoma State University lab. Other support work includes traffic control, plating, loading and unloading of midden soil. The amount shown are expected charges beyond November 2010. COMPLETE, NO FURTHER ACTION	CMOD #14 Approved	
1250-0029	12/08/10	081-0029	Cost overrun for bid item UD-10 "Additional excavation and backfill"	4	CMB-0036	Agree	05/04/11	+112,500	Bid item UD-10 is to pay for excavation of connection hole and kill hole for SFWD line. Contract only included 200 cubic yard for this work. The size of excavations is dictated by field conditions and per the direction of SFWD inspector. RE's estimate of the total volume of dirt to be excavated is 630 cy. Examples of differing conditions encountered are: location of existing water line is different than where it's shown in the plan, existing waterline where shown in the plan to be connected to is inactive, differing condition at 5th/Clementina, connection holes and kill holes need to be expanded due to other utilities in the way. COMPLETE, NO FURTHER ACTION; CMOD #17	CMOD #17 Approved	
1250-0030	12/08/10	081-0030	Supplement bid item GE-4 "Allowance for differing site conditions" related to the installation of publicly owned facilities only (sewer, water, AWSS, Joint trench)	4	CMB-0030	Agree	04/13/11	+235,595	This change order is to supplement GE-4 for cost overrun related to the installation of publicly owned infrastructure only. GE-4 cost overrun for installation of privately owned infrastructure is being tracked separately and a separate change order will be issued. COMPLETE, NO FURTHER ACTION; CMOD #16	CMOD #16 Approved	
1250-0031	12/08/10	081-0031	Unused allowance for bid item GE-8 "Allowance for cast-in-place utility vaults"	4				-0-	Bid item GE-8 is an allowance to pay contractor for designing and constructing cast-in-place manholes as required for installation of new systems. Only one CIP vault was installed. Credit amount included in Trend #43		
1250-0032	12/08/10	081-0032	Unused allowance for bid item UD-5 "Handling and disposal of Class I Hazardous Waste"	4				-0-	Bid item UD-5 is an allowance to pay contractor for handling and disposal of Class I Hazardous Waste. No class I hazardous waste was off hauled away from the job site. Class I soil found under the I-80 freeway was put back in the trench as backfill. This bid item is expected to remain unused. However, contractor is claiming to recover "General Conditions" cost. Credit amount included in Trend #43		
1250-0033	12/08/10	081-0033	Unused allowance for bid item UD-6 "Transportation of Class I Hazardous Waste"	4				-0-	Bid item UD-6 is an allowance to pay contractor for transporting of Class I Hazardous Waste. No class I hazardous waste was off hauled away from the job site. Class I soil found under the I-80 freeway was put back in the trench as backfill. This bid item is expected to remain unused. However, contractor is claiming to recover "General Conditions" cost. Credit amount included in Trend #43		
1250-0034	12/08/10	081-0034	Cost overrun for bid item TR-6 "Allowance for manual traffic control"	4	CMB-0037	Agree	05/04/11	+68,820	Bid item TR-6 is an allowance to pay for off-duty police officers and parking control officers. Contract allowance amount is \$50,000.00. Contract specs calls for police officers at 4 intersections (4th/Howard, 4th/Folsom, 4th/Harrison and 4th/Bryant). The average cost of 1 police officer is about \$800.00 per day (\$100.00 per hour). The \$50,000.00 allowance is only good for 60 days for 1 police officer. Hence, additional money was needed for traffic control support. Final amount paid police officers is \$87,500.00. Additional billings for parking control officers (from Al Herce of DPT) is forthcoming; RE estimated this bill to be about \$60,000.00. COMPLETE, NO FURTHER ACTION; CMOD #18	CMOD #18 Approved	
1250-0035	12/08/10	081-0035	Premium cost for requesting contractor to accelerate work on 4th Street between Howard and Folsom	2				-0-	Due to archaeological discoveries, many trenches remained open and the project would not have enough time to complete installation of underground utilities and restore the roadway before the Holiday season. Without accelerating the work, the project would have had to pay rentals for the barriers, street plates and shoring for the unfinished trenches that would have remained. By accelerating the work and DPT allowing the contractor to work through the beginning of the Holiday Moratorium, the project avoided these rental costs, which is estimated to be greater than the premium cost of accelerating the work. COR Not submitted by Contractor CLOSED COMPLETE, NO FURTHER ACTION		

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CENTRAL SUBWAY PROJECT
Project Trend/Change Control Log

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					Approval Action	Approval Date				
1250-0036	12/08/10	081-0036	Rental/Maintenance costs for support of Archeological Trenches (Part 1 of 4) \$255,840; Support Work During Archeologist Mitigation Efforts (Part 2 of 4) \$199,741; Mobilization and Equipment Standby Costs (Part 3 of 4) \$67,728; Additional Overhead/Indirect Costs During Archeological Delay Period (Part 4 of 4) \$124,186	2	CMB-0041	Agree	07/13/11 02/15/12 07/25/12 09/12/12	-0- Addl Work as Result of Archeological Shutdown (3 of 4). 07/25 : Revised mod - compensation for 1 of 3) Rental/Maintenance, 2 of 3) Addl Work result of Archeological support, 3 of 3) Addl OH/Indirect cost. RE to add Equipment Standby time to revised mod. 09/12: RE to Prepare Modification 10/29: CMod 20 is being issued as a unilaterally change, by the SFMTA that represents the SFMTA's estimate of a fair and reasonable final compensation amount for the additional work. COMPLETE, NO FURTHER ACTION	CMOD #20 Approved	
1250-0037	12/08/10	081-0037	Compensation for loss of production, inefficiency and disruption of work due to archaeological discovery	2				-0- Due to archaeological discoveries, contractor may potentially claim for compensation for loss of production, inefficiency and disruption of work. RE has not received any change order request related to this item. Amount shown is a ROM cost by the RE. RE expects a COR from the contractor but change justification is very unlikely. Initial draft COR was \$898,453. RE has adjusted to \$661,559 removing the month of October and option work. This was then revised to 800,000. There has been no official submittal from Synergy. SFMTA has directed Synergy to submit anything related to the Architectural delays through the claims process. This will be carried in the Potential Claim Log. COMPLETE, NO FURTHER ACTION		
1250-0038	03/18/11	081-0038	Project Delay due to archaeological discovery and PG&E Issues.	2				-0- Due to archaeological discoveries compounded with PG&E's ability to perform service switchover to Olivet University and de-energize a live duct bank in conflict with 48" sewer. The project will realize an estimated 6 weeks of non-compensable delay to the substantial completion date of 4/6/11. 47 days estimated by RE. Contractor submitted COR 51 in the amount of \$1,144,776.74 on September 1st, 2011. RE responded requesting additional backup on October 19th, 2011. Subsequently, no additional information has been provided by the contractor, therefore, SFMTA has directed Synergy to submit anything related to the Architectural delays through the claims process. This will be carried in the Potential Claim Log.		
1250-0039	05/18/11	081-0039	Remove BP-4 (Waterproofing) from Contract	4				-0- Bid item was not used. Contractor requesting compensation to recover for General Conditions cost. Bid item amount total is \$40,000. NO FURTHER ACTION; Superseded by COR #58. (See 1250-0043 below)	N/A	
1250-0040	05/18/11	081-0040	Delete SW-8 (24" Sewer) from Contract	4				-0- Bid item was not used. Contractor requesting compensation to recover for General Conditions cost. Bid item amount total is \$73,117. NO FURTHER ACTION; Superseded by COR #58. (See 1250-0043 below)	N/A	
1250-0041	05/18/11	081-0041	Delete UD-5 and UD-6 (Class I Off haul and Handling) from Contract	4				-0- Bid items were not used. Contractor requesting compensation to recover for General Conditions cost. Bid items total amount is \$150,000. NO FURTHER ACTION; Superseded by COR #58. (See 1250-0043 below)	N/A	
1250-0042	05/25/11	081-0042	Delete GE-6 (Hazmat) from Contract	4				-0- Bid item was not used. Contractor requesting compensation to recover for General Conditions cost. Bid item amount total is \$100,000. NO FURTHER ACTION; Superseded by COR #58. (See 1250-0043 below)	N/A	
1250-9001	10/06/10	081-9001	Utility Companies refusal to contribute to utility support costs and work-around. (Voided. Recorded individually in TR-0059-TR-0061.)	7					VOIDED	
1250-0043	08/03/11	081-0043	Unit Rate Adjustment for Entire 1250 Bid Items	4				(333,904) Pursuant to General Provision GP-11, COR is to adjust contract value to account for fix overhead costs for bid items not performed or where the bid item performed varied by 25%. COMPLETE, NO FURTHER ACTION; CMOD #20	CMOD #20 Approved	
Contract 1250 Totals							+2,694,211	Total Changes to the Contract in the amount of \$2,694,211, represents a \$740,834 OVER RUN of the original allocated contingency of \$1,953,377. Changes that will be Utility Reimbursement credits through the Form B process in the amount of \$162,992 will offset some of this OVER RUN. Final Contract Closeout Total \$11,968,150 will be reduce by \$2,275,419 Utility Reimbursement credits for a Final Program cost of \$9,692,731 for CN 1250		(162,992)

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Contract 1251 - Utilities Relocation #2 (UMS)											
1251-0001	03/18/11	082-0001	Modify traffic control plan by establishing a single travel lane on Stockton St. in lieu of time-based multiple lane requirements as stipulated in contract plans TR-001 to 004.	7				-0-	After discussions with the Contractor and the Union Square Business Improvement District (BID), the SFMTA determined that modifying the lane requirements along Stockton St. and implementing the alternate pedestrian walkway design would be beneficial to the execution of CN 1251 in the following ways: increased public safety, increase construction production, and create a more pleasing environment to the public and merchant. COR #1 COMPLETE, NO FURTHER ACTION; CMOD #4	CMOD #4 Approved	
1251-0002	03/18/11	082-0002	Installation of reinforced concrete slab underneath Joint Trench along Stockton at O'Farrell (East Side). CTL 133+66.37 (27.08 LEFT) to CTL 134+00.87 (27.08 LEFT)	1&3	CMB-0035	Agree	04/20/11	+67,634	Pursuant to a commitment between Barney's and SFMTA, Emergency Stair #4 (to be constructed in CN 1253) must avoid existing subsided sidewalk basement. It was determined that moving the conflicting stairs would require the Joint Trench to be constructed in a manner that would enable it to span the excavated area. The addition of the invert slab allowed for the needed span thereby allowing for a relocation of Emergency Stair #4. COR #4; PCC #1 COMPLETE, NO FURTHER ACTION; CMOD #2	CMOD #2 Approved	
1251-0003	03/18/11	082-0003	Adjust placement of 3EA manholes along Geary Street and O'Farrell Street. The modified manhole locations require the installation of approximately 265LF of additional HDPE pipe inside the existing 3'x5' brick sewer.	1	CMB-0029	Agree	02/23/11	+148,919	During future station construction, the design team anticipates that excavation related settlement may cause damage to the brick sewers along Geary and O'Farrell Streets. This proposed modification will replace the vulnerable brick sewer within the influence zone with HDPE pipe that will not be as susceptible to settlement-induced damage. COR #9, PCC #2 COMPLETE, NO FURTHER ACTION; CMOD #1	CMOD #1 Approved	
1251-0004	04/06/11	082-0004	Changes to Neiman Marcus secondary enclosure wall due to various differing site conditions.	2	CMB-0031	Agree	04/13/11	+189,584	Due to various differing site conditions as described in RFIs 15, 37, 38 and 44, changes to the secondary enclosure wall are required. The existing footing were found to be inconsistent, i.e. missing footing in one area, footing sticks out beyond existing wall, overpour on existing footing, existing wall to be 6" into private property. Contract plan SR-302 shows a consistent footing. COR #8 COMPLETE, NO FURTHER ACTION; CMOD #3	CMOD #3 Approved	
1251-0005	04/06/11	082-0005	Existing PG&E conduits were found on top and parallel to existing AWSS on Geary Blvd. at 2 locations (east and west of Stockton)	6				+66,084	Contract plans AW-501.1, 501.2, 501.4 and 501.4 show the existing AWSS to be replaced in place. However, existing PG&E conduits were found to be on top and parallel to the existing AWSS resulting in extra work in working around and/or shifting the existing electrical conduits. Contract plans JT-308 and 309 showed the existing electrical and AWSS to be separate. Estimate includes \$77,892.53 (Synergy FA Request) + \$25,000 (first digging west side) + \$10,000 (temp backfill during moratorium) + \$15,000 (plate rental west side at \$5k per month). Estimate does not include Synergy's cost to sequence his work. Updated projected cost impact from \$50,000 to \$127,893 based on compilation of force accounts received. RE negotiating COMPLETE, NO FURTHER ACTION	CMOD #24 Approved	(66,084)
1251-0006	04/20/11	082-0006	Design changes to utilities on Stockton street between Post and Geary	1	CMB-0039	Agree	06/08/11	+398,624	Due to changes to the limits of the UMS Station on Stockton Street between Post and Geary, the original utility design has changed. COR #24, PCC #4 COMPLETE, NO FURTHER ACTION; CMOD #5	CMOD #5 Approved	
1251-0007	04/20/11	082-0007	Design changes to utilities on Ellis Street	1	CMB-0049	Agree	08/24/11	(434,957)	Due to changes to the limits of the UMS Station on Ellis street, the original utility design has changed. PCC #5 COMPLETE, NO FURTHER ACTION; CMOD #5	CMOD #5 Approved	
1251-0008	04/20/11	082-0008	Elimination of underpinning at 150 Stockton	1					Based on field verification, it was determined that underpinning is no longer needed. Contract bid item SR-9 is for a total amount of \$116,000 measured by LF. However, CM team does not anticipate to recover the full amount because contractor may be entitled to retain general conditions cost and some excavation cost that was already performed but encumbered in Bid Item SR-9. Agreed credit of (\$58,000) to be included in Trend #60. CLOSED, NO FURTHER ACTION		
1251-0009	04/20/11	082-0009	Additional cost for police officers and/or Parking Control Officers for traffic control.	4	CMB-0038	Agree	06/01/11	+261,584	Contract bid item TR-7 for manual traffic control in the amount of \$120,000 is insufficient to control traffic for the duration of the contract. The \$120,000 allowance only equates to one police officer for a duration of 7.5 months. At a minimum, it is anticipated that one police officer or PCO will be needed at Stockton/Post for the entire contract duration of 16 months. Additionally, one PCO is required for each intersection at Geary/Stockton and O'Farrell/Stockton. COMPLETE, NO FURTHER ACTION; CMOD #4	CMOD #4 Approved	
1251-0010	05/25/11	082-0010	Accelerate Stockton east between O'Farrell and Market	1				+27,409	Contractor needed to rent additional excavators to work concurrently with the other block on Stockton between O'Farrell and Market. Amount: \$27,409; COR #25 COMPLETE, NO FURTHER ACTION; CMOD #3	CMOD #3 Approved	

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1251-0011	06/22/11	082-0011	Potholing at 4th/Howard for PUC sewer design	1					Request from MOS utility design team to pothole for the intercept of a 36" force main sewer and 96" sewer. PUC requested that this be done in order to ensure that we have accurate utility information to avoid costly change orders during construction. Per direction from CMB on January 18, 2012, this request is denied. COR #50, PCC #6 CLOSED, NO FURTHER ACTION: Per direction from CMB on January 18, 2012, this request is denied.		
1251-0012	07/06/11	082-0012	Additional cost to lower the AWSS at O'Farrell, east of Stockton, due to numerous existing utility conflicts.	2	CMB-0042, CMB-0050	Agree	8/3/2011, 9/21/2011	+278,351	The AWSS is in conflict with AT&T, PG&E and several other utilities and needs to be installed under all these utilities at about 11' deep (instead of 6' depth as noted in Plan AW-501.4, sheet note #5). During negotiations with the Contractor several items of work were found to be missing for the original cost estimates which increase the amount to \$278,351. RFI #76, COR #31 COMPLETE, NO FURTHER ACTION; CMOD #6	CMOD #6 Approved	
1251-0013	07/06/11	082-0013	Accelerate start of construction in front of Macys West by trenchless construction method	7				-0-	Micropile installation on Stockton east between O'Farrell and Market has proven to be much slower than anticipated. To mitigate this potential delay, contractor requested to start construction in front of Macys West. COR 32 (CMB 0055 approval - see also Trend CN1251 #'s 04 & 10) COMPLETE, NO FURTHER ACTION; CMOD #3 (No Cost Change)	CMOD #3 Approved	
1251-0014	07/21/11	082-0014	Increase in Bid Item WD-10, Allowance for Additional Excavation and Backfill.	3	CMB-0055	Agree	09/14/11	+191,779	This allowance is for the contractor to perform additional excavation, backfilling and restoration associated with the water tie-ins and capping for the distribution piping system. The contractor has performed two water service tie-ins at an average cost of \$14,000 per tie-in. The current number of tie-ins and capping is 35 separate points. This amounts to a total cost of \$490,000. The current contract allowance amount is \$100,000, therefore an additional \$390,000 will be needed to augment bid item. CMB made a partial approve of up to \$200K. The initial Contract Modification to supplement this allowance is in the amount of \$191,778.62. RE's cost analysis of this trend confirms that the initial CMod amount of \$191,778.62 is sufficient to cover for all water tie-in/capping work. COMPLETE, NO FURTHER ACTION; CMOD #9	CMOD #9 Approved	
1251-0015	08/03/11	082-0015	Additional traffic signal work at Post/Stockton	1				+17,530	Modification of the traffic signal at Post/Stockton is required to implement the detour shown in contract plan TR-010. There are no bid item to bill this work. COR #19 COMPLETE, NO FURTHER ACTION; CMOD #8	CMOD #8 Approved	
1251-0016	08/03/11	082-0016	Additional traffic signal work at Sutter/Mason	2				+32,054	Existing conduits shown in Plan ET-101 differs from what is actually in the field. City's response to RFI 73 directs contractor to install new conduits and conductors. RFI #73; COR #33 COMPLETE, NO FURTHER ACTION; CMOD #8	CMOD #8 Approved	
1251-0017	08/03/11	082-0017	Furnish and install AT&T Manhole 5830 on O'Farrell Street	6	CMB-0051	Agree	09/21/11	+25,000	AT&T was supposed to hire its own subcontractor to furnish and install all AT&T vaults in CN 1251. AT&T requested SFMTA for Synergy to perform this work as change order to CN 1251. AT&T agreed to reimburse SFMTA (\$25,000) through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #7	CMOD #7 Approved	(25,000)
1251-0018	08/03/11	082-0018	Furnish and install AT&T Manhole 5829 on Geary Blvd.	6	CMB-0051	Agree	09/21/11	+31,000	AT&T was supposed to hire its own subcontractor to furnish and install all AT&T vaults in CN 1251. AT&T requested SFMTA for Synergy to perform this work as change order to CN 1251. AT&T agreed to reimburse SFMTA (\$31,000) through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #7	CMOD #7 Approved	(31,000)
1251-0019	08/03/11	082-0019	Extend joint trench and modify existing AT&T Manhole 403 on Ellis Street.	6	CMB-0057	Agree	10/26/11	+31,000	AT&T was supposed to furnish and install AT&T vault #5833 on Ellis Street. The current design was to intercept the existing AT&T conduit in the middle of Ellis Street. It was discovered that the existing AT&T conduit actually run adjacent to the southern curb line along Ellis Street. Therefore, AT&T requested SFMTA for Synergy to extend the joint trench approximately 200 feet to the West and tie into their existing AT&T vault #403. This work will also require Synergy to enlarge vault #403 to accept the additional conduit. This additional work for AT&T will need to be reimbursed to SFMTA through the Form B process. Note: The agreed amount (\$31,000) is for enlargement of vault #403 only; the additional 200 feet of trench to be captured in the JT bid items. (See Trend 60) COR #43 COMPLETE, NO FURTHER ACTION; CMOD #11	CMOD #11 Approved	(31,000)
1251-0020	09/07/11	082-0020	Change PG&E conduit material from PVC to GRS on west side of Stockton between Geary and Post	6	CMB-0058	Agree	11/02/11	+19,537	PG&E requested to use GRS material in lieu of PVC in areas where PG&E conduits were expected to be exposed and temporary supported during future UMS station construction. PG&E agreed to reimburse SFMTA (\$19,537) through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #21	CMOD #21 Approved	(19,537)

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1251-0021	09/07/11	082-0021	6					PG&E made changes to the locations of the service points and layout of some of the primary lines. In addition, due to changes to the limits of the UMS Station on Ellis Street, it was determined that Muni Vault 1850A is no longer needed. Cost for this trend is captured in Trend #31 or CMod #12. CLOSED; NO FURTHER ACTION. Cost for this trend is captured in Trend #31/CMod #12		
1251-0022	09/07/11	082-0022	7					During the design phase the representatives of the Hilton Hotel agreed to and signed a license agreement with the SFMTA to allow embedded eyebolt supports. Hilton's Dir of Property Ops now wants to have OCS poles rather than the embedded building eyebolt supports. However, the OCS designer was able to revise the OCS design to eliminate the need for either eyebolts or poles in front of Hilton Hotel, resulting in a \$2,000 credit. CLOSED; NO FURTHER ACTION. Applicable bid items to be adjusted accordingly, See Trend #60.		
1251-0023	09/07/11	082-0023	1	CMB-0065	Agree	1/25/2012, 2/29/12	+405,440	SFMTA Operations has requested a bypass be installed at 4th Street and Folsom Street. \$242,619 in labor costs for OCS installation has not been negotiated yet. 1/25: Condition agreed upon verification material from Contractor to be procured is available. (Verified 02/01/12). 02/29: CMod negotiated cost has been revised to incorporate original three items and the add'l OCS work on Folsom St. COR #52; PCC #7 Updated projected cost impact from \$490,000 to \$405,440. CMod #12 (Formally CMod #15) COMPLETE, NO FURTHER ACTION; CMOD #12	CMOD #12 Approved	
1251-0024	09/07/11	082-0024	6	CMB-0059	Agree	11/16/2011, 05/02/12	+201,411	As a new requirement, PG&E had requested that a 5" slurry wall be installed between the gas line and wet utilities where the separation between the 2 utilities is less than 3 feet. PG&E agreed to reimburse SFMTA (\$201,410) through the Form B process. COR #58 COMPLETE, NO FURTHER ACTION; CMOD #19	CMOD #19 Approved	(201,411)
1251-0025	09/07/11	082-0025	6					PG&E requested to install additional conduits crossing Stockton Street at Geary and O'Farrell to minimize service interruption during future UMS Station construction. PG&E agreed to reimburse SFMTA through the Form B process. This item is captured under applicable JT Bid item, see Trend 60. CLOSED; NO FURTHER ACTION. Item is captured under applicable JT Bid Item, See Trend 60.		
1251-0026	09/14/11	082-0026	2					The sub-basement in the public parking garage at O'Farrell/Mason extends beyond the property line up to the curb line. Therefore, regular foundations as per original design could not be installed. CLOSED; NO FURTHER ACTION. Item is captured under applicable OCS Bid Item, See Trend 60.		
1251-0027	09/20/11	082-0027	1	CMB-0056	Agree	11/30/11	+281,435	Acceleration is necessary to avoid potential delay impacts to Central Subway follow-on contracts. COR #40 COMPLETE, NO FURTHER ACTION; CMOD #10	CMOD #10 Approved	
1251-0028	10/18/11	082-0028	6	CMB-0057	Agree	10/26/11	+157,000	AT&T was supposed to hire its own subcontractor to furnish and install all AT&T vaults in CN 1251. AT&T requested SFMTA for Synergy to perform this work as change order to CN 1251. AT&T agreed to reimburse SFMTA (\$157,000) through the Form B process. COR #43 COMPLETE, NO FURTHER ACTION; CMOD #11	CMOD #11 Approved	(157,000)
1251-0029	10/26/11	082-0029	6					Vault 133 rebuild is superseded by Trend 40. Demolition of existing vaults 403 and 113 is superseded by Trend 43 CLOSED; NO FURTHER ACTION. Demo of exiting vaults 403 and 113 are superseded by Trend 43. (See CMOD #23)		
1251-0030	10/26/11	082-0030	6	CMB-0058	Agree	11/02/11	+46,366	PG&E asked SFMTA to enlarge vault 873. PG&E agreed to reimburse SFMTA (\$46,366) through the Form B process. CMB approved a NTE amount of \$40K COMPLETE, NO FURTHER ACTION; CMOD #21	CMOD #21 Approved	(46,366)
1251-0031	10/26/11	082-0031	6	CMB-0058	Agree	11/02/11	+17,193	PG&E asked SFMTA to install additional conduits. PG&E agreed to reimburse SFMTA (\$17,193) through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #21	CMOD #21 Approved	(17,193)
1251-0032	11/08/11	082-0032	6	CMB-0059	Agree	11/16/2011, 05/02/12	+92,292	PG&E gas drawings were not included in the bid package and there was no bid item to capture this work. Gas drawings was issued by PG&E in June 2011. PG&E agreed to reimburse SFMTA (\$92,292) through the Form B process. Updated projected cost impact from \$202,400 to \$169,087 due to reduction in number of kill holes from 18 to 15. 04/11: Discovery of actual number of Kill/Tie locations being 26 instead of 15 will require confirmation from PG&E of the locations and the new cost of scope of work. COMPLETE, NO FURTHER ACTION; CMOD #19	CMOD #19 Approved	(92,292)

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1251-0033	11/23/11	082-0033	1	CMB-0068	Agree	03/07/12	+408,700	Additional enclosure wall is design initiated change. COR #47, PCC #9 Updated projected cost impact from \$262,484 to \$408,700. 39 Calendar Day Time Extension COMPLETE, NO FURTHER ACTION; CMOD #13 (formally CMOD #14)	CMOD #13 Approved	
1251-0034	01/10/12	082-0034	2	CMB-0069	Agree	04/04/12	+337,548	Existing utilities that are in active service were discovered in the City public right-of-way and are obstructing the performance of Contract work. Worst case scenario - "Not to Exceed" value) CM team will report actual amount value at a later date COR #71 CMB agreed to a Not-to-Exceed amount of \$346,456 on 4/4/12. All physical work was scheduled to complete by 4/13/12 COMPLETE, NO FURTHER ACTION; CMOD #17	CMOD #17 Approved	
1251-0035	01/11/12	082-0035	1					UMS Design Team requested 1251 to pothole (6'Wx12'Lx8'D) on Stockton between Post and Geary to locate existing piles and tie-backs at Union Square. Cost for this scope of work from the Contractor is \$19,870.73. Per direction from the CMB on Jan 18th this request is denied and the DP2 designer will cover this potential future obstruction with a note on the drawings. COR #53 CLOSED; NO FURTHER ACTION. Per direction of CMB on 1/18/12, this request is denied and DP2 Designer will cover this potential future obstruction with a note on the drawings.		
1251-0036	01/11/12	082-0036	6					CN 1252 Contract is requesting 1251 to install PG&E conduits in order to bring power in advance of the tunnel equipment arrival. The scope of work, which involves trenching at the busy 4th/Bryant intersection, was part of the 1252 contract, hence, a credit of same amount (\$54,892.07) to be due back to 1252. Based on a field meeting and discussions with BIH on Jan 17th this work will be done under CN 1252 as originally planned. COR #55 CLOSED; NO FURTHER ACTION. Based on field meeting with BIH on 1/17/12; this work will be completed under CN 1252 as planned.		
1251-0037	01/17/12	082-0037	3	CMB-0078	Agree	09/12/12	+27,428	After field investigation, the existing sewer lateral was found to connect to the Stockton main near Geary. However, the location where the lateral is connected to the main is inside the footprint of the UMS station, in which the main is shown in the contract plan to be slurry filled. The contract plan shows the lateral to be connected to the main on Maiden Lane but is not possible due to invert problem. At the CMB meeting on 1/18/12, Albert Hoe reported that he had instructed the design team during the design phase to investigate this lateral and make the connection to the sewer main at Maiden Lane. RE was asked to investigate if this could be a possible error and omission by the sewer design. (See Trends #44 and 45) COMPLETE, NO FURTHER ACTION; CMOD #18	CMOD #18 Approved	
1251-0038	01/04/12	082-0038	1	CMB-0064, CMB 0080	Agree	1/04/2012, 10/24/12	+29,273	JCDecaux refused to remove the remaining (2EA) kiosks without being paid for work already completed. The CMB approved on 1/04/12 Task Order No. 35 (Removal of 3EA sidewalk kiosks) as requested for the work already completed. On 10/24/12 the CMB approved Trend #38 removal of the remaining 2EA kiosks; work already completed and paid for as part of the approved CMB 0064 dated 01/04/12 for a total of 5EA kiosks removed. Total work priced at \$29,268. COMPLETE, NO FURTHER ACTION; CMOD #22	CMOD #22 Approved	
1251-0039	01/17/12	082-0039	1				+4,752	Requested by Muni Operation. COMPLETE, NO FURTHER ACTION; CMOD #22	CMOD #22 Approved	
1251-0040	02/15/12	082-0040	6	CMB-0070	Agree	04/11/12	+45,000	AT&T requested SFMTA for Synergy to rebuild manhole 133 at Post/Stockton. COR #64 AT&T agreed to reimburse SFMTA (\$45,000) through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #14	CMOD #14 Approved	(45,000)
1251-0041	02/15/12	082-0041	6	CMB-0070	Agree	04/11/12	+23,704	AT&T requested SFMTA for Synergy to extend their conduit from vault to vault instead of wye-casting into exiting duct bank. COR #63 AT&T agreed to reimburse SFMTA (\$23,704) through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #14	CMOD #14 Approved	(23,704)
1251-0042	02/15/12	082-0042	6	CMB-0070	Agree	04/11/12	+31,525	AT&T requested SFMTA for Synergy to extend their conduit from vault to vault instead of wye-casting into exiting duct bank. COR #62 AT&T agreed to reimburse SFMTA (\$31,525) through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #14	CMOD #14 Approved	(31,525)

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1251-0043	02/15/12	082-0043	Force account work for demolition of existing AT&T vaults 113 (Post/Stockton) and 403 (Ellis)	6	CMB-0076	Agree Conditionally	10/03/12	+52,607	Agreed cost shown in Trends 29 and 40 is for installing vaults only. Cost to demo existing vaults is tracked on force account (estimated cost at \$15k each vault). AT&T agreed to reimburse SFMTA (\$52,607) through the Form B process. CMB Agreed contingent on receipt of confirmation letter from AT&T for costs associated with these three trends (CMB 0076 approval - see Trend CN1251 #'s 72 & 80) COMPLETE, NO FURTHER ACTION; CMOD #23	CMOD #23 Approved	(52,607)
1251-0044	02/15/12	082-0044	Install new sewer lateral from Macys West on O'Farrell including plumbing modification inside Macy's building.	3	CMB-0078	Agree	09/12/12	+11,438	Contract plan SW-4 shows an existing lateral to be connected to new main. However, the 8" lateral is too big to be connected directly to the new 14" main necessitating a new connection to the manhole. However, numerous existing utilities were in the way and required installation of a new lateral at a higher elevation. Due to the raised lateral invert, modification to the building is also needed. COMPLETE, NO FURTHER ACTION; CMOD #18	CMOD #18 Approved	
1251-0045	02/15/12	082-0045	Install new 2 each sewer laterals on Stockton between Post and Geary	3	CMB-0078	Agree	09/12/12	+30,260	Contract plan SW-3 shows 2 each existing laterals coming from the Union Square garage to be connected to the new main at approximate sta 128+55. However, the laterals were found to be connected to the downstream end of the existing main (toward Geary), which is called for to be abandoned in 1251 to make room for the future station. (See Trends #37 and 44) COMPLETE, NO FURTHER ACTION; CMOD #18	CMOD #18 Approved	
1251-0046	03/06/12	082-0046	Additional cost for enlarging PG&E vault 584 on O'Farrell east of Stockton	6				+80,000	The two (2) existing PG&E duct banks that were supposed to be intercepted by vault 584 were wider than shown on plan. Vault 584 was needed to be enlarged in order to capture the two (2) ductbanks. PG&E agreed to reimburse SFMTA (\$80,000) through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #24	CMOD #24 Approved	(80,000)
1251-0047	04/10/12	082-0047	Enlarge Muni Vault 900A on Stockton between Post and Geary	2	CMB-0082	Agree	10/31/12	+15,357	Contract plan JT-301 calls for an intercept vault to capture 2 (E) Muni ductbanks (DB). These DBs were found to be farther apart than shown on plan. The intercept vault needs to be widened. (CMB 0082 approval - see Trend CN1251 #'s 47, 58 & 78) COMPLETE, NO FURTHER ACTION; CMOD #26	CMOD #26 Approved	
1251-0048	04/10/12	082-0048	Additional cost and time for stuck auger during micropile drilling	2					Contractor's hollow stem auger got stuck during drilling of micropile #27C in front of 17 Stockton. Contractor claims differing condition as cause for the stuck auger. Contractor is asking for 1 day compensable time extension. SFMTA is reviewing claim for entitlement. COR #67 RE Denied COR (City Letter 26); however Contractor will most likely send rebuttal. CLOSED; NO FURTHER ACTION.		
1251-0049	04/10/12	082-0049	Additional cost and time for added rebar and coordination with 17-19 Stockton Owner's contractor	2	CMB-0083	Agree	11/07/12	+9,058	Existing footing of One Stockton was found to be recessed from property line. City's response to RFI 171 called for additional rebar to compensate for the gap between back of new enclosure wall and existing footing. Also, the Owner's contractor of 17-19 Stockton asked that Synergy clear his work area so he can pour the primary wall and bring in his new switchgear. Synergy is asking 2 days compensable time extension. (CMB 0083 approval - see Trend CN1251 #'s 53, 59, and 64) COMPLETE, NO FURTHER ACTION	CMOD #27 Approved	
1251-0050	04/10/12	082-0050	Additional cost to install a Type 770 pole foundation at a different location, install 2 each DPT mast arms and demo existing wall in conflict with OCS footing	2	CMB-0074	Agree	08/15/12	+48,898	Type 770 pole foundation at SW 5th/Folsom could not be installed per plan due to a conflict with a cistern. Only solution is to remove an existing pole foundation (recently installed in 1251 as contract work) to make room for the 770 pole foundation. At 5th/Folsom, 2 DPT mast arms (not shown in original plan) need to be installed. At Pole #811, an existing concrete wall is in conflict with pole foundation. (CMB 0074 approval - see Trend CN1251 #'s 67, 74 & 75) COMPLETE, NO FURTHER ACTION; CMOD #20	CMOD #20 Approved	
1251-0051	04/10/12	082-0051	Intercept existing PG&E duct bank and terminate into vault 5464 at Market/Ellis	6				+23,633	PG&E requested to reroute existing duct bank running north out of MH 1803 at 4th/Pioneer Place into MH 5464 at Market/Ellis PG&E agreed to reimburse SFMTA (\$23,633) through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #24	CMOD #24 Approved	(23,633)
1251-0052	04/10/12	082-0052	Reroute unforeseen existing waterline on Geary east of Stockton	2	CMB-079	Agree	10/10/12	+27,234	An unforeseen existing waterline was found to be in conflict with PG&E vault 573 and needs to be rerouted per City's response to RFI #182. (CMB 0079 approval - see Trend CN1251 #'s 65 & 70). This is potentially a E&O issue due to unforeseen existing waterline on discovered along Geary Street (east of Stockton Street) not shown in the contract drawings. COMPLETE, NO FURTHER ACTION; CMOD #28	CMOD #28 Approved	

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1251-0053	04/10/12	082-0053	Additional cost for premium to accelerate contract work	1	CMB-083	Agree	11/07/12	+10,591	SFMTA directed Synergy to accelerate work to advance PG&E and AT&T cut-over and allow CN 1252 Contractor to start work at UMS COR #74 PG&E agreed to reimburse SFMTA (\$10,590) through the Form B process. 11/07/12 (CMB 0083 approval - see Trend CN1251#'s 49, 59, and 64) COMPLETE, NO FURTHER ACTION; CMOD #27	CMOD #27 Approved	
1251-0054	04/17/12	082-0054	Additional waterproofing at FIDM and north end of Crate & Barrel	2				+8,151	Sidewalk in front of FIDM and north end of Crate & Barrel did not have a sub-sidewalk basement, hence the original plan did not call for waterproofing of the primary wall. While excavating for the joint trench, contractor found the existing waterproofing to be spalling and peeling off from the primary wall. COR #72 COMPLETE, NO FURTHER ACTION; CMOD #22	CMOD #22 Approved	
1251-0055	04/17/12	082-0055	Install Swiveloc lids on all PG&E vaults	6					PG&E requested SFMTA to add this scope to the 1251 contract for safety reason. COR #72 SFMTA decided to defer this work to the 1252 contract. COMPLETE, NO FURTHER ACTION;		
1251-0056	05/31/12	082-0056	Additional work on force account related to sewer installation	2				+45,156	Additional work due to unforeseen and differing conditions during installation of sewer. COMPLETE, NO FURTHER ACTION; CMOD #15	CMOD #15 Approved	
1251-0057	05/31/12	082-0057	Additional work on force account related to water installation and NRG vault demolition	2				+39,599	Additional work due to unforeseen and differing conditions during installation of water and demolish existing NRG vaults that are in conflict with utility installation. COMPLETE, NO FURTHER ACTION; CMOD #16	CMOD #16 Approved	
1251-0058	05/31/12	082-0058	Additional streetlight conduit on 5th Street between Harrison and Bryant	2	CMB-0083	Agree	10/31/12	+17,754	The existing streetlight pullboxes new cables were supposed to be connected to per contract plan did not have power. New conduit needs to be install from the power source. COR #75 (CMB 0082 approval - see Trend CN1251 #'s 47, 76 & 78) COMPLETE, NO FURTHER ACTION; CMOD #25	CMOD #25 Approved	
1251-0059	06/26/12	082-0059	Accelerate contract work at Barney's front	1	CMB-0083	Agree	11/07/12	+16,948	As a result of numerous meetings and complaints by Barneys, it was decided to accelerate contract work in order to restore Barneys sidewalk earlier (CMB 0083 approval - see Trend CN1251 #'s 53, 49, and 64) COMPLETE, NO FURTHER ACTION; CMOD #27	CMOD #27 Approved	
1251-0060	06/26/12	082-0060	Final Bid Item Reconciliation	4				(508,961)	Bid item analysis for entire contract as of 6/12/12.	CMOD #30 Approved	
1251-0061	06/26/12	082-0061	Excavate for PG&E cutover at 177 Stillman	6				+7,424	PG&E requested Synergy to excavate for PG&E cutover at 177 Stillman. Reference document: Email from Michael Lightstone dated 12/9/11 PG&E agreed to reimburse SFMTA (\$7,424) through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #24	CMOD #24 Approved	(7,424)
1251-0062		082-0062	Additional waterproofing at Macys Men's wall	2				+24,774	Contract did not call for waterproofing at Macys Men's wall. However, when contractor dug for the joint trench, it was found that the existing waterproofing has deteriorated and needed to be replaced. COR# 20 COMPLETE, NO FURTHER ACTION; CMOD #22	CMOD #22 Approved	
1251-0063		082-0063	Excavation and restoration cost for PG&E gas tie-in and kill holes. Part II	6				+56,458	After completion of Part I (see trend 32), PG&E had offered to self-perform the excavation and restoration of the gas tie-in/kill holes because PG&E had crews available to perform the work. However, PG&E no longer have available crews, hence Synergy had to continue and finish excavating and restoring the last tie-in/kill holes. PG&E agreed to reimburse SFMTA (\$56,458) through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #24	CMOD #24 Approved	(56,458)
1251-0064		082-0064	Accelerate finish and detail work of AT&T and PG&E vaults	1	CMB-0083	Agree	11/07/12	+4,704	In order to expedite turn-over of AT&T and PG&E vaults, SFMTA directed Synergy to accelerate the detailing and finish work of these vaults. SFMTA will pay Synergy premium cost for OT hours. 11/07/12 - (CMB 0083 approval - see Trend CN1251 #'s 53, 59, and 49) COMPLETE, NO FURTHER ACTION; CMOD #27	CMOD #27 Approved	
1251-0065		082-0065	Additional fittings for AWSS lateral and chipping of pole foundation at Market/Ellis	2	CMB-0079	Agree	10/10/12	+20,412	An existing Muni pole foundation is in the way of the AWSS lateral. Additional fittings are required to complete contract work. (CMB 0079 approval - see Trend CN1251 #'s 52 & 70) This is potentially an E & O issue due to an existing Muni pole foundation is in the way of the AWSS lateral. COMPLETE, NO FURTHER ACTION; CMOD #28	CMOD #28 Approved	
1251-0066		082-0066	Intercept PG&E conduits at Vault 573 at Geary east of Stockton	6				+6,466	During installation of PG&E intercept vault 573, PG&E had incorrectly identified the conduits to be intercepted. This error was discovered during cut-over process by PG&E. PG&E agreed to reimburse SFMTA (\$6,466) through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #24	CMOD #24 Approved	(6,466)

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1251-0067		082-0067 Additional feeder span, no-bo insulator and adjustment of guywire for the Folsom OCS bypass	3	CMB-0074	Agree	08/15/12	+32,149	SFMTA Electrical Designer had pointed out the new Folsom Bypass does not have enough capacity to power the new OCS necessitating installation of feeder spans. Also, adjustments to the guywire are necessary to mitigate conflict with new signal mast arms. COR #76 7/25/12 - RE presented COR to CMB; direction given to develop one CMOD with all remaining items to be purchased for the new OCS bypass. (CMB 0074 approval - see Trend CN1251 #'s 50, 74 & 75) COMPLETE, NO FURTHER ACTION; CMOD #20	CMOD #20 Approved	
1251-0068		082-0068 Extended Overhead cost from July 19, 2012 to August 16, 2012	1	CMB-0075	Agree Conditionally	10/03/12	+106,967	Contract is expected to be extended beyond the approved July 18, 2012 completion due to the following reasons: contractor was slowed due to accommodation of AT&T and PG&E cut-over, for example, contractor has to provide windows of time for AT&T to occupy its work space to provide continuity and efficiency for AT&T cut-over, contractor has to advance cleaning and detailing of vaults to turnover to AT&T and PG&E, these work are typically done as punchlist, contractor now has to sequence work and reallocate resources; SFWD cut-over is taking longer than expected; PG&E gas cut-over was delayed due to inability to access Armani building, this delay held up completion of sewer MH, SFWD connection and restoration on O'Farrell east; added change order work, i.e. additional PG&E conduit at vault 573 and additional excavation for AT&T cut-over at 240 Stockton CMB Agreed contingent on receipt of letter confirming e-mail as presented in the meeting and content viewed related to agreement and remaining actions and release of funds. COMPLETE, NO FURTHER ACTION; CMOD #24	CMOD #29 Approved	
1251-0069		082-0069 Removal of abandoned PG&E gas valve (8each) and install anodes	6				+4,737	PG&E asked Synergy to remove all abandoned gas valves (8each) PG&E agreed to reimburse SFMTA (\$4,737) through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #24	CMOD #24 Approved	(4,737)
1251-0070		082-0070 Core drill primary wall and install interior plumbing at Armani and Disney for the fire service water cutover	2	CMB-0079	Agree	10/10/12	+14,034	Existing fire service inside the building is a thin-wall steel pipe that extends out to the previously existing sub-sidewalk basement. However, 1251 had backfilled the sub-sidewalk basement per contract, which now made the steel pipe susceptible to corrosion. SFWD does not want to tie-in to the steel pipe due to corrosion issue plus the fact that the pipe is thin walled, which makes welding almost impossible. A ductile iron pipe needs to be installed from the main and into the building. COR #77 (CMB 0079 approval - see Trend CN1251 #'s 52 & 65) COMPLETE, NO FURTHER ACTION; CMOD #28	CMOD #28 Approved	
1251-0071		082-0071 Install a new 8" backflow preventer for the fire service inside Macys Men's building	6					The new water main (installed in the 1251 Contract) is closer to the property line than the existing backflow preventer. State law stipulates that a backflow preventer be installed in between the property's fire suppression system and the water main. The SFWD refuses to make this connection until a proper backflow preventer is installed. SFMTA will insist on Macys to install its own backflow preventer. CLOSED; NO FURTHER ACTION.		
1251-0072	08/08/12	082-0072 Additional AT&T trench from new vault 5829 to existing vault 127 on Geary east of Stockton	6	CMB-0076	Agree	10/03/12	+23,993	AT&T requested new conduits to maintain continuity between the 2 vaults. AT&T agreed to reimburse SFMTA (\$23,993) through the Form B process. RE Tracking work on FAR CMB Agreed contingent on receipt of confirmation letter from AT&T for costs associated with these three trends (CMB 0076 approval - see Trend CN1251 #'s 43 & 80) COMPLETE, NO FURTHER ACTION; CMOD #14	CMOD #14 Approved	(23,993)
1251-0073	08/08/12	082-0073 Additional work to install water and electrical utilities for Flower Stand on Geary west of Stockton	1				+17,966	Contract bid allowance for providing utility services for flower stands (UD-14) had been exhausted during relocation of 2 flower stands. A third and final flower stand is still needed to be relocated. COMPLETE, NO FURTHER ACTION; CMOD #22	CMOD #22 Approved	
1251-0074	08/08/12	082-0074 Traffic Signal modification at 5th/Folsom	1	CMB-0074	Agree	08/15/12	+16,429	Due to installation of OCS bypass on Folsom between 4th and 5th Streets, a left turn signal is required at 5th/Folsom. Additional signal heads and modification to the existing traffic signal is necessary. RE Tracking work on FAR (CMB 0074 approval - see Trend CN1251 #'s 50, 67, & 75 also). COMPLETE, NO FURTHER ACTION; CMOD #20	CMOD #20 Approved	

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1251-0075	08/08/12		082-0075	Unforeseen conditions related to pole foundation installation for the Folsom OCS Bypass	2	CMB-0074	Agree	08/15/12	+12,568	Contractor encountered unforeseen concrete and brick substructures and abandoned utility lines. RE Tracking work on FAR (CMB 0082 approval - see Trend CN1251#'s 47, 58 & 78) COMPLETE, NO FURTHER ACTION; CMOD #20	CMOD #20 Approved	
1251-0076	08/08/12		082-0076	Adjustment to OCS on Mason Street	2/3	CMB-0082	Agree	10/31/12	+14,988	Modify bracket arm at existing Pole #511 to alleviate tension load and bending of pole. Realign trolley wire on Mason between Geary and Eddy to smoothen transition when shifting from right lane to left lane. Also, add intermediate guywire to prevent excessive sagging of bracket arms at various locations. RE Tracking work on FAR (CMB 0082 approval - see Trend CN1251#'s 47, 58 & 78) COMPLETE, NO FURTHER ACTION; CMOD #26	CMOD #26 Approved	
1251-0077	09/12/12		082-0077	Additional work related to Qwest, TCG and UCCO facilities	2	CMB-0081	Agree Conditionally	10/31/12	+37,181	Qwest, TCG and UCCO requested Synergy to tie-in their existing conduits into the new vaults that Synergy installed per contract. The utility companies are responsible for connecting existing conduits into new vaults, therefore, this request is considered extra work. Private Utilities companies agreed to reimburse SFMTA (\$37,181) through the Form B process. RE Tracking work on FAR CMB agreement contingent upon CMod package to include evidence from all utilities that cost are reimbursable to SFMTA through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #25	CMOD #25 Approved	(37,181)
1251-0078	09/12/12		082-0078	Unforeseen conditions encountered during excavation and installation of OCS poles along Mason and 5th Streets.	2	CMB-0082	Agree	10/31/12	+27,645	Several obstructions, i.e. buried concrete, boulders, brick, abandoned utilities were discovered during excavation and installation of OCS poles along Mason and 5th Street. RE Tracking work on FAR (CMB 0082 approval - see Trend CN1251 #'s 47, 58 & 76) COMPLETE, NO FURTHER ACTION; CMOD #26	CMOD #26 Approved	
1251-0079	09/12/12		082-0079	Additional work related to installation of PG&E Vaults 467, 571, 573, 586 and 594 including joint trench leading to these vaults	2				+44,530	Unforeseen conditions were encountered during installation of select PG&E vaults including joint trenches leading to these vaults. PG&E agreed to reimburse SFMTA (\$44,530) through the Form B process. RE Tracking work on FAR COMPLETE, NO FURTHER ACTION; CMOD #24	CMOD #24 Approved	(44,530)
1251-0080	09/12/12		082-0080	Additional work related to installation of AT&T Vaults 5828, 5829, 5830, 5831, 5832 and 5833 including joint trench leading to these vaults	2	CMB-0076	Agree	10/03/12	+56,806	Unforeseen conditions were encountered during installation of select AT&T vaults including joint trenches leading to these vaults. AT&T agreed to reimburse SFMTA (\$56,805) through the Form B process. CMB Agreed contingent on receipt of confirmation letter from AT&T for costs associated with these three trends (CMB 0076 approval - see Trend CN1251 #'s 43 & 72) COMPLETE, NO FURTHER ACTION; CMOD #23	CMOD #23 Approved	(56,806)
1251-0081	09/13/12		082-0081	PG&E concrete cover versus CDF on electrical duct bank	6	CMB-0107	Agree	02/13/13	+43,882	Contract Plan JT-014 calls for CDF cover on PG&E duct bank. However, PG&E requested to use regular concrete due to heat dissipation problem with CDF. PG&E agreed to reimburse SFMTA (\$43,881) through the Form B process. 12/19/12 - Presented to CMB, direction given to finalize cost and obtain a Form B agreement with PG&E 02/13/13 - Revised CMod presented to CMB. PG&E agreed with negotiated reimbursement amount. COMPLETE, NO FURTHER ACTION	CMOD #24 Approved	(43,882)
Contract 1251 Totals									+3,962,032	Total Changes to the contract in the amount of 3,962,032 represents an UNDERRUN of allocated contingency in the amount of \$1,405,265.32. Changes that will be Utility Reimbursement credits through the Form B process in the amount of \$1,224,828 will increase the UNDERRUN. Final Contract Closeout Total \$20,794,581 will be reduce by \$7,618,112 Utility Reimbursement credits for a Final Program cost of \$13,176,469 for CN 1251		(1,224,828)
Contract 1252		COR No.	PCC No.	1252 Change Description	Change Type	CMB Change No.	Configuration Management Board Agree/Disagree	Decision Date	Actual/Forecast	Comments	Contract Modification No.	

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1252-0001	04/23/12	1	AWSS Conflict w/ Low Pressure Water	6	CMB-0091	Agree to Merit Agree to Cost	10/10/12 01/16/13	+16,907	AWSS contract work was made more difficult by the proximity of a water line which was closer than indicated on UT-501. See COR 008 for TIA request. 10/10/12 - Merit info presented to CMB - Agreed 01/16/13 - CMB - NOT TO EXCEED Amount \$16,900	CMOD #17	
1252-0002	04/23/12	2	AWSS Add. Tie-Rods 4th-Harrison	6	CMB-0086	Agree to Merit Agree to Cost	10/10/12 12/19/12	+58,000	The AWSS line must be restrained a certain distance beyond the 90 degree elbow we are installing under contract 1252. The 1252 contract work includes excavating on both sides of this 12-foot portion of pipe. Additional work scope (per Michael Smith @ DPW): Station 162+80 to 162+90 - Restrain the existing 12-inch tee to the existing pipe north of the tee. Restrain any other joints that are not restrained on the existing pipe up to the new pipe to be installed. 10/10/12 - Merit info presented to CMB - Agreed 12/19/12 - CMB - NOT TO EXCEED Amount \$58,000	CMOD #17	
1252-0003	04/23/12	3	AT&T Vault Conflict-4th & Harrison	6	CMB-0092	Agree to Merit Agree to Cost	10/10/12 01/16/13	+16,015	After excavation of the roadway surface and subgrade at Fourth and Harrison streets an AT&T vault was discovered to be in conflict with the current alignment of the 42" RCP sewer main. Verbal authorization was given by an AT&T representative to make modifications to the vault. COR 003 has been submitted by BIH in response to this issue. Work is to be charged via SFMTA Form B agreement to AT&T. 10/10/12 - Merit info presented to CMB - Agreed 01/16/13 - CMB - NOT TO EXCEED Amount \$21,089	CMOD #17	(16,015)
1252-0004	05/18/12	6	PG&E live electrical delays	6	CMB-0088	Agree to Merit Agree to Cost	11/28/12 1/9/2013	+7,402	PG&E lines indicated on contract drawing UD-502 thru 504 were to be abandoned yet were not yet abandoned when BIH started work. They were abandoned on 5/21. 11/28/12 - Merit info presented to CMB - Agreed 01/09/13 - CMB - NOT TO EXCEED Amount \$7,600	CMOD #10	
1252-0005	06/06/12	7	Oil filled pipe @ Launch Box	2	CMB-0093	Agree to Merit Agree to Cost	1/16/13 1/16/13	+9,980	Synergy Demo Crew exposed an existing 6" steel line which had oil in it on the West side of 4th St between Harrison and Bryant. 01/16/132 - Merit info presented to CMB - Agreed 01/16/13 - CMB - NOT TO EXCEED Amount \$10,000	CMOD #5 Approved	
1252-0006	04/23/12	8	TIA - Associated w/ COR 001, COR 002, and COR 003	6		Agree to Merit	10/10/12	+269,904	TIA and Overhead Costs related to COR 001, 002 and 003. 10/10/12 - Merit info associated w/COR's 001, 002 & 003 presented to CMB - Agreed.	CMOD #17	
1252-0007	06/12/12	9	MOS - Live Utilities: PGE, AT&T, and SFWD 8" Water Line extra kill hole location	2		Agree to Merit	11/14/12	-0-	Live PG&E Electrical Lines Conflict: BIH was notified that PG&E had live electrical lines running through each headwall work zone @ Moscone station. 8 inch Low Pressure Water Line Conflict: Contract drawings show this utility to be abandoned and capped prior to work. Synergy struck and damaged the water line. SFWD directed Synergy to excavate a kill hole so they could properly abandon the line. 11/04/12 - COR Evaluation for Merit presented to CMB.		
1252-0008	06/19/12	10	MOS - Demo PGE duct bank / SF City 911 fiber optic line	2	CMB-0094	Agree to Merit Agree to Cost	10/10/12 01/16/13	+4,916	Upon excavation of the MOS north headwall, BIH's subcontractor Synergy Project Management (SPM) uncovered a PG&E duct bank that contained a live San Francisco 911 fiber optic line. 11/14/12 - Presented to CMB. The narrative will be rewritten CMB agrees with partial merit labor work involved in supporting the utility agencies. This item will be brought back to the CMB for approval. 01/09/13 - CMB - NOT TO EXCEED Amount 4,919.54	CMOD #3 Approved	
1252-0009	07/02/12	11	MOS - Traffic Signal line re-route south headwall	6	CMB-0095	Agree to Merit Agree to Cost	1/16/13	+37,500	After potholing Synergy discovered several traffic lines which were in the proposed location of the south MOS headwall. Traffic Lines re-routed. 01/16/13 - CMB - NOT TO EXCEED Amount \$37,500	CMOD #19	
1252-0010	01/00/00	12	MOS - Archaeological Standby North Headwall	2	CMB-0096	Agree to Merit Agree to Cost	12/11/12 01/16/13	+16,892	Upon excavation of the MOS north headwall, BIH's subcontractor Synergy Project Management (SPM) uncovered a layer of "Midden" or Native American debris. 12/11/12 - Merit info presented to CMB - Agreed 01/16/13 - CMB - NOT TO EXCEED Amount \$7,600	CMOD #6 Approved	
1252-0011	07/06/12	13	MOS - SL conduit from PG&E vault @ north headwall	6		Agree to Merit	11/28/12	+10,903	Permanent power is required to supply an existing Street Light box north of the MOS N headwall. 11/28/12 - Merit info presented to CMB - Agreed		

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1252-0012	06/26/12	15	LB - Pre-Excavation for Slurry Walls	2	CMB-0087	Agree to Merit Agree to Cost	11/28/12 12/19/12	+96,000	Pre-excavation of slurry wall panels due to CDF encased sewer line. The concrete encasement was found by the Contractor to extend to a depth of 9'-11' below the top of guide wall or street surface. The 8" VCP sewer main and concrete encasement was incorrectly shown in the contract drawings to be approximately 4'-5' below the street surface. 11/28/12 - Merit info presented to CMB - Agreed 12/19/12 - CMB - NOT TO EXCEED Amount \$96,000	CMOD #22	
1252-0013	07/02/12	17	MOS - Standby Time @ south headwall due to live TS lines	6		Agree to Merit	11/21/12	-0-	Standby delays related to the discovery of traffic lines within the proposed location of the south MOS headwall. 11/14/12 - COR presented to CMB. CMB requested additional revisions to the evaluation. CMB agrees with partial merit. The COR will be brought back to the CMB for approval. 11/21/12 - COR revisited at mtg for clarification the issue is related to CMB action from item 3 -7/25/12 (Mtg #88) specifically acted on 08/01/12 (CMB Mtg. 89) referred originally as Trend #15.	CMOD #19	
1252-0014	Closed	19	UMS - Grant street 2 way conversion (e- & striping)	7					In order to implement a full street closure for Stockton Street at the UMS location the DPT recommended that Grant Street be converted from an existing one-way street to a two way street for vehicular traffic. Closed - Work is done. 07/18/12 - This potential change was brought before the CMB. Board's decision to have DPT perform the work. CLOSED; NO FUTHER ACTION		
1252-0015	06/22/12	20	PROJECT WIDE - Utility Demo limit reduction credit	5					BIH's subcontractor Synergy Project Management (SPM) would like to minimize the limits of utility demo at the Launch Box, Moscone station, UMS station and TBM Retrieval Shaft locations. Closed - SFMTA to BIH/SPM "Build per Plan".		
1252-0016	04/02/12	21	UMS - Reduced Duration	5	CMB-0073	Agree Cost (Conditionally)	08/01/12	-0-	No cost change for acceleration of utility relocation, ground improvements (jet grouting), and headwall construction at Union Square/Market Street Station. 08/01/12 - CMB approval condition upon incorporating correctness to backup documentation as required by & documented in CMB mtg. RE to prepare modification.	CMOD #8	
1252-0017	07/10/12	22	MOS - Asbestos Pipe at north headwall	2	CMB-0090	Agree to Merit Agree to Cost	12/12/12 01/09/13	+5,705	Upon excavation of the MOS north headwall, BIH's subcontractor Synergy Project Management (SPM) uncovered fryable asbestos-laden transite pipe. 12/12/12 - Merit info presented to CMB - Agreed 01/09/13 - CMB - NOT TO EXCEED Amount \$6,000	CMOD #5 Approved	
1252-0018	07/10/12	23	MOS - Brick Wall #2 discovered @ north headwall	2		Agree to Merit	12/06/12	-0-	Upon excavation of the MOS north headwall, BIH's subcontractor Synergy Project Management (SPM) uncovered a buried wall. 11/14/12 COR presented to CMB. Evaluation for merit will be rewritten and brought back to CMB for approval. 11/21/12 - Merit info presented to CMB - Agreed		
1252-0019	08/10/12	26	MOS - Asbestos Pipe at south headwall	2	CMB-0085	Agree to Merit Agree to Cost	12/12/12 01/09/13	+30,000	Transite pipe was discovered during MOS south headwall excavation. 12/12/12 - Merit info presented to CMB - Agreed 01/09/13 CMB - NOT TO EXCEED Amount \$30,000	CMOD #16	
1252-0020	08/10/12	27	MOS - Oil filled pipe at south headwall	2	CMB-0089	Agree to Merit Agree to Cost	12/12/12 01/09/13	+8,226	A pipe containing oil was discovered during MOS south headwall excavation. 12/12/12 - Merit info presented to CMB - Agreed 01/09/13 CMB - NOT TO EXCEED Amount \$8,600	CMOD #5 Approved	
1252-0021	01/00/00	29	MOS - Todco scaffolding reimbursement	2	CMB-0097	Agree to Merit Agree to Cost	12/12/12 01/16/13	+1,718	1252 contract work requires the removal of scaffolding erected by Fine Line Construction, the contractor performing renovations on the Woolf House. 12/12/12 - Merit info presented to CMB - Agreed 01/09/13 - CMB - NOT TO EXCEED Amount \$1,717	CMOD #3 Approved	
1252-0022	Closed	closed	Disputed Work Items - NTP2 vs. NTP3	7				-0-	BIH interpretation of Special Provisions SP-3 NTP2 description includes activities that SFMTA interprets to be within NTP3. These activities include: Ellis Street and Green Street shafts and associated compensation grouting, MOS headwalls and jet grouting, jet grouting at crosspassage 5, UMS head walls and jet grouting, OCS removal along Stockton Street from Geary to Ellis, and the TBM retrieval shaft. On April 13, SFMTA released the MOS headwalls and jet grouting, jet grouting at crosspassage 5, UMS jet grouting, OCS removal along Stockton Street from Geary to Ellis, and preparatory and utility work necessary for the construction of the retrieval shaft.		

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						Approval Action	Approval Date				
1252-0023	05/30/12	4	Manhole in east guidewall footprint	2				-0-	While performing excavation for the east side guidewalls at the TBM Launch Box, BIH's subcontractor CJA-NCC encountered a manhole near the bottom of the excavation which was unexpected. BIH has stated that removal of the manhole prior to the installation of the guidewalls was necessary to ensure the successful installation of the slurry walls.		
1252-0024	Closed	closed	2" gas line inside 16" casing	2				-0-	While performing excavation for the Sewer and AWSS trench at the intersection of Fourth and Harrison streets, BIHJV's subcontractor Synergy encountered what was identified to be a 16" depressurized gas main. This gas main contained a 2" gas line which is shown on contract drawing UD-502 to be abandoned/removed.		
1252-0025	04/23/12	5	CDF Encasement on 42" RCP	2				+140,596	While performing excavation for the east side guidewalls at the TBM Launch Box, BIH's subcontractor CJA/NCC encountered a CDF backfill at the existing 42" RCP sewer which reportedly had a significantly higher compressive strength than the 50-150 psi. which was anticipated. BIH claims that the CDF conflicted with the construction of the guidewalls and it could not be excavated by conventional means.		
1252-0026	Closed	closed	Damage to Live LPW main at 4th and Folsom	2				-0-	Synergy Demo Crew hit a blow-off valve on the 8" water line at the Southwest corner of the MOS headwalls. SFWD is to install a permanent cap per contract drawing WD-404.		
1252-0027	Closed	14	MOS - 76 Gas Station fencing	1					SFMTA requested BIH to install fencing around the perimeter of the 76 gas station at 4th and Folsom St. Issue closed, cost of fence paid by BIH in return for use of gas station lot. CMB - Temporary use of 800 Folsom Street site for construction staging. Use of this site would be a tradeoff between SFMTA and BIH. The Contractor would maintain the sites security and up-keep in exchange for not billing.		
1252-0028	Closed	16	LB - SPTC delays due to concrete encased 8" sewer	2					Closed. Combined with COR 015. 07/25/12 - Verbal information presented to CMB as a potential change.		
1252-0029	08/06/12	18	MOS - South Headwall re-design	1				-0-	Costs related to leave end stops in place and a "T-Section" at the Moscone headwalls return walls. 11/14/12 - Presented to CMB. RE is recommending a possible compensation value of \$135K. CMB agrees with partial merit for labor and material cost of this COR. RE will proceed with scoping the work.		
1252-0030	08/02/12	24	Ellis - Utility demolition	3		Agree to Merit	12/06/12	+38,678	BIH says that no utilities were shown at Ellis; however, Reference Drawing UE-126 shows utilities. 12/06/12 - Merit info presented to CMB - Agreed		
1252-0031	Closed	25	Crack Gauges	4				-0-	BIH disagrees with SFMTA on the total number of crack gauges to be installed on the project. Per the contract drawings a total of 926 crack gauges are to be installed. BIH claims that a total of 50 are to be installed.		
1252-0032	08/07/12	28	Ellis asbestos abatement	2		Agree to Merit	12/06/12	+35,386	A steam line containing asbestos was discovered during potholing at the Ellis Street Shaft. 12/06/12 - Merit info presented to CMB - Agreed	CMOD #16	
1252-0033	-	30	LB - Class 1 Hazardous Material Hauloff	2				-0-	BIH trucking costs for Class 1 haul off. Also see COR 054 regarding Class 1 Haz material haul off for Phase 2. Cost to be reimbursed by "ES-8". Additional costs hazardous waste allowances.		
1252-0034	-	70	LB - Jet Grout Quantity Overrun	4		Agree to Merit	03/20/13	+768,600	The contract drawings call for the contractor to determine the extent of jet grouting at the launch box. BIH's jet grout quantities are projected to overrun the prescribed bid quantity by up to 40 percent. 03/20/13 - Merit info presented to CMB - Agreed		
1252-0035	01/00/00	unsubmitted	Utility Removal UD-304 and UD-503	6				TBD	RFI 00134 asks whether certain utilities indicated on drawings UD-304 (On Stockton inside limits of future UMS Station) and on UD-503 (On Fourth and Stillman Streets outside limits of Launch Box) may be left in place. Answer: "Confirmed, the utilities in question can be abandoned in place and are not required to be removed. The Engineer will seek an adjustment to Bid Item GB-3 for the elimination of this work."		
1252-0036	05/17/12	35	Additional Road Base on Fourth Street	2				-0-	BIH's subcontractor Synergy Project Management (SPM) discovered what they believe to be an additional layer of road base under the existing asphalt and road base layer while performing roadway demo work along the west side of Fourth street between Harrison and Bryant St. The additional layer is estimated by BIH/SPM to be approximately 8" - 12" thick. 12/06/12 - Evaluation of merit presented to CMB - Agreed No Merit for this change.		

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1252-0037	01/00/00	unsubmitted	DPW permitting potential impacts	7				TBD	DPW Permitting issue to cause potential impacts. DPW is not issuing BIH permits for excavating the MOS headwalls, jet grouting at the LB, and excavating support at the LB, as they claim to have not been able to conduct a thorough review of the project's design documents and were not included in the design process. BIH may be required to re-sequence and stand many other potential impacts w/o said permits.		
1252-0038	05/30/12	38	Manhole in West Guidewall Footprint	3	CMB-0101	Agree to Merit Agree to Cost	12/05/12 01/23/13	+3,821	While performing excavation for the west side guidewalls at the TBM Launch Box, BIH's subcontractor CJA-NCC unexpectedly encountered a manhole foundation within the excavation at approximate station 165+70. It was necessary to chip away a portion of the existing manhole to gain the necessary clearance to construct the west slurry wall. 12/05/12 - CMB agreed with Evaluation of Merit 01/23/13 - CMB - NOT TO EXCEED Amount \$4,052.17	CMOD #12	
1252-0039	01/00/00	unsubmitted	Panel W-33 Obstruction	2				TBD	While performing excavation for the slurry walls at the TBM Launch Box, BIH's subcontractor CJA-NCC unexpectedly encountered buried (wood pile?) debris located approximately 12 feet below the guide wall within Launch Box Diaphragm Wall Panel W-33. This trend is being tracked separately from Trend 20 because we believe it may be a different structure. BIH has not provided adequate information substantiating the merging of the two trends.		
1252-0040	08/23/12		1 PCC No.1 - Revisions to Moscone North Headwall Elevation (Top)	1	CMB-0099	Agree to Cost	1/16/2013	+20,358	SFMTA initiated change to revise headwall elevations to facilitate a change in the roof elevation of MOS station. 01/16/13 CMB - NOT TO EXCEED Amount \$20,500	CMOD #7 Approved	
1252-0041	08/23/12		2 PCC No. 2 - Revisions to UMS Headwall Concrete and Reinforcement Limits	1				-0-	SFMTA initiated change to revise UMS headwall concrete and reinforcement limits to provide a cost savings. 08/29/12 - Revised PCC presented.		
1252-0042	08/24/12	31	Retrieval Shaft - Unmarked 12" Steel Pipe	2	CMB-0108	Agree to Merit Agree to Cost	1/2/2013 02/27/13	+1,200	While performing excavation for the joint trench at the retrieval shaft BIH's subcontractor Synergy Project Management (SPM) discovered an abandoned 12" dia. steel pipe which appears to run continuously under Columbus Ave. 01/02/13 - Merit info presented to CMB - Agreed 2/27/13 - Cost presented to CMB - agreed to NTE \$1,250	CMOD #14	
1252-0043	08/31/12	32	LB - Panel W29 Wood Pile	2		Agree to Merit	11/28/12	+81,000	While performing excavation for the slurry walls at the TBM Launch Box, BIH's subcontractor CJA-NCC unexpectedly encountered what appeared to be a wood pile within Launch Box Diaphragm Wall Panel W-29. 11/28/12 - Merit info presented to CMB - Agreed	CMOD #20	
1252-0044	09/04/12	33	0 Ret Shaft - 20" Water Line Conflict	2		Agree to Merit	11/14/12	-0-	During excavation for the joint trench at the retrieval shaft SPM discovered that the MRY Duct Bank is directly above an active 20" low pressure waterline. As a result the work at the Retrieval Shaft must reportedly be altered. 11/14/12 - Presented to CMB, the CMB agrees with some merit of this COR, element of change not defined clearly. RE will proceed with scoping the work.		
1252-0045	09/11/12	34	0 LB - Panel W28 Wood Pile	2				+81,000	While performing excavation for the slurry walls at the TBM Launch Box, BIH's subcontractor CJA-NCC unexpectedly encountered what appeared to be a wood pile within Launch Box Diaphragm Wall Panel W-28.		
1252-0046	01/00/00	36	0 MOS - Catch Basin @ south headwall	3				-0-	A catch basin on the NW corner of 4th and Folsom interfered with the construction of the MOS Headwalls. Removal of the catch basin was needed in order for the headwalls to be built. BIH claims the catch basin was not shown in the contract drawings. Closed due to improper notification.		
1252-0047	01/00/00	37	UMS - 12" steel pipe removal	3				-0-	A 12" steel pipe at the north UMS headwall location interfered with the demolition of other existing UMS utilities. BIH claims the steel pipe was not shown in the contract drawings. Closed due to improper notification.		
1252-0048	09/07/12	39	MOS - 16" Steel Pipe removal @ northeast headwall	3	CMB-0102	Agree to Cost	01/23/13	+2,952	SPM removed an unmarked 16" steel pipe from the excavation of the NE MOS Headwall. Construction of the MOS headwall could not commence without this utility being removed. BIH claims the 16" steel pipe was not shown in the contract drawings.	CMOD #15	
1252-0049	01/00/00	40	MOS - Extra Road Base @ northeast headwall	2				-0-	BIH's subcontractor Synergy Project Management (SPM) discovered what they believe to be an additional layer of road base under the existing asphalt at the NE MOS headwall location. The road base in this location was approx. 20" thick on a patch that was roughly 25' x 25'. Closed due to improper notification. +		

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1252-0050	05/18/12	41	LB - Impacts due to live PG&E electrical lines (Synergy)	6	CMB-0098	Agree to Merit Agree to Cost	01/16/13	+1,217	Based on direction from the SFMTA, Synergy provided a full time flagger for one night shift of work @ the intersection of I-80 off-ramp near 4th/Bryant streets in order to assist PGE while they performed the abandoning of the existing live PGE electrical at the Launch Box location which was shown to be dead in the contract drawings. 01/13/13 - CMB agreed with Evaluation of Merit 01/16/13 CMB - NOT TO EXCEED Amount \$1,245	CMOD #10	
1252-0051	01/00/00	executed	Contract Amendment No. 2	1				(3,040,713)	0	CMOD #2 Approved	
1252-0052	08/17/12	42	LB - Panel W25 Wood Pile	2		Agree to Merit	11/28/12	+116,785	While performing excavation for the slurry walls at the TBM Launch Box, BIH's subcontractor CJA-NCC unexpectedly encountered an obstruction within Launch Box Diaphragm Wall Panel W-25. 11/28/12 - CMB agreed with Evaluation of Merit	CMOD #20	
1252-0053	08/22/12	43	LB - Panel W30 Wood Pile	2		Agree to Merit	11/28/12	+47,185	While performing excavation for the slurry walls at the TBM Launch Box, BIH's subcontractor CJA-NCC unexpectedly encountered an obstruction within Launch Box Diaphragm Wall Panel W-30. 11/28/12 - CMB agreed with Evaluation of Merit	CMOD #20	
1252-0054	09/19/12	44	MOS - 16" steel pipe removal @ southeast headwall	3	CMB-0109	Agree to Merit Agree to Cost	12/06/12 02/27/13	+1,600	SPM removed an unmarked 16" steel pipe from the excavation of the NE MOS Headwall. Construction of the MOS headwall could not commence without this utility being removed. BIH claims the 16" steel pipe was not shown in the contract drawings. 12/06/12 - CMB agreed with Evaluation of Merit 2/27/13 - Cost presented to CMB - agreed to NTE \$1,800	CMOD #15	
1252-0055	06/09/12	45	Ret Shaft - Credit for reduced AT&T conduits	6				(331)	Credit to install 2 less conduits in the AT&T infrastructure at the Retrieval Shaft Joint Trench. The conduit notes on page JT-701 of the contract documents require 8 EA 4" conduits as laid out on the AT&T line. The reduced materials would result in 6 EA 4" conduits as a result.		(331)
1252-0056	09/25/12	46	UMS - Unmarked steel pipes (6", 12", 14") / Duct Bank	6	CMB-0103	Agree to Merit Agree to Cost	12/06/12 1/23/2013	7475.28	While performing excavation for the utility demolition at the south UMS headwall BIH/Synergy discovered a 6" dia. steel pipe, 16" dia. steel pipe, 18" dia. steel pipe, and a concrete duct bank. BIH claims the utilities were not shown in the contract drawings. 12/206/12 - CMB agreed with Evaluation of Merit 01/23/13 - CMB - NOT TO EXCEED Amount \$7,461	CMOD #18	
1252-0057	09/25/12	47	Ret Shaft - unmarked 10" steel pipe/duct bank	6	CMB-0104	Agree to Merit Agree to Cost	12/06/12 01/23/13	+2,108	Synergy Project Management (SPM), discovered an abandoned duct bank and 10" steel pipe which traveled underneath Columbus Avenue between Powell and Union Streets. Removal of the duct bank was necessary to complete the construction of the 36" RCP sewer main relocation work in this area. The status of the removal of the steel pipe is uncertain and may have not been necessary for the sewer main relocation. 12/06/12 - CMB agreed with Evaluation of Merit 01/23/13 - CMB Not to Exceed \$2,201	CMOD #14	
1252-0058	09/28/12	48	UMS - 3'x5' brick sewer at south headwall	6	CMB-0114	Agree to Merit Agree to Cost	12/06/12 03/13/13	+12,475	Synergy Project Management (SPM), discovered a brick sewer within the utility demolition limits at the UMS South headwall. The sewer encountered was larger than the 12" pipe which was shown in the contract drawings. Removal and disposal of the sewer commenced on September 26th and was completed by September 28th. Removal of the sewer was necessary for headwall construction. 12/06/12 - CMB agreed with Evaluation of Merit 03/13/13 - CMB Not to Exceed \$12,474.65 - Comparison sheet to be updated with comments supporting negotiations to justify analysis and record of negotiations.	CMOD #18	
1252-0059	01/00/00	49	Ret Shaft - Tree trimming debris haul off	7				-0	Synergy Project Management (SPM), was requested by the SFMTA to remove and dispose of debris near the Northeast corner of Columbus Avenue and Union Street. The debris resulted from tree trimming activities performed by MUNI operations. CLOSED; NO FURTHER ACTION.		
1252-0060	10/10/12	50	Ret Shaft - 12" steel pipe removal at Union/Columbus	6	CMB-0110	Agree to Merit Agree to Cost	12/12/12 02/27/13	+2,200	On October 4th 2012, the Contractor discovered and removed a 12" Steel pipe at the intersection of Union Street and Columbus Avenue. Removal and disposal of the steel pipe was necessary in order to complete the proposed sewer re-location work near the Retrieval Shaft. Sewer work included the construction of a manhole which had been positioned in the field to avoid an existing MUNI duct bank. 12/212/12 - CMB agreed with Evaluation of Merit 2/27/13 - Cost presented to CMB - Agreed to NTE \$2,600	CMOD #14	
1252-0061	10/11/12	51	Ret Shaft - Elevation design conflict (30" low psi water / sewer)	3		Agree to Merit	03/13/13	+26,000	03/13/13 - Merit info presented to CMB - Agreed		

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1252-0062	09/07/12	53	Chinatown - Night drilling for instrumentation	7				-0-			
1252-0063	-	54	LB Class 2 Hazardous Material Haul Off (Phase 2)	2				-0-	Cost to be reimbursed by "ES-8". Additional costs hazardous waste allowances.		
1252-0064	10/10/12		PCC No. 4 - Ret shaft sewer pipe material change	1				-0-	Change approximately 65 ft. of pipe for sewer bypass around the TBM Retrieval Shaft from 3' X 5' oval glass fiber reinforced pipe to a 48-inch (OD) HDPE SD-17 pipe with casing insulator placed inside a 54-inch diameter, ½-inch thick steel casing pipe. In addition, delete permanent sheet pile wall that was to have been placed along the west side of the trench to facilitate future maintenance access to the sewer along the shaft.		
1252-0065	12/18/12	57	PCC No. 8 - UMS - Tree Removal	1				-0-	SFMTA is directing removal of a tree at at the northeast corner of Stockton and O'Farrell St. CLOSED; NO FURTHER ACTION.		
1252-0066	10/10/12		PCC No. 5 - Ret Shaft Water Dist. Pipe Material Change	1				-0-	Change material type of approximately 188 linear feet of 20-inch water line and approximately 125 linear feet of 30-inch water line from Welded Steel Pipe (WSP) to Ductile Iron Pipe (DIP) with TR-Flex joints. Install 6-inch thick concrete cap over 20-inch water line where cover is less than 24 inches..		
1252-0067	10/26/12	58	Ret Shaft - Additional 10" steel pipe removal	6	CMB-0111	Agree to Merit Agree to Cost	12/12/12 02/27/13	+700	Work is a continuation of work performed in COR 047. 12/12/12 - CMB agreed with Evaluation of Merit 2/27/13 - Cost presented to CMB - Agreed to NTE \$860.85	CMOD #14	
1252-0068	10/10/12		PCC No. 3 - General Detour Signage	1	CMB-0112	Agree to Cost	02/27/13	+6,153	Full closure of Stockton Street at Union Square was not anticipated under the 1252 Contract. The implementation of detour signage associated with the full closure of Stockton Street was to occur under the 1300 Contract. After the award of the 1252 Contract it was decided that a full closure of Stockton could be implemented to help reduce the headwall construction durations. As a result of the full closure the City Traffic Engineer has requested that a portion of the 1300 detour signs be installed now under the 1252 Contract to help alleviate traffic congestion and provide better detour signage around Union Square. 10/03/12 - PCC presented to CMB. CMB directed the RE to get a price quote from DPT do the work as a price comparison. This item will be brought back to the CMB at a later date. 11/14/12 - PCC presented to CMB. The CMB did not agree that Central Subway needed to take the lead on implementing detour signage, but suggested that the RE study the traffic activity and at the end of November report findings. 2/27/13 - Cost presented to CMB - Agreed to NTE \$6,152.60		
1252-0069	11/08/12		PCC No. 6 - Supplemental instrumentation of BART tunnel lining.	1				+657,884	Implement additional instrumentation of BART tunnel lining: (A) Existing bolt preload force – Determine the actual load in 12 bolts. (B) Bolt force sensor – Install 12 bolt force sensors at bolts for a total of 24 bolts. (C) Rail movement under dyNAmic train loading – Install dyNAmic strain gauges (2 per rail, 8 per tunnel). 10/31/12 - PCC presented to CMB for merit. CMB directed RE to proceed with obtaining a price quote from Contractor to perform the work.		
1252-0070	01/00/00	unsubmitted	Full Closure of 4th Street	1				TBD	SFMTA allowed full closure of 4th Street in order to facilitate construction of Launch Box Slurry Wall Construction Week Ending 11/04/12 - 11/11/12.		
1252-0071	11/07/12	61	LB - Panel P-17 Buried Obstruction	2		Agree to Merit	01/02/13	+1,473	CJA-NCC discovered an unmarked buried water main at Panel P-17, approximately 6' below the guidewall at CTL Station 165+52, while performing slurry diaphragm wall excavation. 01/02/13 - CMB agreed with Evaluation of Merit.	CMOD #21	
1252-0072	11/14/12	62	LB – Panel P-9 Buried Obstruction	2		Agree to Merit	01/23/13	+150,000	CJA-NCC discovered a buried obstruction while excavating slurry diaphragm wall panel P-9 at the Launch Box location. 01/02/13 - Presented to CMB for merit, CMB did not agree. CMB suggested inspector's daily tags as backup or reference the tag numbers in the write-up when force account work is involved. 01/23/13 - Revised write up presented CMB agreed with Evaluation of Merit.	CMOD #21	
1252-0074	11/16/12	65	LB – Panel P-12 Buried Obstruction	2		Agree to Merit	01/23/13	+150,000	CJA-NCC discovered a buried obstruction (water main) while excavating slurry diaphragm wall panel P-12 at the Launch Box location. 01/02/13 - Presented to CMB for merit, CMB did not agree. CMB suggested inspector's daily tags as backup or reference the tag numbers in the write-up when force account work is involved. 01/23/13 - Revised write up presented; CMB agreed with Evaluation of Merit.	CMOD #21	

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1252-0075	11/19/12	66	Retrieval Shaft - Unmarked 12" Steel Pipe	2		Agree to Merit	01/23/13	+3,700	While performing excavation for the joint trench at the retrieval shaft BIH's subcontractor Synergy Project Management (SPM) discovered an abandoned 12" dia. steel pipe which appears to be a Low Pressure Water Main. 01/23/13 - Merit info presented to CMB - Agreed 2/27/13 - Cost presented to CMB - Agreed to NTE \$3,800	CMOD #14	
1252-0076	11/19/12	67	LB - Panel P-10 Buried Obstruction	2		Agree to Merit	01/23/13	+18,000	CJA-NCC discovered a buried obstruction or concrete encased clay sewer pipe, approximately 7' below the top of the guide wall while excavating slurry diaphragm wall panel P-10 at the Launch Box location. 01/02/13 - Presented to CMB for merit, CMB did not agree. CMB suggested inspector's daily tags as backup be attached or reference the tag numbers in the write-up when force account work is involved. 01/23/13 - Merit info presented to CMB - Agreed	CMOD #21	
1252-0077	12/21/12	7	PCC No. 7 Bart Temporary Annex Wall	1	CMB-0106	Agree to Cost	1/30/2013	+15,500	SFMTA is requesting Contractor construct temporary wall for Bart Annex for SFMTA use. 01/30/13 - CMB - NOT TO EXCEED Amount \$15,380	CMOD #11	
1252-0078	12/28/12	PCC 9, FA CO 1	UMS Headwall - Unknown Buried Pipe	1	CMB-0100	Agree to Merit Agree to Cost	1/16/13 1/16/13	+75,000	Related to COR 063. SFMTA instructed BIH to perform investigation into the 48" diameter steel pipe as it is a Differing Site Condition. 01/30/13 01/16/13 - CMB - NOT TO EXCEED Amount \$75,00	CMOD #4 Approved	(75,000)
1252-0079	01/09/13	PCC 10, FA CO 3	Relocation of TBM Retrieval Shaft	1					Modify Bid Item ST -4 Construction of Base Bid Permanent Retrieval Shaft to relocate the TBM retrieval Shaft to 1731-1741 Powell Street - 01/09/13 - Draft PCC10 presented to CMB for Contractor Design Activity to be paid on FA. NTE value \$20K increased to \$50K in final doc. 02/20/13 - COST IS NOT REFLECTED HERE - SCOPE IS FUNDED BY OTHER CPT 690 \$\$\$\$ 03/06/13 - Cost proposal received from BIH . SFMTA will develop a detail estimate of what is believed to be the scope of work.		
1252-0080	12/19/12	0	Segment Measuring Frequency	7				(1,300,000)	RFI 203.1 - In light of gauging frequency, and the difficulties of erecting a ring with cast in gaskets, BIH JV alternately proposes to assemble a ring on the Master ring at an interval of every 500th ring cast. The assembled ring would be comprised of randomly selected segments, or segments chosen by the Engineer.		
1252-0081	09/09/12	0	F21 and Old Navy Instrumentation Proposal	7				-0-	Wang Technology is proposing instrumentation changes to the Liquid Level Sensors and Tilt Beams in the basements of Old Navy and Forever 21.		
1252-0082	01/14/13	68	UMS – AT&T Vault Walkway @ N Headwall	2	CMB-0112	Agree to Merit Agree to Cost	1/16/13 02/27/13	+2,000	SPM discovered a walkway at the UMS north headwall. This walkway is located at the UMS north headwall and connects the south AT&T vault, located within the utility demolition limits, to an north AT&T, located outside of the utility demolition limits. SPM proposes to construct 3'x5' wall to the extents necessary, inside this walkway. The wall will be constructed of plywood and necessary reinforcement in order to create a bulkhead that will isolate the walkway and north vault from the south vault. 01/16/13 - CMB recommendation Contractor/Sub-contractor proceed on Force Account with a "Not to Exceed Amount" \$2K.		
1252-0083	11/08/12	69	UMS – Cap and Remove 48" Steel pipe	2					Closed		
1252-0084	01/24/13	PCC 11, FA CO 2	UMS – Cap and Remove 48" Steel pipe	1	CMB-0105	Agree to Cost	01/23/13	+150,000	BIH/Synergy encountered a buried 48" Diameter steel pipe during work at the UMS S. Headwall. The pipe is located 6 feet from the south UMS headwall and 5 feet from the face of the curb. This PCC is to complete removal of pipe @ S. Headwall and Investigate and remove pipe if necessary @ the North headwall. 01/30/13 - CMB - NOT TO EXCEED Amount \$150,000	CMOD #9	(150,000)
1252-0085	01/24/13	71	LB – Ramp Excavation Wood Piles Obstruction	2				+800	BIHJV encountered numerous groups of wood piles while performing excavation of the Launch Box ramp. The wood piles are approximately 16"+ in diameter and are located along the north and south perimeter walls of the Launch Box ramp excavation area. 01/30/13 - CMB did not agree with merit of change suggestion the RE negotiate w/Contractor for another concession.		

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						Approval Action	Approval Date				
1252-0086	02/08/13	72	Ellis Shaft Jet Grout Obstruction	2				+54,000	On February 6th, 2013, CJA/NCC was drilling column R3 of the Ellis Shaft and reported hitting an obstruction 52ft below existing grade. The obstruction reportedly caused the jet grout monitor to shear off. At this time it is not known what the obstruction is or if it caused the monitor to be sheared off.		
1252-0087	02/14/13	73	MOS - Unknown 16" Pipe removal @ northwest headwall	2				+3,000	BIH-JV's subcontractor, Synergy, encountered an abandoned 16" pipe while installing the 12" waterline at the north headwall of Moscone. The pipe was at the same elevation as the new 12" waterline and therefore needed to be removed to facilitate the installation of the new 12" waterline. 03/13/13 - Merit info presented to CMB - Agreed		
1252-0088	NA	74	Whole Foods - Unknown brick obstruction in Comp Grout Trench	0				-0-	BIH has decided not to submit a COR as production was not significantly impacted.		
1252-0089	03/11/13	75	Hazardous Waste Disposal Denial - Spolis containment Cost Impacts	7				+1,100,000	BIH submitted change order request (COR) 030 seeking reimbursement for the demonstrated additional costs of excavating, handling and disposing of excavated material found to contain hazardous material to a permitted landfill over that which can be disposed of at an unregulated dump site. The SFMTA refused reimbursement for such costs under the hazardous waste bid item allowance. As a result of this determination, BIH is modifying its approach to the construction and handling operations of tunnel spoils generated during tunneling operations.		
1252-0090	03/08/13	76	MOS - 16" Pipe removal @ SW Headwall	2		Agree to Merit	03/20/13	+2,000	BIH-JV's subcontractor, Synergy, encountered an abandoned 16" pipe while installing the 12" waterline at the south headwall of Moscone. The pipe was at the same elevation as the new 12" waterline and therefore needed to be removed to facilitate the installation of the new 12" waterline. 03/20/13 - Merit info presented to CMB - Agreed		
1252-0091	03/06/13	77	Comp Grout - WFB-5 Drilling Obstruction	2				+10,000	On March 06, 2013, BIHJV encountered a potential Differing Site Condition (DSC) while drilling the compensation grouting hole WFB-5 located at Whole Foods and more precisely at CTL Station 160+38. This potential DSC consists of an obstruction located at a depth of 9' below grade which prevented CJA-NCC from drilling any further.		
1252-0092	03/07/13	78	Comp Grout - WF & ATT	2		Agree to Merit	03/20/13	+20,000	BIHJV encountered multiple potential Differing Site Conditions (DSC's) of varying dimensions while excavating the compensation grouting trench for the drill holes located at Whole Foods and AT&T. 03/20/13 - Merit info presented to CMB - Agreed No Merit		
1252-0093	03/07/13	79	Comp Grout - Old Navy	2		Agree to Merit	03/20/13	+45,000	BIHJV encountered a potential Differing Site Condition (DSC) while sawcutting the pavement for the compensation grouting holes located at Old Navy. The original design was to drill the compensation grout holes between two existing PG&E lines. It was discovered in the field that there is not enough clearance between the existing PG&E lines for the original design to be possible and multiple other potential DSCs were also encountered including, but not limited to, tile duct banks, concrete of unknown contents, and steel pipes. 03/20/13 - Merit info presented to CMB - Agreed		
1252-0094	03/12/13	80	MOS North Asbestos Wrapped 20" Waterline	2				+43,000	Synergy Project Management was performing the installation of low pressure water distribution piping at the Moscone north headwall and discovered an unknown material wrapping around the existing 20" waterline which appeared to contain asbestos material.		
Contract 1252 Totals								+80,486	Total Changes and Potential Change (trends) to the contract are currently \$80,486 Out of Scope Changes to the Contract for Relocation of TBM (Trend 79, PCC 10) to be paid out of CPT690, funded separately. Not include in total above and being tracked separately from original Program Costs of \$1.5783B		(241,346)
CONSTRUCTION TRENDS (Based on #1252 Trending Log and CMod) - SUBTOTALS:								+80,486	The \$80,486 represents an UNDERRUN of allocated contingency. Current Balance = (33,658,454 - 80,486) = \$33,577,968 This does not include potential reimbursements from utilities		(241,346)
DESIGN TRENDS											
FD-001	07/31/10	084-0001	Narrowing of Platform at UMS	1	CMB-0006	Agree	08/04/10	(800,000)	[In "Current Forecast" - Sep2010 Cost Report.]		

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FD-002	07/12/10	084-0002	1	CMB-0009	Agree (Conditionally)	08/25/10	(2,000,000)	Further actions: Designer required to receive Fire/Life/Safety approval before proceeding with this change. Designer to allocate cost impacts by Station (Current figures are "place-holders.". [In "Current Forecast" - Sep2010 Cost Report.]		
FD-002	07/12/10	085-0001	1	CMB-0009	Agree (Conditionally)	08/25/10	(500,000)	Further actions: Designer required to receive Fire/Life/Safety approval before proceeding with this change. Designer to allocate cost impacts by Station (Current figures are "place-holders.". [In "Current Forecast" - Sep2010 Cost Report.]		
FD-002	07/12/10	086-0001	1	CMB-0009	Agree (Conditionally)	08/25/10	(500,000)	Further actions: Designer required to receive Fire/Life/Safety approval before proceeding with this change. Designer to allocate cost impacts by Station (Current figures are "place-holders.". [In "Current Forecast" - Sep2010 Cost Report.]		
FD-003	07/31/10	085-0002	1	To be verified	Info Only	08/25/10	+7,000,000	Presented to CMB for information/consideration.		
FD-004	07/29/10	084-0003	1	CMB-0007	Agree	08/18/10	(8,000,000)	[In "Current Forecast" - Sep2010 Cost Report.]		
FD-005	08/22/10	084-0004	1	CMB-0010	Agree	12/29/10	(22,500,000)	Documentation to be filed.		
FD-006	08/03/10	084-0005	1	CMB-0008	Agree	08/18/10	-0-			
FD-006	08/03/10	086-0002	1	CMB-0008	Agree	08/18/10	-0-			
FD-007	08/03/10		1	CMB-0018	Agree	09/15/10	-0-			
FD-008	07/30/10		1	CMB-0017	Agree	09/15/10	+2,000,000			
FD-009	10/06/10	082-0003	1	CMB-0019	Agree	12/15/10	+3,000,000			
FD-010	10/06/10	082-0004	1	CMB-0020	Agree	11/17/10	+2,000,000			
FD-011	10/06/10	082-0005	1	CMB-0021	Agree	11/17/10	+500,000			
FD-012	10/06/10	082-0006	1	CMB-0022	Disagree	11/17/10	-0-			
FD-013	10/06/10	082-0007	1	CMB-0023	Agree	11/17/10	+4,100,000			
FD-014	10/06/10	082-0008	1	CMB-0024	Agree	12/15/10	+3,100,000			
FD-015	10/06/10	082-0009	1	CMB-0025	Agree	11/17/10	+1,000,000			
FD-016	10/06/10	085-0003	1	CMB-0011	over taken by FD-021	01/19/11	+5,000,000	Additional Information Pending.		
FD-017	10/06/10	085-0004	1	CMB-0012	over taken by FD-021	01/19/11	+10,300,000	Additional Information Pending.		
FD-018	10/06/10	084-0006	1	CMB-0013	Disagree	11/10/10	-0-	Additional Information Pending.		
FD-019	10/06/10	086-0003	1	CMB-0014	Agree	11/10/10	TBD			
FD-020	10/06/10	084-0007	1	CMB-0015	Agree	11/10/10	TBD			
FD-021	01/14/11	085-0005	1	CMB-0027	Agree	01/19/11	(18,000,000)	Agreement with changes to project configuration only. Additional Information required related to cost and schedule impacts. No agreement on Design cost impact, Design costs directly related to this change to be tracked separately		
FD-022	02/16/11	084-0008	1	CMB-0029	Agree	02/23/11	(134,000)	This trend has both an EPC number as well as a Construction Trend Number. See also Construction Trend No. 1251-0003		
FD-023	11/17/10	087-0001	1	CMB-0032	Agree	07/27/11				
FD-024	11/17/10	087-0002	1	CMB-0033	Agree	08/24/11	(350,000)			
FD-025	04/13/11	083-0001		CMB-0034	Agree	04/13/11	(10,000,000)	Will require changes to Bid Schedule to incorporate Traffic, Utilities and Pavement Demo/Restoration as incidental costs to the Bid Option. Estimated DP1 cost impact is approx. 80-100 hrs. of engineering time.		

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FD-026	05/31/11	084,085,086	Air Replenishment System for Stations	1	CMB-0040	Agree	07/13/11	+1,245,000	Install air replenishment system at MOS, CTS and UMS to address the requirements of the SFFD Bulletin 5.07. The air replenishment system will be used to fill firefighter's self-contained breathing apparatus during firefighting operations in the three subway stations.		
FD-027	07/21/11	082-0010	1 Stockton street (Apple Store) Secondary Closure Wall		CMB-0043	Agree	08/03/11	+500,000	1) Add secondary closure wall to supplement recently completed primary closure wall built by owner to isolate the sub-sidewalk basement of 1 Stockton Street (Apple Store). 2) Modify position of joint trench (and all associated conduits, ducts etc.) for secondary closure wall to be constructed.		
FD-028	08/03/11	086-0004	MOS Revisions to Emergency Ventilation Requirements		CMB-0052	Agree	09/07/11	+500,000	Changes will extend the date of the 90% (pre-final) submittal by 20 working days and the 100% (final) submittal by 40 working days. CMB did not approve a time extension for 90% or 100% submittal delivery. Project Controls estimated \$321,645.		
FD-029	08/08/11	085-0006	CTS Revisions to Emergency Ventilation Requirements		CMB-0053	Agree	09/07/11	+1,000,000	Changes will extend the date of the 90% (pre-final) submittal by 20 working days and the 100% (final) submittal by 40 working days. CMB did not approve a time extension for 90% or 100% submittal delivery. Project Controls estimated \$411,895.		
FD-030	08/08/11	084-0009	UMS Revisions to Emergency Ventilation Requirements		CMB-0054	Agree	09/07/11	+1,000,000	Changes will extend the date of the 90% (pre-final) submittal by 20 working days and the 100% (final) submittal by 40 working days. CMB did not approve a time extension for 90% or 100% submittal delivery. Project Controls estimated 733,420.		
FD-031	10/31/11		Accessibility Improvements at the SE corner of Union Square (UMS)								
FD-032	10/31/11		Union Square Entrance Reconfiguration (UMS)								
FD-033	10/31/11		Additional Compensation Grouting due to Tunnel Settlement Alert and Trigger Levels (All Stations)					+21,040,000	ECP dated 11/17/11. ECP being routed for approval.		
FD-034	12/09/11		Operational Performance and Safety Enhancement at 4th and King		CMB-0062	Agree	12/14/11	+450,000	SFMTA Operations requested that the design of the 4th & King tie-in work be expanded to include a number of improvements at the junction involving the turn-back area extending to the scissors crossover at 6th & King. SFMTA Ops confirmed that the requested changes result in an arrangement that is consistent with standard operation practices and therefore does not involve new or unacceptable risks. CS 1553 Memorandum No. 0081. Conditionally agreed upon verification/resolution of Buy America issue for the switches. 3/14/12: "Buy America" issue no longer applicable. Revised ECP element - remove H&K switch machines and replace with hydraulic/120V switch machines such as Nortrak or equal.		
FD-035	06/26/12		Tunnel Air Replenishment System		CMB-0071	Agree	07/11/12	+1,215,000	Design and construct a fire fighter air replenishment system for Central Subway tunnel as described in SF Fire Code 511.2, Bulletin 5.07 except as noted in the Central Subway Request for Approval of Variance for the ARS to SFFD on March 5, 2012, and subsequently approved by SFFD. Design Impact: ROM - \$215K Construction Impact: ROM - \$1M		
FD-036	06/26/12		Surface Segment Sewers - 4th St.		CMB-0072	Agree	07/18/12	+2,200,000	Replace current unreinforced brick crown from 1906 as it may not be able to withstand loading for construction of the CS trackway section. Reconstruct manholes between Brannan and King Streets as existing are in conflict with proposed rail. Replace service laterals and provide sleeves for future replacement. Additional potential scope option of \$1.5M-Sewer and \$2.3M-Force Main may be requested. If so, it will be Cost to SFPUC		
FD-037	08/27/12		Platform Display System Signs		CMB-0077	Agree (Conditionally)	08/29/12	+500,000	Modify Stations (Contracts 1253, 1254 and 1255) and Surface, Track and Systems (Contract 1256) technical specifications and drawings for the Platform Display System (PDS) to match the changes made to the PDS units being supplied under the Integrated Systems Replacement (ISR) Project, Contract No.1260. 08/29/12: CMB agreement condition upon follow up action to evaluate procurement by CN1260		

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FD-038	11/07/12		Elongated Sidewalk Bulb-out at Chinatown Station					TBD	CTS Sidewalk Bulb out (Southwest corner Stockton/Washington To bring the Central Subway Project - Chinatown Station in closer conformance wit the City's General Plan, SF Planning Department in its May, 2012 GPR Letter (recommends) making design changes specifically the extension of the sidewalk bulb-out at Stockton Street to help create a "station plaza". This elongated bulbout on the southwest corner (SWC) of Stockton and Washington Streets in front of the station headhouse would also include bike racks, benches, trees and other landscape features. Design Impact: ROM - \$TBD Construction Impact: ROM - \$TBD		
FINAL DESIGN TRENDS (Based on All ECPs) - SUBTOTALS									Incorporated budget increases have been absorbed by allocated and unallocated funds and the program budget to date remains \$1,578,300,000.		-0-
OTHER TRENDS											
X51-001	07/31/10	082-0001	1251 Revised estimate, escalation impact and contingency.	7				+9,532,314	Cost Transfer #0033 (Base \$\$), 0033a (Allocated Contingency), 0036 (Base \$\$ Escalation , 0036a (Allocated Contingency Escalation). [Sep2010 Cost Report]	BT-0033, BT-0033-A, BT0036, BT-0036-A	
X51-002	07/31/10	082-0002	Form B Credit for 1251 Utilities	7				(7,697,949)	Reserve and Contingencies removed as per communications with PG&E. This is consistent with the 1250 utility agreement. [Cost Transfer #0034 - Aug2010 Cost Report].	BT-0034	
X52-001	07/31/10	083-0001	1252-(TUN) Revised estimate, escalation impact and contingency	7				(2,165,462)	Cost Transfer #0035 (Base \$\$), 0035a (Allocated Contingency), 0037 (Base \$\$ Escalation , 0037a (Allocated Contingency Escalation). [Sep2010 Cost Report]	BT-0037, BT-0037-A	
X03-001	08/31/10	003-0001	OEWD's Pilot Training Program	7				+75,000	Workforce training pilot program in conjunction with the City/County's Office of Economic and Workforce Development (OEWD). Provides specialized training to SF residents to perform tunneling work. Central Subway financial responsibility being investigated. Requires further clarification		
X53-001	07/18/11	084-0001	CS 155-2 (DP2) CBP4 - Construction Budget Adjustment YOE	7	CMB-0044	Agree	07/27/11		Adjust construction budget in Section 6 of Contract No. CS 155-2 to Year of Expenditure		
X53-002	10/25/11		Change UMS Advertise Date to April 4th, 2012						DP2 Designer's new proposed dates for Pre-Final and Final Design have pushed out Advertise Dates.		
X53-003	04/11/12	084-0002	CN1253 (UMS) Construction Budget Adjustment 90%					+55,720,600	CMB is currently vetting the 90% estimate of \$221,534,723 which represents a \$\$X increase from the 65% base amount in 2010\$. Increase would deplete current YOE dollars and require use of unallocated contingency.		
X53-004	06/26/12	084-0002	Approve/Execute/Certify durations change for UMS Contract						Shortened the duration for Approve/Execute/Certify - UMS Contract from 40 to 24days to reflect an optimistic but doable duration for contractor submittals.		
X54-001	07/13/11	085-0001	CS 155-2 (DP2) CBP5 - Construction Budget Adjustment YOE	7	CMB-0045	Agree	07/27/11		Adjust construction budget in Section 6 of Contract No. CS 155-2 to Year of Expenditure		
X54-002	10/25/11		Change CTS Advertise Date to May 23rd, 2012		CMB-0061	Agree	12/28/11		DP2 Designer's new proposed dates for Pre-Final and Final Design have pushed out Advertise Dates.		
X54-003	11/02/11		Change CTS Advertise Date to February 8th, 2012						Change CTS Advertise Date from May 23, 2012 to February 8, 2012 (-74 working days)		
X54-005	12/06/11		Revisions to CTS Construction Schedule		CMB-0060	Agree	12/28/11				
X54-006	12/07/11	085-0002	CS 155-2 (DP2) CBP4 - Construction Budget Adjustment - allowed	7							
X55-001	07/18/11	086-0001	CS 155-2 (DP2) CBP6 - Construction Budget Adjustment YOE	7	CMB-0046	Agree	07/27/11		Adjust construction budget in Section 6 of Contract No. CS 155-2 to Year of Expenditure		
X55-002	10/25/11		Change MOS Advertise Date to June 25th, 2012						DP2 Designer's new proposed dates for Pre-Final and Final Design have pushed out Advertise Dates.		
X55-003	11/02/11		Change MOS Advertise Date to May 23rd, 2012						Change MOS Advertise Date from June 25, 2012 to May 23, 2012 (-22 working days)		
X55-004	06/26/12		Change MOS Advertise Date to Aug 20, 2012						Change MOS to August 20, 2012		
X56-001	10/25/11		Change STS Advertise Date to July 27th, 2012						DP2 Designer's new proposed dates for Pre-Final and Final Design have pushed out the Station's Advertise Dates. STS Advertise Date is staggered from Station's Advertise Dates.		

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X56-002	12/14/11	STS Construction Schedule Revision for Equipment Procurement								
X56-003	06/26/12	Change STS Advertise Date to October 1, 2012						Change STS Advertise Date to October 1, 2012		
X40-001	10/19/11	028-0001 SFPUC CDD Updated Budgets	7		Authorized		+505,127	1250 SFPUC CDD Monthly Service Report Final & 1251 SFPUC CDD Estimate	BT-0172, BT-0177	
X80-001	10/19/11	071-0001 DP1: CS 155-1 Modifications No. 2 & 3	see Prof. Serv		Authorized		+560,585	Modification No. 2: \$395,584.59, Modification No. 3: \$165,000. Individual details listed in Professional Services. See trend 1551-0002,1551-0005 - 1551-0009	BT-0170, BT-0171, BT-0173	
X80-002		071-0002 DP1: CS 155-1 Modification No. 4	7		Authorized		+135,898	Modification No. 4: \$135,898 Individual details listed in Professional Services. See trends 1551-0010 - 1551-0014.	BT-0187	
X80-003	10/27/11	029-0001 Increase City Auditor Budget	7		Authorized		+50,220	Reduce unallocated Contingency to increase City Auditor budget as authorized in Budget Authorization #51.	BR#51, BT-0181	
X80-004	10/27/11	232-0001 Increase SFCTA Budget	7		Authorized		+20,000	Increase SFCTA budget per per Budget Authorization #51 to conduct travel forecast (TEP CEQA Modeling) to satisfy PMO review and SFMTA Fleet Plan light rail vehicle.	BR #51, BT-0182	
X80-005	7/1/10, 11/2/10, 3/24/11	072-0001 DP2: CS 155-2 Modification No. 1	7		Authorized		+1,010,000	Modification No. 1: \$1,010,600 Individual details listed in Professional Services. See trends 1552-0002, 1552-0003 and 1552-0005.	BT-0194, BR#53	
X80-006	5/6/10, 7/25/11, 9/22/11	072-0002 DP2: CS 155-2 Exercised Options	see Prof. Serv		Authorized		+366,771	Individual details listed in Professional Services. See trends 1552-0001, 1552-0007 and 1552-0014.	BT-0023, BT-0194	
X80-007	11/08/11	151-0001 Operations SFMTA Transit Services			Authorized		+50,000	CSP request services to support and test OCS for 30/45 trolley reroute. Authorized per Budget Revision #53	BR #53, BT-0189	
X80-008	09/01/11	081-0001 SFMTA Safety, Training, Security & Enforcement Div PCOs	7		Authorized		+60,000	CSP request PCOs to support 1251 and 1252 construction for one year. Authorized \$60,000 per Budget Revision #45.	BR #45, BT-0190	
X80-009	11/30/11	016-0001 SFMTA Sustainable Streets 30 and 45 re-route	7		Authorized		-0-	CSP request services to support 30/45 trolley reroute. \$162,600 was reduced from DPT staffing plan budget.	BT-0188	
X80-010	11/09/11	073-0001 DP3: CS 155-3 Modification No. 1	7		Authorized		+152,882	Modification No. 1: \$152,882 Individual details listed in Professional Services. See trends 1553-0012 and 1553-0013.	BT-0203	
X80-011	8/9/11, 9/22/11, 10/11/11, 11/9/11	073-0002 DP3: CS 155-3 Exercised Options	see Prof. Serv		Authorized		+1,026,398	Individual details listed in Professional Services. See trends 1553-0001 - 1553-0004, 1553-0006, 1553-0009 - 1553-0011, 1553-0014. Updated from \$971,686 to include Trend 1553-0014.	BT-0203	
X80-012		151-0002 OCS materials procured directly for work in reference to CN1251 CMOD#12.		CMB-0065	Agree	1/25/2012, 2/29/12	+126,149	See also Trend 1251-0023		
X80-013	05/30/12	073-0003 DP3: Provide Vibration Impact Analysis and Extend PC Support Technical and CSP Quality Manager	1				+133,906	Amend #2: Vibration Impact Analysis \$38,380 Amend #3: PC Support Tech \$34,483; Quality Manager - \$61,043	TBD	
X80-014	12/17/12	For combining the stations and track and systems into Contract 1300 (SSTS)	7					Stations and track and systems into Contract 1300 (SSTS)		
X80-015	12/17/12	Changing the Bid Opening date and condensing the Contract Duration for Contract 1300	7					Changing the Bid Opening date and condensing the Contract Duration for Contract 1300		
X80-016	02/19/13	Change to Tunnel and CTS interface and buffer float Contract 1300 (SSTS)	7					Change (MPS) reducing the number of days currently in (from 550 calendar days from NTP to 450 calendar days) for the key interface between CTS and the tunnel completion. Reduced number of days will be issued as part of Add #3 of the 1300 contract. 1/23/13 CMB Agreed verbally to change @ Mtg #111.		
OTHER TRENDS (Based on Various Trends)								Current Forecast reflects a net +3,537,933 unfavorable impact for all Other Trends.		-0-
GRAND TOTALS								Current Forecast reflects an estimated net +66,751,620 unfavorable exposure to the project to date. Incorporated budget increases have been absorbed by allocated and unallocated funds and the program budget to date remains \$1,578,300,000.		(241,346)

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PROFESSIONAL SERVICES TRENDS: The following trends are listed for administrative purposes. The dollar amounts are reflected in the "Other Trends" section of this log in the form of cost (budget) transfers - ie CCOP's. The total values indicated for each professional contract are for tracking all potential cost exposures and may or may not be approved.										
Contract CS-155-1										
1551-0001	07/30/10	071-0001	Conform Contract Terms per Negotiations from 10/2/09 to 11/6/09	7			-0-	To be addressed in Amendment 1.	Amendment 1 Pending	-0-
1551-0002	02/18/11	071-0002	Project Office Delay (Adjustments for OH Rate and Team Productivity impact)	7	Authorized	07/29/11	+101,411	Amendment Signed by ED/CEO 7/29/11 COMPLETE, NO FURTHER ACTION; Amendment #2	Amendment 2 Approved	
1551-0003	02/18/11	071-0003	Additional Construction Support for CP-1	7						-0-
1551-0004	02/18/11	071-0004	Redesign Required by Barney's and PUC for CP-2	7						-0-
1551-0005	02/18/11	071-0005	Archeological Monitoring 16.20.C1 (total)	7	Authorized	07/29/11	+197,173	Amendment Signed by ED/CEO 7/29/11 COMPLETE, NO FURTHER ACTION; Amendment #2	Amendment 2 Approved	
1551-0006	02/18/11	071-0006	Eyebolts	7	Authorized	07/29/11	+50,000	Amendment Signed by ED/CEO 7/29/11 COMPLETE, NO FURTHER ACTION; Amendment #2	Amendment 2 Approved	
1551-0007		071-0007	Secondary Closure Walls 800/838 Market	1	Authorized	07/29/11	+47,400	Amendment Signed by ED/CEO 7/29/11 COMPLETE, NO FURTHER ACTION; Amendment #2	Amendment 2 Approved	
1551-0008		071-0008	Delete Optional Tasks - Tasks 1-14	1			-0-	Deleted Options in the amount of (\$529,952) in Amendment has been reversed through Budget Authorization #50. COMPLETE, NO FURTHER ACTION; Amendment #2	Amendment 2 Approved	
1551-0009		071-0009	CTS Lowering	1	Authorized	12/08/11	+165,000	Amendment Signed by ED/CEO 12/8/11 COMPLETE, NO FURTHER ACTION; Amendment #3	Amendment 3 Approved	
1551-0010		071-0010	Modify Sidewalk Vault Demo ECP-FD009	7	Authorized	12/08/11	+39,311	Amendment Signed by ED/CEO 12/8/11 COMPLETE, NO FURTHER ACTION; Amendment #4	Amendment 4 Approved	
1551-0011		071-0011	Modify Stockton St. Sewer ECP-FD010	7	Authorized	12/08/11	+4,112	Amendment Signed by ED/CEO 12/8/11 COMPLETE, NO FURTHER ACTION; Amendment #4	Amendment 4 Approved	
1551-0012		071-0012	Reconfigure Utilities N. Side Ellis ECP-FD011	7	Authorized	12/08/11	+2,448	Amendment Signed by ED/CEO 12/8/11 COMPLETE, NO FURTHER ACTION; Amendment #4	Amendment 4 Approved	
1551-0013		071-0013	Extend SubSidewalk Closure Wall ECP-FD013	7	Authorized	12/08/11	+85,233	Amendment Signed by ED/CEO 12/8/11 COMPLETE, NO FURTHER ACTION; Amendment #4	Amendment 4 Approved	
1551-0014		071-0014	Reroute OCS to Fifth St. ECP-FD014	7	Authorized	12/08/11	+4,794	Amendment Signed by ED/CEO 12/8/11 COMPLETE, NO FURTHER ACTION; Amendment #4	Amendment 4 Approved	
1551-0015		071-0015	Retrieval Shaft Redesign - Sewer By Pass	7			+56,000	Awaiting documentation from Designer		
1551-0016		071-0016	Design Measures for Settlement Protection	7			+99,000	Awaiting documentation from Designer		
1551-0017		071-0017	Incorporate Headwalls MOS/UMS	1	Disagree at this time	11/01/11	+42,000	In letter dated November 1, 2011 DPM responded that until concurrence with DP2 on cost transfer or additional documentation, the requested change is denied.		
1551-0018		071-0018	Prepare Utility Composite	-	Disagree	11/01/11	+50,000	DPM responded that Program does not agree in letter dated November 1, 2011.		
1551-0019		071-0019	Incorporate Cross Passages	1	Disagree at this time	11/01/11	+43,000	In letter dated November 1, 2011 DPM responded that until concurrence with DP2 on cost transfer or additional documentation, the requested change is denied.		
Contract CS-155-1 Total							+986,882	Of the total cost exposure shown, Contract Modifications and Authorized Option dollars have been absorbed by DP1 allocated contingency in the amount of \$696,483 of a total budget of \$705,000. Additional potential exposure is +\$391,411. Currently, overall contract value remains unchanged in the amount of \$6,500,000.		-0-
Contract CS-155-2										
1552-0001	05/06/10	072-0001	Optional Task 2.50 and Task 12.07	1	Authorized	05/06/10	+274,775	CS Letter 0473 from ED/CEO Optional Task 2.50 to support art enhancement activities NTE \$164,383 and Optional Task 12.07 to support design structures for Public Art NTE \$110,392.		
1552-0002	07/01/10	072-0002	Expanded Hydraulic Testing at CTS	7	Authorized	07/01/10	+26,100	Estimated cost breakdown is included in the 7/1/10 letter from CSDG and includes signed approval by SFMTA. Amendment No. 1 authorized by ED/CEO on 12/21/11. COMPLETE, NO FURTHER ACTION; Amendment #1	Amendment 1 Approved	
1552-0003	10/11/10	072-0003	Additional Soil Borings at UMS Station - Task No. 3.10 Supplemental Investigations	7	Authorized	11/02/10	+34,500	Estimated cost breakdown is included in the 10/11/10 letter from CSDG and includes signed approval by SFMTA. Amendment No. 1 authorized by ED/CEO on 12/21/11. COMPLETE, NO FURTHER ACTION; Amendment #1	Amendment 1 Approved	

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CENTRAL SUBWAY PROJECT
Project Trend/Change Control Log

Item #	Date Initiated	Change Description	Change Type	CMB No.	Change Status		Projected Cost Impact +Exposure/(Benefit)	Comments	Contract Modification Number	Utility Reimbursements
					Approval Action	Approval Date	Actual/Forecast			
1552-0004	02/11/11	072-0004	MOS TOD White Paper Proposal	1			+33,847	Conceptual study will assess a potential high rise building at the Moscone station headhouse. Estimated cost breakdown is included in the 2/11/2011 letter from CSDG - On Hold .		
1552-0005	03/24/11	072-0005	CTS - Alternate 5	7	Authorized	03/24/11	+950,000	CS Letter from DED dated 3/24/11 has agreed to a modification of \$950,000 for performing additional work. Amendment No. 1 authorized by ED/CEO on 12/21/11. COMPLETE, NO FURTHER ACTION; Amendment #1	Amendment 1 Approved	
1552-0006	06/28/11	072-0006	Audited Overhead Rate Adjustment for Year 2010 - Request for Amendment	7			-0-	Estimated cost of \$406,320 is included in the 6/28/11 letter from CSDG. See 1552-0006 Rev. 1 for most current estimate		
1552-0007	07/25/11	072-0007	REVIT and CAD Support (to City Staff) Option to DP2 Contract (Optional Services Task 12.12)	1	Authorized	07/25/11	+79,200	CS Letter No. 0768 from ED/CEO dated 7/25/11 has authorized Optional Task 12.12 NTE \$79,200.		
1552-0008	08/03/11	072-0008	MOS Revisions to Emergency Ventilation Requirements	-	Provide further Justification	09/07/11	-0-	CMB did not approve a \$60,000 proposed increase. Document References ECP FD028, CSDG letter dated 8/8/11. DPM responded that program does not agree in letter dated 10/17/11.		
1552-0009	08/03/11	072-0009	CTS Revisions to Emergency Ventilation Requirements	-	Provide further Justification	09/07/11	-0-	CMB did not approve an \$80,000 proposed increase. Document References ECP FD029, CSDG letter dated 8/8/11. DPM responded that program does not agree in letter dated 10/17/11.		
1552-0010	08/03/11	072-0010	UMS Revisions to Emergency Ventilation Requirements	-	Provide further Justification	09/07/11	-0-	CMB did not approve a \$100,000 proposed increase. Document References ECP FD030, CSDG letter dated 8/8/11. DPM responded that program does not agree in letter dated 10/17/11.		
1552-0011	08/17/11	072-0011	Audited Overhead Rate Adjustment for Year 2010 - Request for Amendment - Rev. 1	7			+426,322	Estimated cost breakdown is included in the 8/17/11 letter from CSDG. This is a revision to the 6/28/11 letter and cost breakdown.		
1552-0012	08/23/11	072-0012	Station Air Replenishment System	-	Disagree	10/17/11	+36,240	Estimated cost breakdown is included in the 8/23/11 letter from CSDG. DPM responded that program does not agree in letter dated 10/17/11.		
1552-0013	09/01/11	072-0013	COR for Additional Services Related to MOS Constructability Review and Assessment of Alternatives	-			-0-	Cost charged to Task 2.70- part of base work		
1552-0014	09/22/11	072-0014	Proposal for Additional Work to provide Structural Engineering Support (Optional Services)	1	Authorized Optional Task 12.01.C5 only	11/04/11	+35,724	Estimated cost breakdown is included in the 9/22/11 letter from CSDG. Referenced Optional Work Tasks 12.01.C5 and 12.07.C5 - Effort re-evaluated - proposed cost to be resubmitted. CS Letter No. 1232 dated 11/4/11 from Director of Transportation has authorized Optional Task 12.01.C5 for the amount of \$12,796.	Option	
Contract CS-155-2 Total							+1,896,708	Of the total cost exposure shown, Contract Modifications and Authorized Option dollars have been absorbed by DP2 allocated contingency in the amount of \$1,046,324 of a total budget of \$4,890,707. Overall contract value remains unchanged in the amount of \$39,949,959.		-0-
Contract CS-155-3										
1553-0001	08/09/11	073-0001	Authorization to commence optional tasks 9.20J Technical Specifications Item J Facility SCADA	1	Authorized	08/01/11	+259,305	SFMTA letter 0933 from ED/CEO dated 8/9/11 authorizing \$738,787 in optional tasks. COMPLETE, NO FURTHER ACTION; OPTION	Option	
1553-0002	08/09/11	073-0002	Authorization to commence optional tasks 12.05 Architectural Plans	1	Authorized	08/01/11	+257,129	SFMTA letter 0933 from ED/CEO dated 8/9/11 authorizing \$738,787 in optional tasks. COMPLETE, NO FURTHER ACTION; OPTION	Option	
1553-0003	08/09/11	073-0003	Authorization to commence optional tasks 12.13J Facility SCADA Design	1	Authorized	08/01/11	+169,553	SFMTA letter 0933 from ED/CEO dated 8/9/11 authorizing \$738,787 in optional tasks. COMPLETE, NO FURTHER ACTION; OPTION	Option	
1553-0004	08/09/11	073-0004	Authorization to commence optional tasks 12.12E traction power cables for CAD production	1	Authorized	08/01/11	+52,800	SFMTA letter 0933 from ED/CEO dated 8/9/11 authorizing \$738,787 in optional tasks. COMPLETE, NO FURTHER ACTION; OPTION	Option	
1553-0005	09/19/11	073-0005	Proposal to hire Wilson Ihrig to support Acoustics, Noise and Vibration tasks.	7	Authorized	03/08/12	+38,380	Signed by Director of Transportation 3/8/2012. COMPLETE, NO FURTHER ACTION ; Amendment 2	Amendment 2 Approved	
1553-0006	09/22/11	073-0006	Proposal to exercise optional task 12.07 Public Art.	1	Authorized	11/04/11	+10,285	Letter dated 9/22/11 to DOM. PMCM response pending. Priced level of Effort assumed for this task. SFMTA Letter 1213 from Director of Transportation dated 11/4/11 authorizing optional task.		
1553-0007	09/27/11	073-0007	Proposal to exercise optional sub-task 12.12 structural design of the OCS attachments.	7			+59,460	Letter dated 9/27/11 to DOM. NOT FOLLOWING CONTRACT REQUIREMENTS FOR PROPER NOTIFICATION OF CHANGE. PMCM has responded to clarify scope in stations and Tunnel Design. Awaiting resubmittal of request by DP3		
1553-0008	10/05/11	073-0008	Scope Clarification - Add Emergency and Location Signage.	7	Disagree A.12.08-Signage	11/09/11		Letter dated 10/5/11 to DOM. NOT FOLLOWING CONTRACT REQUIREMENTS FOR PROPER NOTIFICATION OF CHANGE. CS Memo No. 0882 from DOM to DP3 PM considers A.12.08 Signage as part of the work necessary to complete the trackway elements of the scope. The work in question is considered part of the base scope of services.		
1553-0009	10/11/11	073-0009	Proposal to exercise mechanical optional task A 12.11 to design a water line on the FBS station platform.	1	Authorized	11/04/11	+33,000	SFMTA Letter 1213 from Director of Transportation dated 11/4/11 authorizing optional task. COMPLETE, NO FURTHER ACTION; OPTION	Option	

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Item #	Date Initiated	Change Description	Change Type	CMB No.	Change Status		Projected Cost Impact +Exposure/(Benefit)	Comments	Contract Modification Number	Utility Reimbursements	
					Approval Action	Approval Date					Actual/Forecast
1553-0010		073-0010	Proposal to exercise Task 12.01 Surface Segment site Drainage	1		Authorized	11/04/11	+108,240	SFMTA Letter 1213 from Director of Transportation dated 11/4/11 authorizing optional task. COMPLETE, NO FURTHER ACTION; OPTION	Option	
1553-0011		073-0011	Proposal to exercise Task 12.02 Sewer Relocation and Analysis Report.	1		Authorized	11/04/11	+81,374	SFMTA Letter 1213 from Director of Transportation dated 11/4/11 authorizing optional task. COMPLETE, NO FURTHER ACTION; OPTION	Option	
1553-0012	11/09/11	073-0012	CTS - Alternate 5	7		Authorized	01/18/12	+88,855	Contract Modification No. 1 authorized by ED/CEO on 1/18/12 COMPLETE, NO FURTHER ACTION; Amendment #1	Amendment 1 Approved	
1553-0013	11/09/11	073-0013	Proposal for Geotechnical Services	7		Authorized	01/18/12	+64,027	Letter dated October 7, 2011 to DOM. PM/CM response pending. Contract Modification No. 1 authorized by ED/CEO on 1/18/12 COMPLETE, NO FURTHER ACTION; Amendment #1	Amendment 1 Approved	
1553-0014	02/06/12	073-0014	Authorization to commence optional tasks 12.12E traction power cables for CAD production, Optional task 2.50 Coordination with Art			Authorized	02/06/12	+54,712	SFMTA Letter 1381 from Director of Transportation dated 2/06/12 authorizing optional tasks 12.12e in the amount of \$41,280 and 2.50 for \$13,432 COMPLETE, NO FURTHER ACTION; OPTION	Option	
1553-0015	03/20/12	073-0015	Proposal for additional services in Response to Approved (ECP) FD-034 Operation Performance and Safety Enhancements to 4th and King and 6th and King.	1				+26,026	FD-034 was updated by CMB on 3/14/12. Proposal transmitted via letter CS1553 No. 0012 dated 3/20/12 to DOM. Amendment #4 PENDING	Option	
1553-0016	03/23/12	073-0016	Proposal for additional work - Tunnel Air Replenishment System (Exercise Optional Service)	7		Authorized	04/26/12	+173,119	SFMTA letter 1658 from Director of Transportation dated 4/26/2012 authorizing \$173,119 in optional tasks. Included in FD-035 to be presented to CMB on 6/26/12	Option	
1553-0017	05/14/12	073-0017	Extension of PC Support Technician	1		Authorized	05/04/12	+34,483	Signed by Director of Transportation 5/14/12 COMPLETE, NO FURTHER ACTION; Amendment #3	Amendment 3 Approved	
1553-0018	05/14/12	073-0018	Extension of CSP Quality Manager	1		Authorized	05/04/12	+61,043	Signed by Director of Transportation 5/14/12 COMPLETE, NO FURTHER ACTION; Amendment #3	Amendment 3 Approved	
1553-0019	04/09/12	073-0019	Authorization to commence optional task 12.02 Utility Plans for design of repositioned and reconstructed manholes for the 78 inch diameter sewer on 4th St.	1		Authorized	04/09/12	+52,712	SFMTA Letter 1630 from the Director of Transportation dated 4/9/2012 authorizing optional task 12.02 in the amount of \$52,712 COMPLETE, NO FURTHER ACTION; OPTION	Option	
1553-0020	04/09/12	073-0020	Authorization to commence optional task 12.12 civil and structural support for traction power duct banks	1		Authorized	04/09/12	+109,000	SFMTA Letter 1630 from the Director of Transportation dated 4/9/2012 authorizing optional task 12.12 in the amount of \$109,000 COMPLETE, NO FURTHER ACTION; OPTION	Option	
1553-0021	04/26/12	073-0021	Authorization to commence optional task 12.11 design of the tunnel based Air Replenishment System including fill panels, feeder pipes, gauges, valves, fire proofing, anchors, supports, low level alarms, wiring, signage, connections to SCADA and monitoring devices, equipment placement, and impact protection	1		Authorized	04/26/12	+173,119	SFMTA Letter 1658 from the Director of Transportation dated 4/26/2012 authorizing optional task 12.11 in the amount of \$173,119 COMPLETE, NO FURTHER ACTION; OPTION	Option	
1553-0022	04/26/12	073-0022	Increased authorization for optional task 12.12.e CAD production support	1		Authorized	04/26/12	+30,000	SFMTA Letter 1658 from the Director of Transportation dated 4/26/2012 authorizing the increase in optional task 12.12e in the amount of \$30,000 COMPLETE, NO FURTHER ACTION; OPTION	Option	
1553-0023	05/21/12	073-0023	Authorization to commence option task 12.11 structural design support for Fire Protection and Plumbing designs	1		Authorized	05/21/12	+39,204	SFMTA Letter 1688 from the Director of Transportation dated 5/21/2012 authorizing the increase in optional task 12.11 in the amount of \$39,204 COMPLETE, NO FURTHER ACTION; OPTION	Option	
1553-0024	05/21/12	073-0024	Authorization to commence optional task 12.12 structural design support for Traction Power and Power/Lighting designs	1		Authorized	05/21/12	+43,638	SFMTA Letter 1688 from the Director of Transportation dated 5/21/2012 authorizing the increase in optional task 12.12 in the amount of \$43,638 COMPLETE, NO FURTHER ACTION; OPTION	Option	
1553-0025	05/21/12	073-0025	Authorization to commence optional task 12.13 structural design support for Telephone and CCTV designs	1		Authorized	05/21/12	+24,328	SFMTA Letter 1688 from the Director of Transportation dated 5/21/2012 authorizing the increase in optional task 12.13 in the amount of \$24,328 COMPLETE, NO FURTHER ACTION; OPTION	Option	
1553-0026	05/21/12	073-0026	Authorization to commence optional task 9.20 Technical Specifications for structural design support for above designs	1		Authorized	05/21/12	+3,039	SFMTA Letter 1688 from the Director of Transportation dated 5/21/2012 authorizing the increase in optional task 9.20 in the amount of \$3,039 COMPLETE, NO FURTHER ACTION; OPTION	Option	
Contract CS-155-3 Total								+2,046,831	Of the total cost exposure shown, Contract Modifications and Authorized Option dollars have been absorbed by DP3 allocated contingency in the amount of \$1,168,995 of a total budget of \$4,598,725. Overall contract value remains unchanged in the amount of \$19,919,526.		-0-

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