


Memorandum

CS Memorandum No. 1378

To: Distribution

From: Beverly Ward, CMB/Risk Management Assistant 

Date: March 6, 2013

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

Subject: Configuration Management Board Meeting No. 115

Attached please find minutes for Configuration Management Board Meeting No. 115 held on February 27, 2013.

Attachments: CMB Meeting No. 115 Rev. 0 Minutes with attachments

Cc: David Kuehn, STV (w/attachments) david.kuehn@stvinc.com
Brad Lebovitz, STV bradley.lebovitz@stvinc.com
Arthur Wong, SFMTA (w/attachments)
Joon Park, 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:

Luis Zurinaga, SFCTA luis.zurinaga@sfcta.org
Shahnam Farhangi, SFMTA
John Funghi, SFMTA
Albert Hoe, SFMTA
Richard Redmond, CSP
Ross Edwards, CSP
Eric Stassevitch, CSP
Mark Latch, CSP
Mark Benson, CSP
Sarah Wilson, CSP
Mun Leong, CSP
Beverly Ward, CSP

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. Zurinaga (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 | 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. <i>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.</i> | RR 03/06/13 |

| ITEM # | DISCUSSION | ACTION BY DUE DATE |
|-------------------------|---|--|
| <p>1 – 02/20/13</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. Status: <i>02/27 This item was not discussed at this week's meeting.</i></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. Status: <i>02/27 This item was not discussed at this week's meeting.</i></p> <p><u>1252 – Validation that 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. Status: <i>02/27 This item was not discussed at this week's meeting.</i></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 piles installed at the 60ft height was a design error. The CMB requested the findings be communicated to the Designer as an E&O issue and a corrective action needs identified. In addition (ML) will incorporate the updated information into the as built. Status: <i>02/27 Material was presented as it relates to the tunnel alignment proposed corrective action to revise the alignment. The proposal would adjust the northbound and southbound tube profile to fit underneath the micropiles. Keeping the platform and station elevation as currently designed. To avoid possibly hitting the micropiles coming out of the station we would go into 5% grade down into a ½% grade where intersect Cross passage 5. The Designer is moving forward with a redesign. SFMTA maintains this redesign should be a no cost to the Program. This information will be ongoing and progress updates will be provided to the CMB as they occur.</i></p> | <p>MB 03/06/13</p> <p>RE 03/06/13</p> <p>RE 03/20/13</p> |
| 1- | <p>1252 – S. Wilson requested negotiation position for COR 0031 - cost comparison (see attached) was presented for cost associated with removal of 12" steel pipe underground in the retrieval shaft area. Merit for the work was previously agreed to by the CMB at meeting #108. AGREE – CMB 0108 – Not To Exceed value of \$1,250.</p> | |
| 2- | <p>1252 – S. Wilson requested negotiation position for COR 044 - presented cost comparison (see attached) for cost associated with removal of 16" steel pipe at the south headwall. Merit for the work was agreed to by the CMB at meeting #105. AGREE – CMB 0109 – Not To Exceed value of \$1,800.</p> | |
| 3- | <p>1252 – S. Wilson requested negotiation position for COR 050 - presented cost comparison (see attached) for cost associated with removal of MOS 12" pipe at Union and Columbus Merit for the work was agreed to by the CMB at meeting #106. AGREE – CMB 0110 – Not To Exceed value of \$2,600.</p> | |
| 4- | <p>1252 – S. Wilson requested negotiation position for COR 058 - presented cost comparison (see attached) for cost associated with 10" steel pipe removal at the intersection of Union and Columbus Streets. Merit for the work was agreed to by the CMB at meeting #106. AGREE – CMB 0111 – Not To Exceed value of \$860.85.</p> | |
| 5- | <p>1252 – S. Wilson requested negotiation position for COR 066 - presented cost comparison (see attached) for cost associated with MOS 12" pipe at removal at the intersection of Union and Columbus. Merit for the work was agreed to by the CMB at meeting #106. AGREE – CMB 0112 – Not To Exceed value of \$3, 800.</p> | |
| 6- | <p>1252 – M. Benson requested negotiation position for PCC 03 rev 1 – presented cost comparison (see attached) for costs associated with Modified Stockton Detour Signage Plan – installs only a portion of the traffic detour signs under contract 1300 to alleviate traffic congestion created by the closure of Stockton Street. (see attached). The Engineer's Estimate for scope of work was reviewed. AGREE – CMB 0113 – Not To Exceed value of \$6,152.60</p> | |

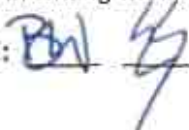
| ITEM # | DISCUSSION | ACTION BY DUE DATE |
|--------|--|-----------------------|
| 7- | 1300 – Contract Retention – City Ordinance regarding retention changed to 5% effective Dec 1, 2012. Contract 1300 was advertised in October 2012 with the previous City ordinance in effect at 10% retention. The City Administrative Code (Sec 6.22.J) now requires Public Works construction contracts only hold 5% from every progress payment in retention. The ordinance allows for the City to hold up to 10% if the Department Head determines that the complexity of the job warrants a higher retention amount. The CMB recommended the maintaining the 10% retention due to the complexity of Contract 1300. Justification language will be added to the routing of addendum No 5 of the 1300 Contract to ensure the Department Head is properly informed. | |
| 8- | 1300 – Mobilization Percentage – A Bidder's Question on Mobilization Percentage Increase was presented for discussion. The bidders question focused on the percentages in the General Provisions (GP) of 2.5% for mobilization and demobilization requesting an increase to 9%. The CMB recommended increasing it to 5% and maintain all other contract provisions pertaining payment provisions for this bid item. | |
| 9- | 1252 - Precast Tunnel Segment Liner - RFI 203.1 – M. Latch provided information as to why the spec QC requirements for checking the segments was revised; reporting the Contractor's QC frequency of gauging the forms and segments is much higher than what the specs requires of assembly on Master Rings. RFI 203.1 agrees to relax the spec section requirement by the Contractor from every 100 th ring to 1 ring every 500 rings cast, to be assembled on the Master Rings. | |
| 10- | The Program Trend/Change Control Log version 02/27/13 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 | 03/06/13 | Open |
| 3 | 11/14/12 | 11/14/12 | 1252 – COR 033 – Retrieval Shaft – 20' Water Line | SW | 03/06/13 | Open |
| 2 | 12/12/12 | 12/12/12 | 1252 – Validation 1300 docs include as built information regarding Asbestos Pipes | RE | 03/20/13 | Open |
| 5 | 01/30/13 | 01/30/13 | 1252 – Micropiles – As built condition explanation | ML | 03/06/13 | CLOSED |
| 4 | 01/30/13 | 02/20/13 | 1252 – COR 008 - Final unit cost for indirects | RR | 03/06/13 | Open |

Meeting adjourned at 5:45pm

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: 04 Mar 13 [Date review completed]

Meeting Agenda

Project No. M544.1, Contract No. CS-149
Program/Construction Management
Configuration Management Board (CMB) Meeting No. 115
February 27, 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 031 — Ret Shaft - Unmarked 12" Steel Pipe - *Not to Exceed Amount*
 - COR 044 — MOS - 16" steel pipe removal at southeast headwall - *Not to Exceed Amount*
 - COR 050 — Ret Shaft - 12" steel pipe removal at Union/Columbus - *Not to Exceed Amount*
 - COR 058 — Ret Shaft - Additional 10" steel pipe removal - *Not to Exceed Amount*
 - COR 066 — Retrieval Shaft - Unmarked 12" Steel Pipe
 - PCC 03, Rev1 — Modified Stockton Detour Plan - *Not to Exceed Amount*
 - Micropile Tunnel encroachment – Update
 - Precast Tunnel Segment Liner – RFI 203.1

2. **1300** – Contract Retention
 - Early Release of Retention to Subcontractors
 - Mobilization Percentage

3. **Trend/Change Log** – 02/27/13


4. **Other Business** –




Meeting Attendance Sheet

Project No. M544.1, Contract No. 149
 Program/Construction Management
 Configuration Management Board Meeting No. 115
 February 27, 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 | MCB |
| Edwards, Ross | CSP | (415) 701-5296 | Ross.Edwards@sfmta.com | RE |
| Farhangi, Shahnam | SFMTA | (415) 554-0721 | Shahnam.Farhangi@sfmta.com | AF |
| 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 | |
| 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 | |
| Nguyen, Roger | SFMTA | (415) 701-4312 | Roger.Nguyen@sfmta.com | |
| Park, Joon | SFMTA | (415) 701-4742 | Joon.Park@sfmta.com | |

| NAME | AFFILIATION | PHONE | E-MAIL (for minutes) | INITIALS |
|-------------------|---|----------------|--|----------|
| Redmond, Richard | CSP | (415) 701-4288 | Richard.Redmond@sfmta.com | RR |
| Stassevitch, Eric | CSP | (415) 701-4426 | Eric.Stassevitch@sfmta.com | ES |
| Ward, Beverly | CSP | (415) 701-5291 | Beverly.Ward@sfmta.com | BW |
| Wilson, Sarah | CSP | (415) 243-0950 | Sarah.Wilson@sfmta.com | SW |
| Wong, Arthur | SFMTA | (415) 701-4305 | Arthur.Wong@sfmta.com | |
| Zurinaga, Luis | SFCTA | (415) 716-6956 | Luis.zurinaga@sfcta.org | LZ |
| | | | | |
| | <i>A. Hoe was in attendance but did not sign the sheet of attendance.</i> | | | |
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| GENERAL | | | |
|--|---|---|--|
| Proposed Change Sponsor: | S. Wilson | Received by CMB: | 02/27/2013 (Date) |
| Affected Disciplines: | Excavation and Ground Support | | |
| Impacts of Change | Retrieval Shaft – Unmarked 12” Steel Pipe | | |
| | Change Order Request (COR 031) Amount Not To Exceed \$1,250.00 | | |
| Contract(s) Directly Affected by this Proposed Change: | | | |
| 1250 1 <input type="checkbox"/> (CP01) | 1251 2 <input type="checkbox"/> (CP02) | 1252 3 <input checked="" type="checkbox"/> (CP03) | 1253 4 <input type="checkbox"/> (CP04) |
| 1254 5 <input type="checkbox"/> (CP05) | 1255 6 <input type="checkbox"/> (CP06) | 1256 7 <input type="checkbox"/> (CP07) | |
| CONFIGURATION MANAGEMENT BOARD APPROVALS | | | |
| | <i>Signatures</i> | | |
| | Agree with the Change | Disagree with the Change | Date |
| Senior Program Manager: | | | |
| Deputy Program Manager: | | | |
| PM Project Services: |  | | 27 Feb 13 |
| PM Project Development/Delivery: |  | | 2/27/2013 |
| SFMTA O & M Manager: | | | |
| SFMTA Safety and Security | | | |
| SFCTA PMO |  | | 27 Feb 13 |
| | Comments | | |
| | | | |
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| COR 031 | | | | | | | | | |
|-----------|---------------|------------------------------------|-----------|----------------|--------------------------|--------------|-------------|---|--|
| No. | Activity Name | Days (C) | Days (EE) | Contractor (C) | Engineer's Estimate (EE) | Delta (EE-C) | Comparison* | Negotiation Position* | |
| Labor | 1 | Remove 12" Pipe @ MRY vault (4274) | 0.25 | 0.25 | \$ 753.41 | \$ 559.33 | \$ (194.08) | The labor rates were adjusted to align with the SFMTA built up labor rates (based on prevailing wage rates) in lieu of an approved labor submittal. | |
| Equipment | 1 | Remove 12" Pipe @ MRY vault (4274) | .25 | 0.25 | \$ 361.04 | \$ 356.67 | \$ (4.37) | The contractor included 30 traffic cones in their cost proposal that weren't shown on FA 4274. The contractor also used a different traffic control set up than what was assumed in the Engineer's Estimate. Contractors 2 Arrow Boards, 6 Road Signs vs. Engineer's Estimate 1 Arrow Board, 1 CMS, 3 Road Signs. | |
| | | Material | | | \$ - | \$ - | \$ - | | |
| | | Markup LM&E - 15% | | | \$ 167.17 | \$ 137.40 | \$ (29.77) | | |
| | | 2nd Tier Subs | | | \$ - | \$ - | \$ - | | |
| | | Markup - 5% | | | \$ - | \$ - | \$ - | | |
| | | Sub. Bond/Insurance 2.14% | | | \$ 27.43 | \$ 22.54 | \$ (4.88) | | |
| | | Prime Markup - 5% | | | \$ 65.45 | \$ 53.80 | \$ (11.66) | | |
| | | Prime Bond/Insurance 1.68% | | | \$ 23.09 | \$ 18.98 | \$ (4.11) | | |
| | | Total | | | \$ 1,397.58 | \$ 1,148.71 | \$ (248.87) | | |
| | | RE Recommended NTE Amount: | | | | \$ 1,250.00 | | The \$101.29 difference between the Engineer's Estimate and the "Not to Exceed Amount" is to account for differences in labor rates. | |

*The amounts shown in the "Comparison" and "Negotiation Position" columns are fully marked up for easy addition or subtraction from the bottom line

Estimate Summary

General Scope: This cost estimate represents the cost tracked by force account tag 4274 for the removal of approximately 9lf of 12" steel pipe underground in the retrieval shaft work area. There are no time impact costs related to this work as it was not determined to be on the critical path.

Detailed Scope:

1. Remove 12" Pipe @ MRY vault (4274)

| | Labor | Equipment | Material | Mark Ups | Total |
|----------------------|-----------|-----------|----------|-----------|-------------|
| Cost Summary: | \$ 559.33 | \$ 356.67 | \$ - | \$ 232.72 | \$ 1,148.71 |

List of attached documents:


- Detailed Estimate
- FA Tag 4274
- Plan view showing area of work

| No. Activity | Days | Hourly rates: | | | | | | | Labor totals | Hourly rates: | | | | | | | | | | Equipment Totals |
|--------------------------------------|------|---------------|-------------------------|-------------------------|------------------------------|----------------|----------------|----------------|--------------|------------------------------|--------------------------------|-----------------------------|---------------------|------------|--------------------|---------------------------|-------------|-----------|-----------|------------------|
| | | Laborer (G3) | Laborer Apprentice (A1) | Laborer Apprentice (A3) | Operating Engineer (OE) (G3) | Labor Resource | Labor Resource | Labor Resource | | Backhoe (John Deere ID 310G) | Breaker attachment for Backhoe | Mini Excavator (Kubota U45) | Dump truck - 3-axle | Work Truck | Construction Signs | Changeable Message Boards | Arrow Board | Equipment | | |
| | | \$ 49.59 | \$ 22.20 | \$ 41.89 | \$ 66.81 | \$ 0.00 | \$ 0.00 | \$ 0.00 | | \$ 62.87 | \$ 42.26 | \$ 63.79 | \$ 66.43 | \$ 33.12 | \$ 2.43 | \$ 9.92 | \$ 3.20 | \$ 0.00 | | |
| 1 Remove 12" Pipe @ MRY vault (4274) | 0.25 | 3 | 1 | 1 | 1 | | | | \$ 559.33 | 0.12 | 0.23 | 1 | 0.16 | 2 | 3 | 1 | 1 | | \$ 356.67 | |
| 2 | 0 | | | | | | | | \$ - | | | | | | | | | | \$ - | |
| 3 Total | | | | | | | | | \$ 559.33 | | | | | | | | | | \$ 356.67 | |

| | | |
|-------------------------------------|-----------|-----------------|
| Labor | \$ | 559.33 |
| Material | \$ | - |
| Equipment | \$ | 356.67 |
| 2nd Tier Sub | \$ | - |
| Markup on 2nd Tier Sub - 5% | \$ | - |
| 1st Tier Sub OH&P - 15% | \$ | 137.40 |
| 1st Tier Sub Bond/Insurance - 2.14% | \$ | 22.54 |
| Prime - Markup - 5% | \$ | 53.80 |
| Prime - Bond/Insurance - 1.68% | \$ | 18.98 |
| Total Amount | \$ | 1,148.71 |

Assumptions:
 Labor Burdens: FICA SS 6.2% - FICA Medicare 1.45% - FUTA .12% - SUTA 1.2% - SF Pay 1.5% - WC 4.03%

Shift Duration: 8hrs

Estimated By:  2/5/2013

Checked By:  2/5/2013

SFMTA - Third Street Light Rail Phase 2 Control Subway

Daily Force Account Field Report

PROJECT NO. CN 1252
 PROJECT NAME: Central Subway Tunnel
 CONTRACTOR: Synergy Project Management, Inc.

REPORT NO. 4274

DATE PERFORMED 8/21/12

DATE OF REPORT 8/21/12

Work Description: Removal of abandoned 12" pipe in contact with main turbine vault + 12" pipe not shown on plans. Columbus Ave. Main vault 707A 707B

| NAME (FIRST LAST) | HOURS |
|-------------------|------------|
| Francisco J | ST 2 OT |
| Mike G | ST 2 OT |
| Colby R | ST 2 OT |
| Ja Vonna C | ST 2 OT |
| Carmen J | ST 2 OT |
| Sean M | ST 2 OT |

| Material | QU | Comments |
|----------|----|----------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

| Service/ subcontractor | QU | Comments |
|------------------------|----|----------|
| | | |
| | | |
| | | |
| | | |

| EQUIPMENT DESCRIPTION | Quantity | Active | Standby |
|-------------------------------------|----------|--------|---------|
| Backhoe w/track | 1 | | 2 |
| Mini Excavator | 1 | 2 | |
| Large Excavator | | | |
| Dump Truck | 1 | | 2 |
| End Dump | | | |
| Harman's Truck | 1 | 2 | |
| Toolbox Truck | 1 | 2 | |
| Sawtooth w/ Truck | | | |
| Excavator w/ Truck | | | |
| Traffic Control @ this location | | | |
| Armed Control @ Street Columbus Ave | 1 | 2 | |
| Traffic Barriers | | | |

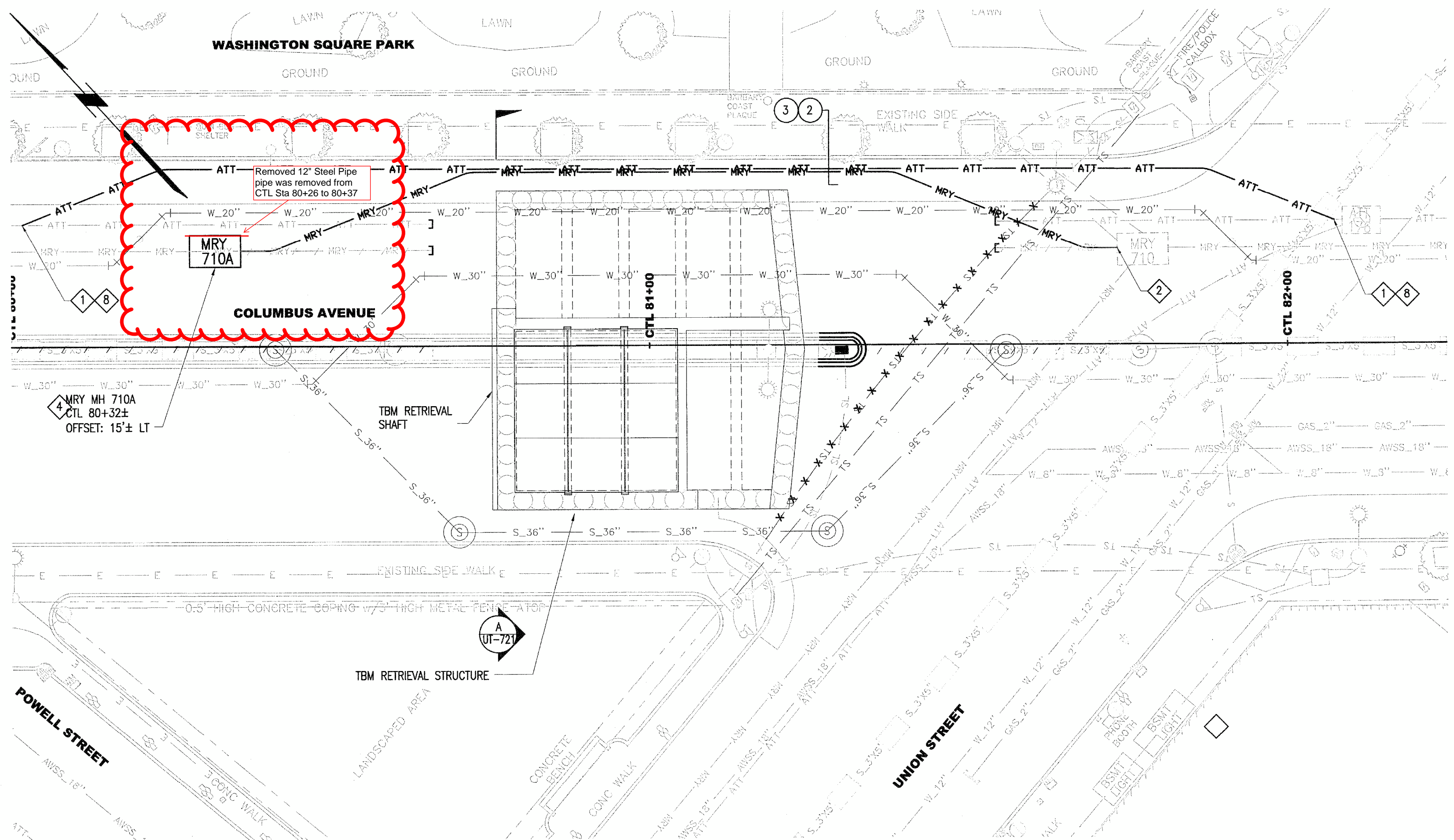
| EQUIPMENT DESCRIPTION | Quantity | Active | Standby |
|-----------------------|----------|--------|---------|
| Steel Piles | + | 8 | |
| Shoring | | | |
| Generators | | | |
| Air Compressor | | | |
| | | | |
| | | | |
| | | | |

| Impacted/Delayed Equipment | QU | Comments |
|----------------------------|----|----------|
| | | |
| | | |
| | | |
| | | |

Notes: 9' section of 12" CI pipe removed at main OH 707A location Sta 41+32

Prepared by: *[Signature]* Date: 8/21/12
 Checked by: *[Signature]* Date: 8-22-12

S:\60503\m544.1\FinalDesign\Drawing-821\2-Civil\Joint Trench\Sheet Files CP03\M54423JT701.dwg FBayani Wed Jan 26, 2011 - 4:04 pm JT-701

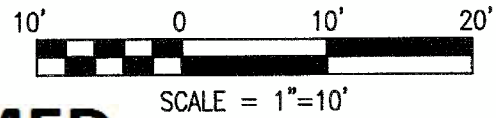


CONDUIT NOTES:

| CONDUIT NOTE # | CONDUIT # AND SIZE | UTILITY AGENCY |
|----------------|--------------------|----------------|
| 1 | 6-5", 8-2" | MRY |
| 2 | 6-5", 2-2" | MRY |
| 3 | 8-4" | AT&T |

SHEET NOTES:

1. CONNECTION TO EXISTING DUCTBANK BY UTILITY OWNER. COORDINATE SCHEDULE FOR WORK WITH UTILITY OWNER.
2. STUB CONDUITS INTO EXISTING PULLBOX/VAULT. COORDINATE WORK WITH PULLBOX/VAULT OWNER.
3. MAINTAIN EXISTING SERVICE OR PROVIDE INTERIM SERVICE UNTIL NEW SERVICE IS CUT-OVER.
4. COORDINATE INSTALLATION OF MUNI VAULT AND CONNECTION TO EXISTING DUCTBANK WITH MUNI.
5. STUB AND CAP CONDUITS FOR FUTURE EXTENSION.
6. CONNECT TO EXISTING STUBBED OUT CONDUITS.
7. UTILITIES SHOWN ON THIS PLAN REFLECT CONDITION AFTER COMPLETION OF CONSTRUCTION OF TBM RETRIEVAL SHAFT STRUCTURE.
8. PROVIDE EXCAVATION TO SUPPORT UTILITY CONNECTION THAT SATISFIES UTILITY AGENCY REQUIREMENTS.

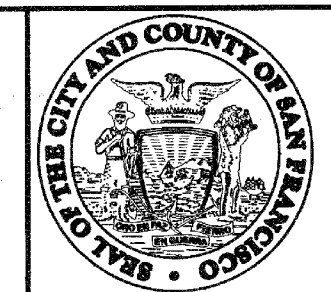
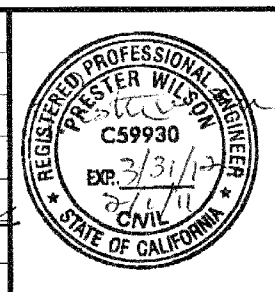


CONFORMED

| DATE | DESCRIPTION | REV. NO. | BY | CHECKED | APPROVED |
|------------|----------------|----------|----|---------|----------|
| 01/21/2011 | ISSUED FOR BID | 0 | | | |

PB TELAMON
TELAMON ENGINEERING CONSULTANTS INC.

DESIGNED: P. WILSON
 DRAWN: F. BAYANI
 CHECKED: M. DEFORGE
 REVIEWED: M. CHAN
 RECOMMENDED: M. FOWLER
 APPROVED: R. EDWARDS
 DATE: JAN 21 2011



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
 APPROVED: [Signature]
 EXECUTIVE DIRECTOR/CEO

THIRD STREET LIGHT RAIL PROGRAM
 PHASE 2 - CENTRAL SUBWAY TUNNELS
JOINT TRENCH TBM RETRIEVAL SHAFT CTL 80+00 TO 82+25

| | |
|-------------------|----------|
| CONTRACT NO. | 1252 |
| SFMTA CONTROL NO. | CL-18049 |
| DRAWING NO. | JT-701 |
| SHEET NO. | 97 |
| REVISION | 0 |

BORDER: REVISED: 05/18/2009

THIS RECORD CONTAINS SENSITIVE SECURITY INFORMATION THAT IS CONTROLLED UNDER 49 CFR PARTS 15 AND 162. NO PART OF THIS RECORD MAY BE DISCLOSED TO PERSONS WITHOUT A NEED TO KNOW, AS DEFINED IN 49 CFR PARTS 15 AND 162, EXCEPT WITH THE WRITTEN PERMISSION OF THE ADMINISTRATOR OF THE TRANSPORTATION SECURITY ADMINISTRATION OR THE SECRETARY OF TRANSPORTATION. UNAUTHORIZED RELEASE MAY RESULT IN CIVIL PENALTY OR OTHER ACTION.

SFMTA Contract No. 1252

Contractor: Barnard Impregilo Healy JV (BIH)

EVALUATION OF MERIT

COR 031

Recommendation: Accept justification of Merit for COR 031, Retrieval Shaft - Unmarked 12" Steel Pipe

Facts: On August 21st 2012, the Contractor discovered and removed an abandoned 12" Steel pipe which traveled underneath Columbus avenue between Powell and Union Streets. Removal of this pipe was necessary to complete the joint trench work at the retrieval shaft work area. A time extension has not been requested for this work.

Contractor Rationale for COR: The steel pipe constitutes a differing site condition, as it was not shown on the drawings at the time of bid.

Justification: RE has evaluated the conditions outlined in Article 3.04 and found that: conditions differ materially and conditions have caused the scope of work to increase.

RE notes that the Differing Site Condition does not include:

1. All that is indicated in or may reasonably interpreted from the Contract Documents or Reference Documents;
2. All that could be seen on Site by diligent observation;
3. Conditions that are materially similar or characteristically the same as those indicated or described in the Contract Documents or Reference Documents.
4. Conditions where the location of a building component is in the proximity where indicated in or reasonably interpreted from the Contract Documents or Reference Documents.

Change Type: (2) Unforeseen Condition

By:



Sarah Wilson
Resident Engineer

1/2/13




Date



Configuration Management Board
Approval

1-2-13

Date

| GENERAL | | |
|---|---|---|
| Proposed Change Sponsor: | S. Wilson | Received by CMB: <u>02/27/2013</u> (Date) |
| Affected Disciplines: | Excavation and Ground Support | |
| Impacts of Change | MOS - 16" Steel pipe removal at southeast headwall | |
| | Change Order Request (COR 044) Amount Not To Exceed \$1,800.00 | |
| <u>Contract(s) Directly Affected by this Proposed Change:</u> | | |
| 1250 1 <input type="checkbox"/> (CP01) | 1251 2 <input type="checkbox"/> (CP02) | 1252 3 <input checked="" type="checkbox"/> (CP03) |
| 1253 4 <input type="checkbox"/> (CP04) | 1254 5 <input type="checkbox"/> (CP05) | 1255 6 <input type="checkbox"/> (CP06) |
| 1256 7 <input type="checkbox"/> (CP07) | | |
| CONFIGURATION MANAGEMENT BOARD APPROVALS | | |
| | <i>Signatures</i> | |
| | Agree with the Change | Disagree with the Change |
| | | Date |
| Senior Program Manager: | | |
| Deputy Program Manager: | | |
| PM Project Services: |  | <u>27 FEB 13</u> |
| PM Project Development/Delivery: |  | <u>2/27/2013</u> |
| SFMTA O & M Manager: | | |
| SFMTA Safety and Security | | |
| SFCTA PMO |  | <u>27 FEB 13</u> |
| | Comments | |
| | | |
| | | |
| | | |
| | | |

COR 044

| No. | Activity Name | Days (C) | Days (EE) | Contractor (C) | Engineer's Estimate (EE) | Delta (EE-C) | Comparison* | Negotiation Position* |
|-----------------------------------|-----------------------------------|----------|-----------|----------------|--------------------------|--------------|--|-----------------------|
| Labor | 1 FA 4286 (18-Sept-12) | 0.125 | 0.125 | \$ 239.76 | \$ 215.57 | \$ (24.19) | The labor rates were adjusted to align with the SFMTA built up labor rates (based on prevailing wage) in lieu of an approved labor submittal. | |
| | 2 STANDBY FA 4286 | 0.125 | 0.125 | \$ - | \$ - | \$ - | | |
| | 3 FA 4315 (09-Oct-12) | 0.25 | 0.25 | \$ 365.54 | \$ 330.94 | \$ (34.60) | The labor rates were adjusted to align with the SFMTA built up labor rates (based on prevailing wage) in lieu of an approved labor submittal. | |
| Equipment | 1 FA 4286 (18-Sept-12) | .125 | 0.125 | \$ 245.57 | \$ 289.61 | \$ 44.04 | The engineers estimate is higher than the contractors estimate because it utilizes an active dump truck vs. including a trucking subcontractor. The full amount of this increase isn't represented by the delta column because the contractor used an incorrect hourly rate for the backhoe that was too high. The engineer's estimate used a cheaper "Large Excavator" than the contractor. | |
| | 2 STANDBY FA 4286 | .125 | 0.125 | \$ 29.00 | \$ 17.26 | \$ (11.74) | | |
| | 3 FA 4315 (09-Oct-12) | .25 | 0.25 | \$ 203.93 | \$ 259.17 | \$ 55.24 | Same equipment comment as shown above. | |
| | Material | | | \$ 265.61 | \$ 35.67 | \$ (229.95) | The engineer's estimate includes a quote that accounts for steel salvage. The contractor uses a minimum dump applicable to typical construction debris dump fees. The contractor incorrectly assesses sales tax and shipping on that dump fee. If done appropriately using their pricing the material cost would be \$240 or \$300.97 marked up. The engineers estimate dump fees marked up would be \$44.73 | |
| | Markup LM&E - 15% | | | \$ 202.41 | \$ 172.23 | \$ (30.18) | | |
| | 2nd Tier Subs | | | \$ 210.00 | \$ - | \$ (210.00) | The contractor included the hauling as a second tier subcontractor cost. The engineers estimate included this cost as an active dump truck during the full duration of the change work. | |
| | Markup - 5% | | | \$ 10.50 | \$ - | \$ (10.50) | | |
| | Sub. Bond/Insurance 2.14% | | | \$ 37.93 | \$ 28.26 | \$ (9.67) | | |
| | Prime Markup - 5% | | | \$ 90.51 | \$ 67.44 | \$ (23.08) | | |
| | Prime Bond/Insurance 1.68% | | | \$ 31.93 | \$ 23.79 | \$ (8.14) | | |
| | Total | | | \$ 1,932.67 | \$ 1,439.93 | \$ (492.75) | | |
| RE Recommended NTE Amount: | | | | \$ | 1,800.00 | | 1439.93 (EE) - 44.73 (EE Dump Fee) + 300.97 (Contractor Dump Fee) + 42.10 (Use Hitachi 200 instead of New Holland Large Exc.) + \$61.73 (differences in labor rates) | |

*The amounts shown in the "Comparison" and "Negotiation Position" columns are fully marked up for easy addition or subtraction from the bottom line

Estimate Summary

General Scope: This change order estimate is for the removal of approximately one half tons of 16" steel pipe from the excavation of the South East Moscone Headwall panel. The work was performed by Synergy Project Management (SPM) as a first-tier subcontractor to BIH and was tracked using force account tags.

Detailed Scope:

- 1. FA 4286 (18-Sept-12)
- 2. STANDBY FA 4286
- 3. FA 4315 (09-Oct-12)

| | Labor | Equipment | Material | Mark Ups | Total |
|----------------------|-----------|-----------|----------|-----------|-------------|
| Cost Summary: | \$ 546.51 | \$ 566.04 | \$ 35.67 | \$ 291.72 | \$ 1,439.93 |

List of attached documents:

- Detailed Estimate
- Materials/Fees List
- FA 4286
- FA 4315

| No. | Activity | Days | Hourly rates: | | | | | | | Labor totals | Equipment Rates | | | | | | | | | | Equipment Totals |
|-----|----------------------|-------|---------------|------------------------------|----------------|----------------|----------------|----------------|------------------|--------------|------------------------------|--------------------------------|---------------------|------------|--|-------------------------|------------------------------|-----------|------------------|--|------------------|
| | | | Laborer (G3) | Operating Engineer (OE) (G3) | Labor Resource | Labor Resource | Labor Resource | Labor Resource | Labor Resource | | Backhoe (John Deere ID 310G) | Breaker attachment for Backhoe | Dump truck - 3-axle | Work Truck | Interlocking Water Filled Triton Barrier | Total per Plate (small) | New Holland Excavator (E135) | Equipment | Equipment | | |
| | | | \$ 49.59 | \$ 66.81 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | | \$ 62.87 | \$ 42.26 | \$ 66.43 | \$ 33.12 | \$ 1.61 | \$ 4.61 | \$ 120.13 | \$ 0.00 | \$ 0.00 | | | |
| 1 | FA 4286 (18-Sept-12) | 0.125 | 3 | 1 | | | | | \$ 215.57 | | | 1 | 2 | 20 | 1 | 1 | | | \$ 289.61 | | |
| 2 | STANDBY FA 4286 | 0.125 | | | | | | | \$ - | 0.12 | 0.23 | | | | | | | | \$ 17.26 | | |
| 3 | FA 4315 (09-Oct-12) | 0.25 | 3 | 0.25 | | | | | \$ 330.94 | | | 1 | 1 | | | 0.25 | | | \$ 259.17 | | |
| 4 | | 0 | | | | | | | \$ - | | | | | | | | | | \$ - | | |
| 5 | Total | | | | | | | | \$ 546.51 | | | | | | | | | | \$ 566.04 | | |


| | | |
|-------------------------------------|-----------|-----------------|
| Labor | \$ | 546.51 |
| Material | \$ | 35.67 |
| Equipment | \$ | 566.04 |
| 2nd Tier Sub | \$ | - |
| Markup on 2nd Tier Sub - 5% | \$ | - |
| 1st Tier Sub OH&P - 15% | \$ | 172.23 |
| 1st Tier Sub Bond/Insurance - 2.14% | \$ | 28.26 |
| Prime - Markup - 5% | \$ | 67.44 |
| Prime - Bond/Insurance - 1.68% | \$ | 23.79 |
| Total Amount | \$ | 1,439.93 |

Assumptions:

Labor Burdens: FICA SS 6.2% - FICA Medicare 1.45% - FUTA .12% - SUTA 1.2% - SF Pay 1.5% - WC 4.03%

-An active dump truck was applied for the full duration of the work instead of what was shown on the FA tags for dump truck usage

Shift Duration: 8hrs

Estimated By:  Kenneth Barnhart 2/13/2013

Checked By:  Charles Dombrowski 2/13/2013

| Material | Qty. | Unit | Unit Price | Extension |
|---------------------------------------|------|------|-----------------|-----------------|
| Dump Fee 16" Steel Pipe - Ox Mountain | 0.5 | TN | \$ 71.33 | \$ 35.67 |
| | | | | \$ - |
| | | | | \$ - |
| | | | | \$ - |
| | | | Sales Tax 8.75% | \$ - |
| | | | Shipping 2% | \$ - |
| Total | | | | \$ 35.67 |

2nd Tier Sub Quote \$ -

PROJECT NO. CN 1252
 PROJECT NAME: Central Subway Tunnels
 CONTRACTOR: Synergy Project Management, Inc.

COR #44

REPORT NO. 4286
 DATE PERFORMED 9/18/12
 DATE OF REPORT 9/18/12

The following work was performed during the reporting period requiring the use of the Labor Force, Materials, Equipment, Special Forces and Services listed below:

Work Description: Removal of 16" steel pipe located at the J. Moscone Overpass. Pipe was not shown on plans.

| NAME (FIRST, LAST) | HOURS | |
|--------------------|-------|---|
| Juan Ochoa | ST | 1 |
| | OT | |
| Alejandro R. | ST | 1 |
| | OT | |
| Anthony Fuller | ST | 1 |
| | OT | |
| Jesus Sepe | ST | 1 |
| | OT | |
| | ST | |
| | OT | |

| Material | Q/U | Comments |
|----------|-----|----------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

| Services/Subcontractor | Q/U | Comments |
|------------------------|--------|----------|
| Who's Name's Trucking | 1 Hour | |
| | | |
| | | |

| EQUIPMENT DESCRIPTION | Quantity | Active | Standby |
|--------------------------------|----------|--------|---------|
| ckhoe w/Breaker | 1 | | 1 |
| Mini Excavator | | | |
| Large Excavator | 1 | 1 | |
| Dump Truck | 1 | | 1 |
| End Dump | | | |
| Foreman's Truck | 1 | 1 | |
| Tool/Fuel Truck | 1 | 1 | |
| Sawcutter w/ Truck | | | |
| Sawcutter w/ Truck | | | |
| Traffic Control @ Intersection | | | |
| Traffic Control @ Street | | | |
| Tylon Barriers | 20 | 1 | |

| EQUIPMENT DESCRIPTION | Quantity | Active | Standby |
|-----------------------|----------|--------|---------|
| Steel Plates | 1 | 1 | |
| Shoring | | | |
| Generator | | | |
| Air Compressor | | | |
| | | | |
| | | | |

| Impacted/Delayed Equipment | Q/U | Comments |
|----------------------------|-----|----------|
| | | |
| | | |
| | | |
| | | |

Does owner want to demobilize equipment? Yes No

Notes:

SFMTA Inspector was called before work was commenced? Yes No
 Daily Force Account Report was filed out at the end of the day the work was performed. Yes No
 SFMTA signature below acknowledges verification of labor, equipment, material, and services/subcontractor hours and quantities only. Costs and contract availability are subject to review and authorization for compliance with approved terms and scope of work. Any costs determined not to be allowable for payment shall be deducted from the contractor's final invoice.

Prepared by: OK Date: 9/18/12
 SFMTA Engineer/Inspector: Bill Hauke Date: 9/19/12

PROJECT NO: CN 1252
 PROJECT NAME: Central Subway Tunnels
 CONTRACTOR: Synergy Project-Management, Inc.

COR44

REPORT NO. 4315

DATE PERFORMED 10/9/12

DATE OF REPORT 10/11/12

The following work was performed by (state quantity for use of the labor form, materials, equipment, Special Force and Services listed below)

Work Description: UMS S.E. - Remove 10" steel pipe not shown
1 drawing (20 lf)

| NAME (FIRST, LAST) | HOURS | |
|--------------------|-------|----|
| | ST | OT |
| Juan Carlos J. | 2 | |
| Martin S. | 2 | |
| Refugio M. | 2 | |
| Walter R. | 2.5 | |

| Material | QTY | Comments |
|----------|-----|--------------|
| Dump Fee | 1 | 4T. of steel |

| Services/Subcontractor | QTY | Comments |
|------------------------|-----|----------|
| Mig Yamara Trucking | 1 | |

| EQUIPMENT DESCRIPTION | Quantity | Active | Standby |
|--------------------------------|----------|--------|---------|
| Excavator w/Breaker | | | |
| Mini Excavator | 1 | | 2 |
| Large Excavator | 1 | 2.5 | 0 |
| Dump Truck | 1 | 2 | 0 |
| End Dump | | | |
| Foreman's Truck | 1 | 2 | |
| Food/Fuel Truck | | | |
| Sawcutter w/ Truck | | | |
| Sawcutter w/ Truck | | | |
| Traffic Control @ Intersection | | | |
| Traffic Control @ Street | 1 | 2 | 0 |
| Tricon Barriers | 15 | 2 | 0 |

| EQUIPMENT DESCRIPTION | Quantity | Active | Standby |
|-----------------------|----------|--------|---------|
| Steel Plates | | | |
| Shoring | | | |
| Generator | | | |
| Air Compressor | | | |

| Impacted/Delayed Equipment | QTY | Comments |
|----------------------------|-----|----------|
| | | |

Does contractor use or operate equipment? Yes No

Notes: VERIFICATION OF TIME ONLY
TRAFFIC CONTROL + BARRIERS SET UP 2 TIMES / DAY - 7 DAYS / WEEK

SFMTA Inspector was called before work was commenced? Yes No
 Daily Force Account Report was filed at the end of the day the work was performed? Yes No

SFMTA Signature below acknowledges verification of labor, materials, and services. Hours and quantities only. Costs and contract availability are subject to review and confirmation in compliance with contract terms and scope of work. Any costs determined not to be allowable for payment shall be deducted from the report prior to final resolution.

Prepared by: [Signature] Date: 10/9/12 SFMTA Engineer/Inspector: [Signature] Date: 10-11-12

SFMTA Contract No. 1252

Contractor:

Barnard Impregilo Healy JV (BIH)

EVALUATION OF MERIT

COR 044

Recommendation: Accept justification of Merit for COR 044, for the removal of a 16" steel pipe at the South Moscone headwall. A time extension has not been requested for this work.

Facts: On September 18th 2012, the Contractor discovered and removed an abandoned 16" Steel pipe within the utility demolition limits on the eastern side of the Moscone South headwall. Removal of the pipe was necessary for headwall construction.

Contractor Rationale for COR: The Contractor contends that the pipe constitutes a differing site condition, as it was not shown on the contract documents at the time of bid.

Justification: RE has evaluated the conditions outlined in Article 3.04 and found that: conditions differ materially and conditions have caused the scope of work to increase.

RE notes that the Differing Site Condition does not include:


1. All that is indicated in or may reasonably interpreted from the Contract Documents or Reference Documents;
2. All that could be seen on Site by diligent observation;
3. Conditions that are materially similar or characteristically the same as those indicated or described in the Contract Documents or Reference Documents.
4. Conditions where the location of a building component is in the proximity where indicated in or reasonably interpreted from the Contract Documents or Reference Documents.

Change Type – (2) Unforeseen Condition

By:


Sarah Wilson
Resident Engineer

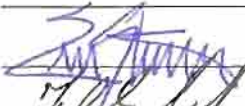
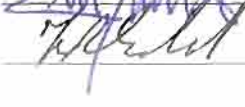

12/6/12
Date


Configuration Management Board
Approval

12-6-12
Date

CMB Change No.: CMB – 110

Initial Implementing Change Control Procedure No.: 1252 –COR - 050

| GENERAL | | |
|---|---|---|
| Proposed Change Sponsor: | S. Wilson | Received by CMB: <u>02/27/2013</u> (Date) |
| Affected Disciplines: | Excavation and Ground Support | |
| Impacts of Change | MOS – 12" Steel pipe removal at Union/Columbus | |
| | Change Order Request (COR 050) Amount Not To Exceed \$2,600.00 | |
| <u>Contract(s) Directly Affected by this Proposed Change:</u> | | |
| 1250 1 <input type="checkbox"/> (CP01) | 1251 2 <input type="checkbox"/> (CP02) | 1252 3 <input checked="" type="checkbox"/> (CP03) |
| 1253 4 <input type="checkbox"/> (CP04) | 1254 5 <input type="checkbox"/> (CP05) | 1255 6 <input type="checkbox"/> (CP06) |
| 1256 7 <input type="checkbox"/> (CP07) | | |
| CONFIGURATION MANAGEMENT BOARD APPROVALS | | |
| | <i>Signatures</i> | |
| | Agree with the Change | Disagree with the Change |
| | | Date |
| Senior Program Manager: | | |
| Deputy Program Manager: | | |
| PM Project Services: |  | 27 FEB 13 |
| PM Project Development/Delivery: |  | 2/27/2013 |
| SFMTA O & M Manager: | | |
| SFMTA Safety and Security | | |
| SFCTA PMO |  | 27 Feb 13 |
| | Comments | |
| | | |
| | | |
| | | |
| | | |

| COR 050 | | | | | | | | | |
|-----------------------------------|---------------|---------------------|-----------|-----------------------------------|--------------|---|-------------|--|--|
| | | Engineer's Estimate | | | Delta (EE-C) | | Comparison* | Negotiation Position* | |
| No. | Activity Name | Days (C) | Days (EE) | Contractor (C) | (EE) | | | | |
| Labor | 1 | FA 4314 | 0.75 | 0.75 | \$ 1,537.68 | \$ 1,225.65 | \$ (312.03) | The labor rates were adjusted to align with the SFMTA built up labor rates (based on prevailing wage) in lieu of an approved labor submittal. | |
| | 2 | FA 4314 STANDBY | 0.625 | 0.625 | \$ - | \$ - | \$ - | | |
| Equipment | 1 | FA 4314 | 0.75 | 0.75 | \$ 377.46 | \$ 367.81 | \$ (9.65) | The contractor uses an incorrect backhoe rate that includes the clamshell when in reality the breaker attachment is being utilized. | |
| | 2 | FA 4314 STANDBY | 0.625 | 0.625 | \$ 91.47 | \$ 86.32 | \$ (5.15) | The contractor uses an incorrect backhoe rate that includes the clamshell when in reality the breaker attachment is being utilized. | |
| | | | | Material | \$ 265.61 | \$ - | \$ (265.61) | The contractor includes a dump fee incorrectly marked up with sales tax and shipping. There are no dump fees noted on the FA tag therefore this was not included in the engineer's estimate. | |
| | | | | Markup LM&E - 15% | \$ 340.83 | \$ 251.97 | \$ (88.87) | | |
| | | | | 2nd Tier Subs | \$ - | \$ - | \$ - | | |
| | | | | Markup - 5% | \$ - | \$ - | \$ - | | |
| | | | | Sub. Bond/Insurance 2.14% | \$ 55.92 | \$ 41.34 | \$ (14.58) | | |
| | | | | Prime Markup - 5% | \$ 133.45 | \$ 98.65 | \$ (34.79) | | |
| | | | | Prime Bond/Insurance 1.68% | \$ 47.08 | \$ 34.81 | \$ (12.28) | | |
| | | | | Total | \$ 2,849.50 | \$ 2,106.55 | \$ (742.95) | | |
| RE Recommended NTE Amount: | | | | | \$ 2,600.00 | 2106.55 (EE) + 300.98 (Dump Fees) + 192.47 (differences in labor rates) | | | |

*The amounts shown in the "Comparison" and "Negotiation Position" columns are fully marked up for easy addition or subtraction from the bottom line

Estimate Summary

General Scope: This estimate establishes the cost to remove a 12" steel pipe at the intersection of Union Street and Columbus Avenue.

Detailed Scope:

1. FA 4314
2. FA 4314 STANDBY

| | Labor | Equipment | Material | Mark Ups | Total |
|----------------------|-------------|-----------|----------|-----------|-------------|
| Cost Summary: | \$ 1,225.65 | \$ 454.13 | \$ - | \$ 426.77 | \$ 2,106.55 |

List of attached documents:

- Detailed Estimate
- Photographs of area (2)
- Plan view sketch

Estimate Prepared:
2/20/2013

| No. | Activity | Days | Hourly rates: | | | | | | Labor totals | Hourly rates: | | | | | | | | Equipment Totals | |
|-----|-----------------|-------|---------------|--------------|----------------|----------------|----------------|----------------|--------------------|------------------------------|--------------------------------|------------|-------------------------|------------------------|-----------|-----------|-----------|------------------|------------------|
| | | | Laborer (G3) | Cement Mason | Labor Resource | Labor Resource | Labor Resource | Labor Resource | | Backhoe (John Deere ID 310G) | Breaker attachment for Backhoe | Work Truck | Total per Plate (small) | Total per trench shore | Equipment | Equipment | Equipment | | Equipment |
| | | | \$ 49.59 | \$ 55.51 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 62.87 | \$ 42.26 | \$ 33.12 | \$ 4.61 | \$ 0.88 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | |
| 1 | FA 4314 | 0.75 | 3 | 1 | | | | | \$ 1,225.65 | 0.167 | 0.167 | 1 | 2 | 3 | | | | | \$ 367.81 |
| 2 | FA 4314 STANDBY | 0.625 | | | | | | | \$ - | 0.12 | 0.23 | | | | | | | | \$ 86.32 |
| 3 | | 0 | | | | | | | \$ - | | | | | | | | | | \$ - |
| 4 | Total | | | | | | | | \$ 1,225.65 | | | | | | | | | | \$ 454.13 |

| | | |
|-------------------------------------|-----------|-----------------|
| Labor | \$ | 1,225.65 |
| Material | \$ | - |
| Equipment | \$ | 454.13 |
| 2nd Tier Sub | \$ | - |
| Markup on 2nd Tier Sub - 5% | \$ | - |
| 1st Tier Sub OH&P - 15% | \$ | 251.97 |
| 1st Tier Sub Bond/Insurance - 2.14% | \$ | 41.34 |
| Prime - Markup - 5% | \$ | 98.65 |
| Prime - Bond/Insurance - 1.68% | \$ | 34.81 |
| Total Amount | \$ | 2,106.55 |

Assumptions:

Labor Burdens: FICA SS 6.2% - FICA Medicare 1.45% - FUTA .12% - SUTA 1.2% - SF Pay 1.5% - WC 4.03%

Shift Duration: 8hrs

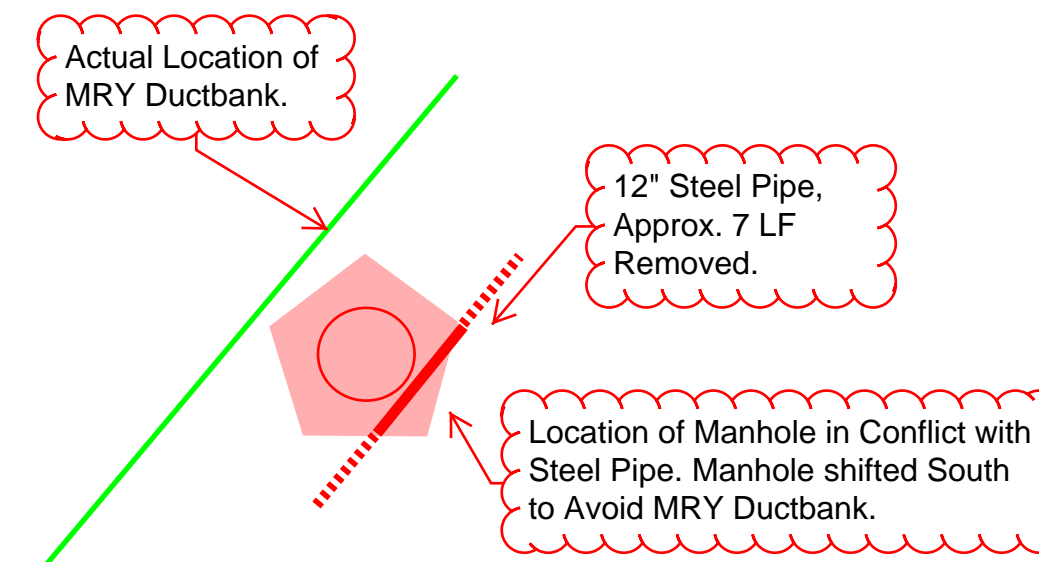
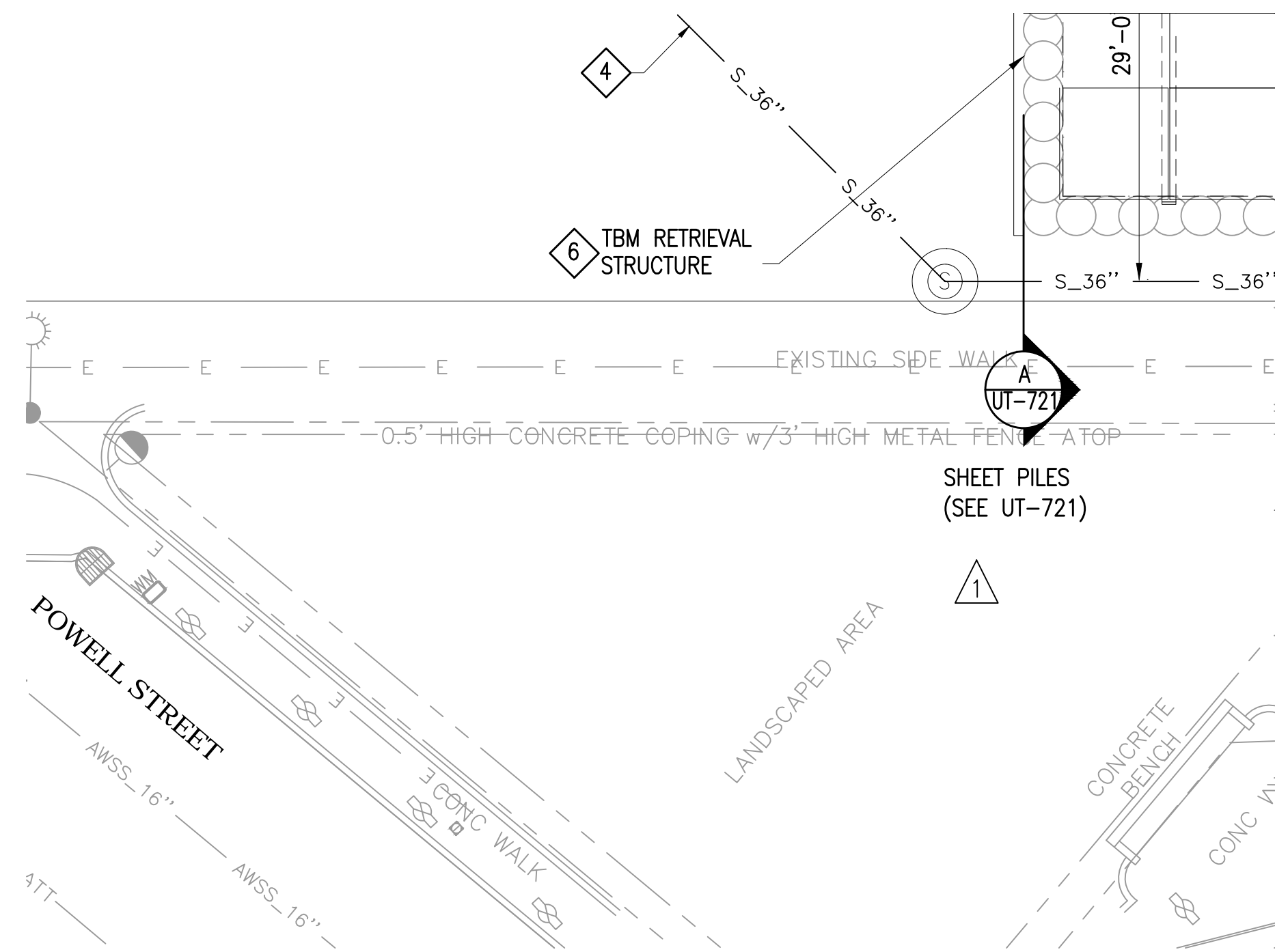
Estimated By: Kenneth Bamhart

2/20/2013

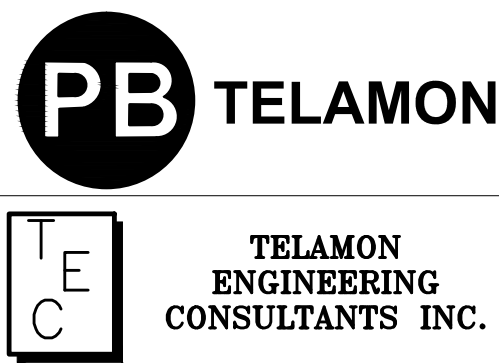
Checked By: Charles Dombrowski

2/20/2013

\\Sv6nos003.muni.sfgov.org\m544.1\FinalDesign\Drawing-821\2-Civil\Utility Composites\Sheet Files CP03\Utility Composite\ M:



| DATE | DESCRIPTION | REV. NO. | BY | CHECKED | APPROVED |
|------------|-----------------------|----------|----|---------|----------|
| 05/04/2011 | ISSUED FOR ADDENDUM 5 | 1 | DZ | MC | RE |
| 01/21/2011 | ISSUED FOR BID | 0 | - | - | - |



FOR ORIGINAL
 DESIGNED: M. DEFORGE
 DRAWN: F. BAYANI
 CHECKED: P. WILSON
 REVIEWED: M. CHAN
 RECOMMENDED: M. FOWLER
 APPROVED: R. EDWARDS
 DATE: JAN 21, 2011

CONFORMED

(E) MH LOCATION,
CURRENTLY
COVERED WITH
STEEL

12" Steel Pipe Removed.

10.04.2012 08:45





10/04/2012 12:25

Price Account Field Report

PROJECT NO. CN 1252
 PROJECT NAME: Central Subway Tunnels
 CONTRACTOR: Synergy Project Management, Inc.

REPORT NO. 4314

DATE PERFORMED 10/4/12
 DATE OF REPORT 10/4/12

The following work was performed during the use of the Labor Force, Materials, Equipment, Special Forces and Services listed below:

Work Description: Remove 7 ft of 12" abandoned water in ~~drain~~ abandoned ~~man~~ structure that is in conflict w/ new proposed man hole.*

| NAME (FIRST, LAST) | HOURS |
|-----------------------|-------|
| Francisco Flores | ST 6 |
| | OT |
| Martin Santos | ST 6 |
| | OT |
| Jose Martinez | ST 6 |
| | OT |
| Scott James (Flagger) | ST 4 |
| | OT |
| | ST |
| | OT |

| Material | Q/U | Comments |
|----------|-----|----------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

| Services/Subcontractor | Q/U | Comments |
|------------------------|-----|----------|
| | | |
| | | |
| | | |
| | | |

| EQUIPMENT DESCRIPTION | Quantity | Active | Standby |
|--------------------------------|----------|--------|---------|
| ckhoe w/Breaker | 1 | 1 | 5 |
| Mini Excavator | | | |
| Large Excavator | | | |
| Dump Truck | | | |
| End Dump | | | |
| Foreman's Truck | 1 | 6 | |
| Tool/Fuel Truck | | | |
| Sawcutter w/ Truck | | | |
| Sawcutter w/ Truck | | | |
| Traffic Control @ Intersection | | | |
| Traffic Control @ Street | | | |
| Triton Barriers | | | |

| EQUIPMENT DESCRIPTION | Quantity | Active | Standby |
|-----------------------|----------|--------|---------|
| Steel Plates | 2 | 6 | |
| Shoring | 3 | 6 | |
| Generator | | | |
| Air Compressor | | | |
| | | | |
| | | | |

| Impacted/Delayed Equipment | Q/U | Comments |
|----------------------------|-----|----------|
| | | |
| | | |
| | | |
| | | |
| | | |

Does price work to demobilize equipment? Yes No

Notes: * PLUS CUT & REMOVE ABANDONED 6" STEEL GAS PIPE

Was NTA Inspector called before work was commenced? Yes No

Only Price Account Report was filed on 10/4/12 (at end of the day the work was performed)? Yes No

NTA Signature below acknowledges verification of labor, equipment, material, and services/subcontractor hours and quantities only. Costs and quantities/availability are subject to review and verification for compliance with contract terms and scope of work. Any costs determined not to be allowable for payment shall be deducted from the report prior to final resolution.

Shannon Cunniff 10/4/12
 Projected by Cory Kelly

10/5/12
 NTA Engineer/Inspector

SFMTA Contract No. 1252

Contractor: Barnard Impregilo Healy JV (BIH)

EVALUATION OF MERIT

COR 050

Recommendation: Accept justification of Merit for COR 050, Retrieval Shaft – Removal of 12" Steel Pipe.

Facts: 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. A time extension has not been requested for this work.

Contractor Rationale for COR: The steel pipe constitutes a differing site condition, as it was not shown on the drawings at the time of bid.

Justification: RE has evaluated the conditions outlined in Article 3.04 and found that: conditions differ materially and conditions have caused the scope of work to increase.

RE notes that the Differing Site Condition does not include:

1. All that is indicated in or may reasonably interpreted from the Contract Documents or Reference Documents;
2. All that could be seen on Site by diligent observation;
3. Conditions that are materially similar or characteristically the same as those indicated or described in the Contract Documents or Reference Documents.
4. Conditions where the location of a building component is in the proximity where indicated in or reasonably interpreted from the Contract Documents or Reference Documents.




Change Type: (2) Unforeseen Condition

By: *Sarah Wilson* 12/12/12
 Sarah Wilson Date
 Resident Engineer

[Signature] 12-12-12
 Configuration Management Board Date
 Approval

CMB Change No.: CMB - 111

Initial Implementing Change Control Procedure No.: 1252 -COR - 058

| GENERAL | | | | | | |
|---|---|---|--|--|--|--|
| Proposed Change Sponsor: | <u>S. Wilson</u> | Received by CMB: | <u>02/27/2013</u> <small>(Date)</small> | | | |
| Affected Disciplines: | <u>Excavation and Ground Support</u> | | | | | |
| Impacts of Change | <u>Add'l 10" MOS - 12" Steel pipe removal at Union/Columbus</u> | | | | | |
| Change Order Request (COR 058) Amount Not To Exceed \$860.85 | | | | | | |
| <u>Contract(s) Directly Affected by this Proposed Change:</u> | | | | | | |
| 1250 1 <input type="checkbox"/> (CP01) | 1251 2 <input type="checkbox"/> (CP02) | 1252 3 <input checked="" type="checkbox"/> (CP03) | 1253 4 <input type="checkbox"/> (CP04) | 1254 5 <input type="checkbox"/> (CP05) | 1255 6 <input type="checkbox"/> (CP06) | 1256 7 <input type="checkbox"/> (CP07) |
| CONFIGURATION MANAGEMENT BOARD APPROVALS | | | | | | |
| <i>Signatures</i> | | | | | | |
| | | Agree with the Change | Disagree with the Change | Date | | |
| Senior Program Manager: | | | | | | |
| Deputy Program Manager: | | | | | | |
| PM Project Services: | |  | | <u>27 Feb 13</u> | | |
| PM Project Development/Delivery: | |  | | <u>2/27/2013</u> | | |
| SFMTA O & M Manager: | | | | | | |
| SFMTA Safety and Security | | | | | | |
| SFCTA PMO | |  | | <u>27 Feb 13</u> | | |
| Comments | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| COR 058 | | | | | | | | | |
|-----------------------------------|-----------------------------------|----------|-----------|----------------|--------------------------|--|---|-----------------------|--|
| No. | Activity Name | Days (C) | Days (EE) | Contractor (C) | Engineer's Estimate (EE) | Delta (EE-C) | Comparison* | Negotiation Position* | |
| Labor | 1 | | | | | | The labor rates were adjusted to align with the SFMTA built up labor rates (based on prevailing wage) in lieu of an approved labor submittal. The contractor also has an apprentice laborer with a journeyman rate in their cost estimate. | | |
| | FA 4316 | 0.125 | 0.125 | \$ 294.35 | \$ 232.55 | \$ (61.80) | | | |
| Equipment | 1 | | | | | | The contractors estimate includes welding equipment and a generator that were not tracked on FA 4316. The contractors estimate also uses an incorrect backhoe rate that includes the clamshell when in reality the breaker attachment was being utilized. | | |
| | FA 4316 | 0.125 | 0.125 | \$ 248.47 | \$ 213.90 | \$ (34.57) | | | |
| | | | | | | | The contractors dump fee is lower than the minimum dump fee. Note that a minimum dump fee may be argued by the contractor for an amount of \$300.97 fully marked up. Cut back was not included in the engineer's estimate material list as it was not noted on FA 4316. | | |
| | Material | | | \$ 135.57 | \$ 17.83 | \$ (117.74) | | | |
| | Markup LM&E - 15% | | | \$ 101.76 | \$ 69.64 | \$ (32.12) | | | |
| | 2nd Tier Subs | | | \$ - | \$ - | \$ - | | | |
| | Markup - 5% | | | \$ - | \$ - | \$ - | | | |
| | Sub. Bond/Insurance 2.14% | | | \$ 16.70 | \$ 11.43 | \$ (5.27) | | | |
| | Prime Markup - 5% | | | \$ 39.84 | \$ 27.27 | \$ (12.57) | | | |
| | Prime Bond/Insurance 1.68% | | | \$ 14.06 | \$ 9.62 | \$ (4.44) | | | |
| | Total | | | \$ 850.74 | \$ 582.24 | \$ (268.50) | | | |
| RE Recommended NTE Amount: | | | | \$ 860.85 | | \$582.24 (EE) - 22.36 (EE dump fee) + 300.97 (Min dump fee of \$240) | | | |

*The amounts shown in the "Comparison" and "Negotiation Position" columns are fully marked up for easy addition or subtraction from the bottom line

Estimate Summary

General Scope: This estimate encompasses the cost to remove a 10" steel pipe at the intersection of Union and Columbus streets. This occurred at CTL Sta. 81+67 on 10/18/12.

Detailed Scope:

1. FA 4316

| | Labor | Equipment | Material | Mark Ups | Total |
|----------------------|-----------|-----------|----------|-----------|-----------|
| Cost Summary: | \$ 232.55 | \$ 213.90 | \$ 17.83 | \$ 117.96 | \$ 582.24 |

List of attached documents:

- Detailed Estimate
- Materials List
- FA 4316
- Plan view sketch


Estimate Prepared:
2/21/2013

| No. | Activity | Days | Hourly rates: | | | | | | Labor totals | Hourly rates: | | | | | | Equipment Totals | | |
|-----|--------------|-------|---------------|------------------------------|-------------------------|----------|----------------|----------------|------------------|----------------|------------------------------|--------------------------------|---------------------|------------|-------------------------|------------------|-----------|------------------|
| | | | Laborer (G3) | Operating Engineer (OE) (G4) | Apprentice Laborer (G3) | Driver | Labor Resource | Labor Resource | | Labor Resource | Backhoe (John Deere ID 310G) | Breaker attachment for Backhoe | Dump truck - 3-axle | Work Truck | Total per Plate (small) | | Equipment | Equipment |
| | | | \$ 49.59 | \$ 65.23 | \$ 41.89 | \$ 26.25 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 62.87 | \$ 42.26 | \$ 66.43 | \$ 33.12 | \$ 4.61 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 |
| 1 | FA 4316 | 0.125 | 2 | 1 | 1 | 1 | | | \$ 232.55 | 1 | 1 | 1 | 1 | 2 | | | | \$ 213.90 |
| 2 | | | | | | | | | \$ - | | | | | | | | | \$ - |
| 3 | Total | | | | | | | | \$ 232.55 | | | | | | | | | \$ 213.90 |

| | | |
|-------------------------------------|-----------|----------------|
| Labor | \$ | 232.55 |
| Material | \$ | 17.83 |
| Equipment | \$ | 213.90 |
| 2nd Tier Sub | \$ | - |
| Markup on 2nd Tier Sub - 5% | \$ | - |
| 1st Tier Sub OH&P - 15% | \$ | 69.64 |
| 1st Tier Sub Bond/Insurance - 2.14% | \$ | \$11.43 |
| Prime - Markup - 5% | \$ | 27.27 |
| Prime - Bond/Insurance - 1.68% | \$ | \$9.62 |
| Total Amount | \$ | 582.24 |

Assumptions:
Labor Burdens: FICA SS 6.2% - FICA Medicare 1.45% - FUTA .12% - SUTA 1.2% - SF Pay 1.5% - WC 4.03%

Shift Duration: 8hrs

Estimated By:  2/21/2013

Checked By:  2/21/2013

| Material | Qty. | Unit | Unit Price | Extension |
|------------------|------|------|-----------------|-----------------|
| Dump Fee 1/4 Ton | 0.25 | TN | \$ 71.33 | \$ 17.83 |
| | | | | \$ - |
| | | | | \$ - |
| | | | | \$ - |
| | | | Sales Tax 8.75% | \$ - |
| | | | Shipping 2% | \$ - |
| Total | | | | \$ 17.83 |

2nd Tier Sub Quote \$ -

PROJECT NO. CN 1252
 PROJECT NAME: Central Subway Tunnels
 CONTRACTOR: Synergy Project Management, Inc.

COR #58

REPORT NO. 4316

DATE PERFORMED 10/18/12

DATE OF REPORT 10/19/12

The following work was performed this date requiring the use of the Labor Force, Materials, Equipment, Special Forces and Services listed herein:

Work Description: *Removal of 12" Steel Pipe @ danded man
 in the intersection of Union Columns. (FF was
 removed. *Steel pipe not shown on plans.*

| NAME (FIRST, LAST) | HOURS | |
|--------------------|-------|----|
| | ST | OT |
| Francisco Flores | 1 | |
| Kevin Murphy | 1 | |
| Martin Cyprien | 1 | |
| Juanita Crosby | 1 | |
| Ryan Dale | 1 | |

| Material | Q/U | Comments |
|----------|-----|----------|
| Dump Fee | 1/4 | Jon |

| Services/Subcontractor | Q/U | Comments |
|------------------------|-----|----------|
| | | |

| EQUIPMENT DESCRIPTION | Quantity | Active | Standby |
|--------------------------------|----------|--------|---------|
| ckhoe w/Breaker | 1 | 1 | |
| Mini Excavator | 1 | 1 | |
| Large Excavator | | | |
| Dump Truck | 1 | 1 | |
| End Dump | | | |
| Foreman's Truck | 1 | 1 | |
| Tool/Fuel Truck | | | |
| Sawcutter w/ Truck | | | |
| Sawcutter w/ Truck | | | |
| Traffic Control @ Intersection | | | |
| Traffic Control @ Street | | | |
| Triton Barriers | | | |

| EQUIPMENT DESCRIPTION | Quantity | Active | Standby |
|-----------------------|----------|--------|---------|
| Steel Plates | 2 | 1 | |
| Shoring | | | |
| Generator | | | |
| Air Compressor | | | |

| Impacted/Delayed Equipment | Q/U | Comments |
|----------------------------|-----|----------|
| | | |

Does owner want to demobilize equipment? Yes No

Notes:

Was SFMTA Inspector called before work was commenced?

Yes

Daily Force Account Report was filled out at the end of the day the work was performed?

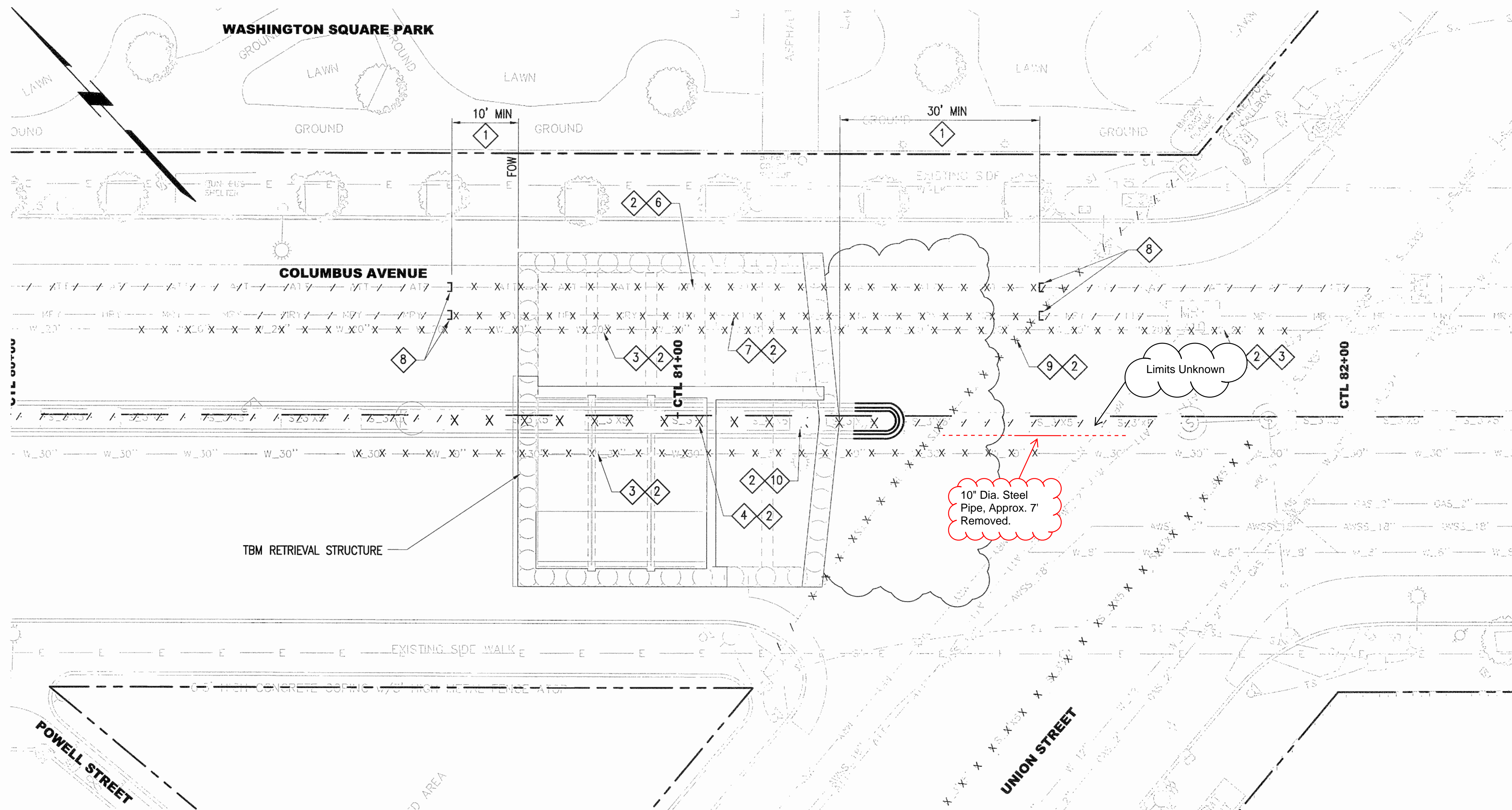
No

SFMTA signature below acknowledges verification of labor, equipment, material, and service/subcontractor hours and quantities only. Costs and contract allowability are subject to review and confirmation for compliance with contract terms and scope of work. Any costs determined not to be allowable for payment shall be deducted from the contract prior to final resolution.

Prepared by *CD* Date *10/19/12*

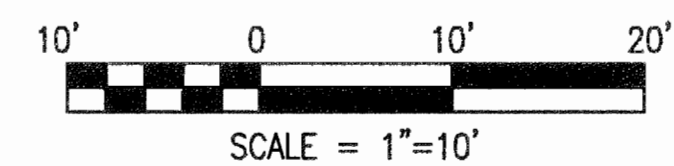
SFMTA Engineer/Inspector *Bill Halko* Date *10/19/12*

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NOTES:

1. DEMOLISH AND REMOVE ALL ABANDONED UTILITY FACILITIES, INCLUDING PREVIOUSLY ABANDONED FACILITIES NOT SHOWN ON PLANS, WITHIN LIMITS OF RETRIEVAL SHAFT STRUCTURE AND TO THE LIMITS INDICATED, UNLESS OTHERWISE NOTED.
2. ACTIVE UTILITIES SHALL BE MAINTAINED UNTIL RELOCATION OR CUT-OVER, UNLESS OTHERWISE NOTED. COORDINATE DEMOLITION WITH RETRIEVAL SHAFT CONSTRUCTION PHASING.
3. REMOVE WATER LINE. SEE WATER DISTRIBUTION (WD) DRAWINGS FOR ABANDONMENT AND REMOVAL.
4. REMOVE SEWER. SEE (SW) DRAWINGS FOR ABANDONMENT.
5. SEE (AW) DRAWINGS FOR ABANDONMENT AND REMOVAL OF AWSS FACILITIES.
6. REMOVE AT&T DUCT BANK. SEE (JT) DRAWINGS FOR ABANDONMENT.
7. REMOVE MRY DUCT BANK. SEE (JT) DRAWINGS FOR ABANDONMENT.
8. CAP OR PLUG ALL ABANDONED FACILITIES, INCLUDING PREVIOUSLY ABANDONED FACILITIES NOT SHOWN ON PLANS, AT JET GROUT OR SECANT PILE LIMIT.
9. REMOVE TRAFFIC SIGNAL CONDUIT. SEE (TS) DRAWINGS FOR ABANDONMENT.
10. SEE STREET LIGHT (SL) DRAWINGS FOR REMOVAL/RELOCATION.



CONFORMED

| | | | | | | | | | | | |
|---|-------------|----------|----|--|----------|---|--|------------------------------|--|------------------------|--|
| TELAMON ENGINEERING CONSULTANTS INC. | | | | CITY AND COUNTY OF SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY | | THIRD STREET LIGHT RAIL PROGRAM PHASE 2 - CENTRAL SUBWAY TUNNELS | | CONTRACT NO. 1252 | | | |
| | | | | DESIGNED: M. DEFORGE DRAWN: F. BAYANI CHECKED: D. ZUJIRING REVIEWED: M. CHAN RECOMMENDED: M. FOWLER APPROVED: R. EDWARDS DATE: JAN 21 2011 | | APPROVED EXECUTIVE DIRECTOR/CEO | | DRAWING NO. UD-701 | | SHEET NO. 88 | |
| 01/21/2011 ISSUED FOR BID | | | | | | | | | | | |
| DATE | DESCRIPTION | REV. NO. | BY | CHECKED | APPROVED | | | | | | |

SFMTA Contract No. 1252

Contractor: Barnard Impregilo Healy JV (BIH)

EVALUATION OF MERIT

COR 058

Recommendation: Accept justification of Merit for COR 058, Retrieval Shaft – Removal of Unmarked 10" Steel Pipe.

Facts: On October 18th 2012, The Contractor discovered and removed an abandoned 10" steel pipe at the intersection of Union Street and Columbus Avenue. Removal of the pipe was necessary to complete the construction of the 36" RCP sewer main relocation work in this area. Sewer work included the construction of a manhole which had been positioned in the field to avoid an existing MUNI duct bank. A time extension has not been requested for this work.



Contractor Rationale for COR: The steel pipe constitutes a differing site condition, as it was not shown on the contract drawings at the time of bid.

Justification: RE has evaluated the conditions outlined in Article 3.04 and found that: conditions differ materially and conditions have caused the scope of work to increase.

RE notes that the Differing Site Condition does not include:




1. All that is indicated in or may reasonably interpreted from the Contract Documents or Reference Documents;
2. All that could be seen on Site by diligent observation;
3. Conditions that are materially similar or characteristically the same as those indicated or described in the Contract Documents or Reference Documents.
4. Conditions where the location of a building component is in the proximity where indicated in or reasonably interpreted from the Contract Documents or Reference Documents.

Change Type: (2) Unforeseen Condition

By:  _____ 12/12/12
Sarah Wilson Date
Resident Engineer
 _____ 12-12-12
Configuration Management Board Date
Approval

CMB Change No.: **CMB - 112**

Initial Implementing Change Control Procedure No.: **1252 -COR - 066**

| GENERAL | | | | | | |
|---|---|---|--|--|--|--|
| Proposed Change Sponsor: | S. Wilson | Received by CMB: | 02/27/2013 (Date) | | | |
| Affected Disciplines: | Excavation and Ground Support | | | | | |
| Impacts of Change | MOS - 12" Steel pipe removal intersection of Union and Columbus St. | | | | | |
| | Change Order Request (COR 066) Amount Not To Exceed \$3,800.00 | | | | | |
| <u>Contract(s) Directly Affected by this Proposed Change:</u> | | | | | | |
| 1250 1 <input type="checkbox"/> (CP01) | 1251 2 <input type="checkbox"/> (CP02) | 1252 3 <input checked="" type="checkbox"/> (CP03) | 1253 4 <input type="checkbox"/> (CP04) | 1254 5 <input type="checkbox"/> (CP05) | 1255 6 <input type="checkbox"/> (CP06) | 1256 7 <input type="checkbox"/> (CP07) |
| CONFIGURATION MANAGEMENT BOARD APPROVALS | | | | | | |
| | <i>Signatures</i> | | | | | |
| | Agree with the Change | Disagree with the Change | Date | | | |
| Senior Program Manager: | | | | | | |
| Deputy Program Manager: | | | | | | |
| PM Project Services: |  | | 27 FEB 13 | | | |
| PM Project Development/Delivery: |  | | 2/27/2013 | | | |
| SFMTA O & M Manager: | | | | | | |
| SFMTA Safety and Security | | | | | | |
| SFCTA PMO |  | | 27 Feb 13 | | | |
| | <u>Comments</u> | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| COR 066 | | | | | | | | |
|---|-----------------------------------|----------|-----------|----------------|--------------------------|--------------|--|-----------------------|
| No. | Activity Name | Days (C) | Days (EE) | Contractor (C) | Engineer's Estimate (EE) | Delta (EE-C) | Comparison* | Negotiation Position* |
| Labor | 1 | | | | | | | |
| | FA 4337 - 11/21/12 Remove Pipe | 1 | 1 | \$ 2,568.72 | \$ 2,047.09 | \$ (521.63) | The labor rates were adjusted to align with the SFMTA built up labor rates (based on prevailing wage) in lieu of an approved labor submittal. | |
| Equipment | 1 | | | | | | | |
| | FA 4337 - 11/21/12 Remove Pipe | 1 | 1 | \$ 806.83 | \$ 727.28 | \$ (79.55) | The contractor includes traffic cones in their estimate which are not included on FA 4337. 6 road signs are used in the contractors estimate compared to 3 in the engineer's estimate as there was not enough evidence in the daily photos to warrant the inclusion of 6 road signs. | |
| | Material | | | \$ 13.83 | \$ 17.83 | \$ 4.00 | | |
| | Markup LM&E - 15% | | | \$ 508.41 | \$ 418.83 | \$ (89.58) | | |
| | 2nd Tier Subs | | | \$ - | \$ - | \$ - | | |
| | Markup - 5% | | | \$ - | \$ - | \$ - | | |
| | Sub. Bond/Insurance 2.14% | | | \$ 83.41 | \$ 68.72 | \$ (14.70) | | |
| | Prime Markup - 5% | | | \$ 199.06 | \$ 163.99 | \$ (35.07) | | |
| | Prime Bond/Insurance 1.68% | | | \$ 70.23 | \$ 57.85 | \$ (12.37) | | |
| | Total | | | \$ 4,250.49 | \$ 3,501.60 | \$ (748.89) | | |
| RE Recommended NTE Amount: | | | | | \$ 3,800.00 | | 3,501.60 (EE) + 298.4 (differences in labor rates) | |
| *The amounts shown in the "Comparison" and "Negotiation Position" columns are fully marked up for easy addition or subtraction from the bottom line | | | | | | | | |

Estimate Summary

General Scope: This estimate encompasses the cost to remove a 12" steel pipe at the intersection of Union and Columbus streets. The work was performed by a 1st tier subcontractor and tracked using a force account tag.

Detailed Scope:

- 1. FA 4337 - 11/21/12 Remove Pipe

| | Labor | Equipment | Material | Mark Ups | Total |
|----------------------|-------------|-----------|----------|-----------|-------------|
| Cost Summary: | \$ 2,047.09 | \$ 727.28 | \$ 17.83 | \$ 709.39 | \$ 3,501.60 |

List of attached documents:

- Detailed Estimate
- Materials List
- Photograph
- Plan view sketch
- FA 4337
- Change Estimate Standards

Estimate Prepared:
 2/21/2013

| No. | Activity | Hourly rates: | | | | | | | | Labor totals | Hourly rates: | | | | | | | | Equipment Totals | |
|-----|--------------------------------|---------------|-----------------------|-----------------------------|---------------------------------------|------------------------|------------------------|------------------------|------------------------|--------------------|---------------------|----------------------------|---------------------|--------------------|-------------------|-------------------|-------------------|-------------------|------------------|------------------|
| | | Days | Laborer (G3) \$ 49.59 | Apprentice Laborer \$ 41.89 | Operating Engineer (OE) (G4) \$ 65.23 | Labor Resource \$ 0.00 | Labor Resource \$ 0.00 | Labor Resource \$ 0.00 | Labor Resource \$ 0.00 | | Work Truck \$ 33.12 | Construction Signs \$ 2.43 | Arrow Board \$ 3.20 | Generator \$ 14.18 | Equipment \$ 0.00 | Equipment \$ 0.00 | Equipment \$ 0.00 | Equipment \$ 0.00 | | |
| 1 | FA 4337 - 11/21/12 Remove Pipe | 1 | 3 | 1 | 1 | | | | | \$ 2,047.09 | 2 | 3 | 1 | 1 | | | | | | \$ 727.28 |
| 2 | | | | | | | | | | \$ - | | | | | | | | | | \$ - |
| 3 | Total | | | | | | | | | \$ 2,047.09 | | | | | | | | | | \$ 727.28 |


| | | |
|-------------------------------------|-----------|-----------------|
| Labor | \$ | 2,047.09 |
| Material | \$ | 17.83 |
| Equipment | \$ | 727.28 |
| 2nd Tier Sub | \$ | - |
| Markup on 2nd Tier Sub - 5% | \$ | - |
| 1st Tier Sub OH&P - 15% | \$ | 418.83 |
| 1st Tier Sub Bond/Insurance - 2.14% | \$ | 68.72 |
| Prime - Markup - 5% | \$ | 163.99 |
| Prime - Bond/Insurance - 1.68% | \$ | 57.85 |
| Total Amount | \$ | 3,501.60 |


Assumptions:

Labor Burdens: FICA SS 6.2% - FICA Medicare 1.45% - FUTA .12% - SUTA 1.2% - SF Pay 1.5% - WC 4.03%

Traffic control accounted for in this estimate was determined by examining photos from 11/21/12.

Shift Duration: 8hrs

Estimated By:  Kenneth Barnhart 2/21/2013

Checked By:  Charles Dombrowski 2/21/2013

| Material | Qty. | Unit | Unit Price | Extension |
|-----------------------------|------|------|-----------------|-----------------|
| Dump Fee 1/4 Ton Steel Pipe | 0.25 | TN | \$ 71.33 | \$ 17.83 |
| | | | | \$ - |
| | | | | \$ - |
| | | | | \$ - |
| | | | Sales Tax 8.75% | \$ - |
| | | | Shipping 2% | \$ - |
| Total | | | | \$ 17.83 |

2nd Tier Sub Quote

\$ -

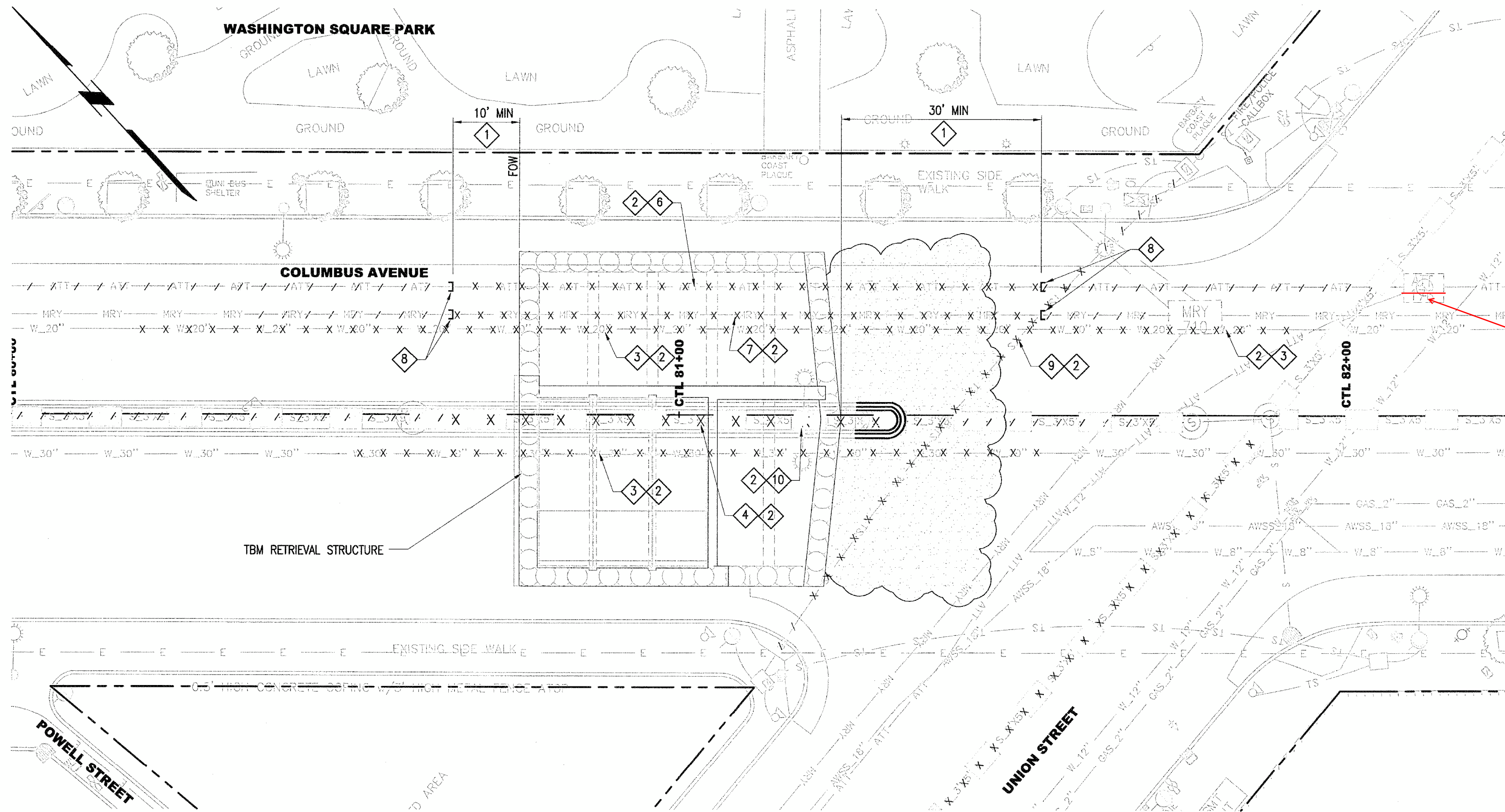


BOHEMIAN
Coffee House
THE BEST IN TOWN

SCHWITZ
17-7200

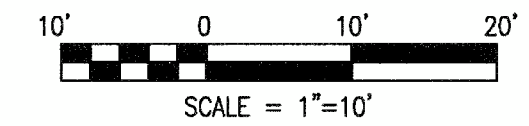
HAIR
NAILS
FACIAL
WAXING

11/21/2012 10:36



NOTES:

1. DEMOLISH AND REMOVE ALL ABANDONED UTILITY FACILITIES, INCLUDING PREVIOUSLY ABANDONED FACILITIES NOT SHOWN ON PLANS, WITHIN LIMITS OF RETRIEVAL SHAFT STRUCTURE AND TO THE LIMITS INDICATED, UNLESS OTHERWISE NOTED.
2. ACTIVE UTILITIES SHALL BE MAINTAINED UNTIL RELOCATION OR CUT-OVER, UNLESS OTHERWISE NOTED. COORDINATE DEMOLITION WITH RETRIEVAL SHAFT CONSTRUCTION PHASING.
3. REMOVE WATER LINE. SEE WATER DISTRIBUTION (WD) DRAWINGS FOR ABANDONMENT AND REMOVAL.
4. REMOVE SEWER. SEE (SW) DRAWINGS FOR ABANDONMENT.
5. SEE (AW) DRAWINGS FOR ABANDONMENT AND REMOVAL OF AWSS FACILITIES.
6. REMOVE AT&T DUCT BANK. SEE (JT) DRAWINGS FOR ABANDONMENT.
7. REMOVE MRY DUCT BANK. SEE (JT) DRAWINGS FOR ABANDONMENT.
8. CAP OR PLUG ALL ABANDONED FACILITIES, INCLUDING PREVIOUSLY ABANDONED FACILITIES NOT SHOWN ON PLANS, AT JET GROUT OR SECANT PILE LIMIT.
9. REMOVE TRAFFIC SIGNAL CONDUIT. SEE (TS) DRAWINGS FOR ABANDONMENT.
10. SEE STREET LIGHT (SL) DRAWINGS FOR REMOVAL/RELOCATION.



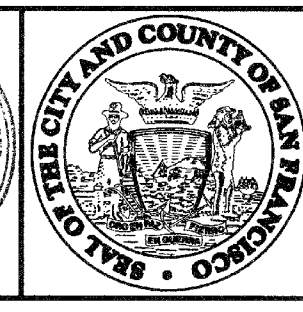
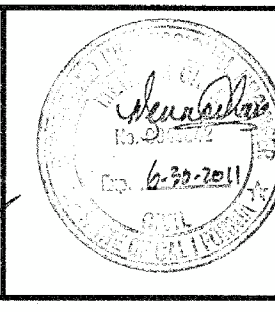
CONFORMED

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| DATE | DESCRIPTION | REV. | BY | CHECKED | APPROVED |
|------------|----------------|------|----|---------|----------|
| 01/21/2011 | ISSUED FOR BID | 0 | | | |

PB TELAMON
TELAMON ENGINEERING CONSULTANTS INC.

DESIGNED: M. DEFORGE
 DRAWN: F. BAYANI
 CHECKED: D. ZOURING
 REVIEWED: M. CHAN
 RECOMMENDED: M. FOWLER
 APPROVED: R. EDWARDS
 DATE: JAN 21 2011



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED
 [Signature]
 EXECUTIVE DIRECTOR/CEO

THIRD STREET LIGHT RAIL PROGRAM
 PHASE 2 - CENTRAL SUBWAY TUNNELS

UTILITY DEMOLITION
 TBM RETRIEVAL SHAFT
 CTL 80+00 TO 82+25

| |
|--------------------------------------|
| CONTRACT NO. 1252 |
| SFMTA CONTROL NO. CL-18035 |
| DRAWING NO. UD-701 |
| SHEET NO. 08 |
| REVISION 0 |

THIS RECORD CONTAINS SENSITIVE SECURITY INFORMATION THAT IS CONTROLLED UNDER 48 CFR PARTS 15 AND 101. NO PART OF THIS RECORD MAY BE DISCLOSED TO PERSON WITHOUT A NEED TO KNOW, AS DEFINED IN 48 CFR PARTS 15 AND 101, EXCEPT WITH THE WRITTEN PERMISSION OF THE ADMINISTRATOR OF THE TRANSPORTATION SECURITY ADMINISTRATION OR THE SECRETARY OF TRANSPORTATION. UNAUTHORIZED RELEASE MAY RESULT IN CIVIL PENALTY OR OTHER ACTION.

PROJECT NO. CN 1252
 PROJECT NAME: Central Subway Tunnels
 CONTRACTOR: Synergy Project Management, Inc.

REPORT NO. 4337
 DATE PERFORMED 11/21/12
 DATE OF REPORT 11/21/12

The following work was performed this date requiring the use of the Labor Force, Materials, Equipment, Special Forces and Services listed herein:

Work Description: Remove 12" steel pipe ATT vault @ Union & Columbus.

| NAME (FIRST, LAST) | HOURS | |
|--------------------|-------|----|
| | ST | OT |
| Francisco F. | 8 | |
| | | |
| Layona C. | 8 | |
| | | |
| Martin S. | 8 | |
| | | |
| Sepe M. | 8 | |
| | | |
| Rehsio H. | 8 | |
| | | |

| Material | Q/U | Comments |
|----------------------|-----|----------|
| <u>276 inch pipe</u> | | |
| | | |
| | | |
| | | |
| | | |

| Service/Subcontractor | Q/U | Comments |
|-----------------------|-----|----------|
| | | |
| | | |
| | | |
| | | |

| EQUIPMENT DESCRIPTION | Quantity | Active | Standby |
|--------------------------------|----------|--------|---------|
| Backhoe w/Breaker | | | |
| Mini Excavator | | | |
| Large Excavator | | | |
| Dump Truck | | | |
| End Dump | | | |
| Foreman's Truck | 1 | 8 | |
| Tool/Fuel Truck | 1 | 8 | |
| Sawcutter w/ Truck | | | |
| Sawcutter w/ Truck | | | |
| Traffic Control @ Intersection | | | |
| Traffic Control @ Street | 1 | 8 | |
| Triton Barriers | | | |

| EQUIPMENT DESCRIPTION | Quantity | Active | Standby |
|-----------------------|----------|--------|---------|
| Steel Plates | | | |
| Shoring | | | |
| Generator | 1 | 8 | |
| Air Compressor | | | |
| | | | |
| | | | |

| Impacted/Delayed Equipment | Q/U | Comments |
|----------------------------|-----|----------|
| | | |
| | | |
| | | |
| | | |

Does owner want to demobilize equipment? Yes No

Notes:

SFMTA Inspector was called before work was commenced? Yes No
 Daily Force Account Report was filled out at the end of the day the work was performed? Yes No
 SFMTA signature below acknowledges verification of labor, equipment, material, and service/subcontractor hours for quantities only. Costs and contract allowability are subject to review and confirmation for compliance with contract terms and scope of work. Any costs determined not to be allowable for payment shall be deducted from this report prior to final payment.
 Prepared by: [Signature] Date: 11/21/12
 SFMTA Engineer/Inspector: [Signature] Date: 11/27/12

Change Estimate Standards

Labor: Cost for change order labor hours shall align with the prevailing wage rate for each applicable trade designation. These shall align with the approved submittal required in GP 6.04 Sect. A1. Prevailing labor wage rates may be found on the Department of Industrial Relations website (<http://www.dir.ca.gov/OPRL/PWD/>).

Material: Cost for materials applicable to proposed change orders shall be limited to direct cost including sales tax. Delivery costs may be applied if the delivery is strictly due to the proposed change order. See GP 6.04 Sect. A2.

Equipment: Rates used for equipment shall align with the approved submittal required in GP 6.04 Sect. A3. This submittal represents the approved equipment rates showing the lesser rate between the California Department of Transportation's Labor Surcharge & Equipment Rental Rate book and the Machinery Information Division of PRIMEDIA Information, Inc's Rental Rate Blue Book.

Taxes and Labor Burdens:

Social Security – 6.2%*

Medicare – 1.45%*

Federal Unemployment Tax Act. – 0.12%*

State Unemployment Insurance – 1.2%*

City/County Payroll Expense Tax – 1.5%* (www.sftreasurer.org/index.aspx?page=23)

Workers Compensation Insurance – 4.03%*(Backup needed with experience modifier)

*Applied to direct labor plus vacation/holiday fringe

Insurance and Bonding:

General Liability Insurance / Bonding: 2.25% ± 0.75% (Backup needed)

Bonding 0.75% ± 0.25%

Insurance 1.50% ± 0.50%

Overhead and Profit: Mark ups for overhead and profit shall be limited to 15% not to exceed overall markup of 25% of total change once all subcontracting tier mark ups have been applied. Contractors may receive a maximum 5% markup on subcontractors total cost. A detailed explanation of overhead and profit mark ups may be found in GP 6.04 Sect. C.

SFMTA Contract No. 1252

Contractor: Barnard Impregilo Healy JV (BIH)

EVALUATION OF MERIT

COR 066

Recommendation: Accept justification of Merit for COR 066, Retrieval Shaft – 12” Steel Pipe in AT&T Vault.

Facts: On November 21st 2012, The Contractor removed an abandoned 12” steel pipe from AT&T vault No.176 at the intersection of Union Street and Columbus Avenue. The removal of the 12” line was needed to provide access for AT&T to make connections inside this vault. A time extension has not been requested for this work.

Contractor Rationale for COR: The contractor claims that the steel pipe constitutes a differing site condition, as it was not shown on the contract drawings at the time of bid.

Justification: RE has evaluated the conditions outlined in Article 3.04 and found that: conditions differ materially and conditions have caused the scope of work to increase.


RE notes that the Differing Site Condition does not include:

1. All that is indicated in or may reasonably interpreted from the Contract Documents or Reference Documents;
2. All that could be seen on Site by diligent observation;
3. Conditions that are materially similar or characteristically the same as those indicated or described in the Contract Documents or Reference Documents.
4. Conditions where the location of a building component is in the proximity where indicated in or reasonably interpreted from the Contract Documents or Reference Documents.

Change Type: (2) Unforeseen Condition

By: 
Sarah Wilson
Resident Engineer

12/12/12
Date


Configuration Management Board
Approval

12-12-12
Date

CMB Change No.: **CMB – 113**

Initial Implementing Change Control Procedure No.: **1252 –PCC - 03**

GENERAL

Proposed Change Sponsor: S. Wilson Received by CMB: 02/27/2013
(Date)

Affected Disciplines: Temporary Traffic Routing

Impacts of Change Modified Stockton St. Detour Signage Plan


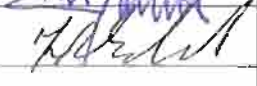

Proposed Contract Change (PCC 03) Amount Not To Exceed \$6,152.60

Contract(s) Directly Affected by this Proposed Change:

| | | | | | | |
|----------------------------|----------------------------|---------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| 1250 | 1251 | 1252 | 1253 | 1254 | 1255 | 1256 |
| 1 <input type="checkbox"/> | 2 <input type="checkbox"/> | 3 <input checked="" type="checkbox"/> | 4 <input type="checkbox"/> | 5 <input type="checkbox"/> | 6 <input type="checkbox"/> | 7 <input type="checkbox"/> |
| (CP01) | (CP02) | (CP03) | (CP04) | (CP05) | (CP06) | (CP07) |

CONFIGURATION MANAGEMENT BOARD APPROVALS

Signatures

| | Agree with the Change | Disagree with the Change | Date |
|----------------------------------|---|--------------------------|-----------|
| Senior Program Manager: | | | |
| Deputy Program Manager: | | | |
| PM Project Services: |  | | 27 Feb 13 |
| PM Project Development/Delivery: |  | | 2/27/2013 |
| SFMTA O & M Manager: | | | |
| SFMTA Safety and Security | | | |
| SFCTA PMO |  | | 27 Feb 13 |

Comments

| PCC 03 | | | | | |
|-----------|---------------|-----------------------------------|--------------------------------------|-----------------|---|
| No. | Activity Name | Days (EE) | Engineer's Estimate (EE) | Comparison* | |
| Labor | 1 | Existing Signs to Remain in Place | 0 | \$ - | |
| | 2 | Install New Temporary Signage | 1.25 | \$ 991.77 | Every work activity shown includes two group three laborers at prevailing wage |
| | 3 | Install New Permanent Signage | 0.5 | \$ 396.71 | |
| | 4 | Remove Existing Signage | 0.25 | \$ 198.35 | |
| Equipment | 1 | Existing Signs to Remain in Place | 0 | \$ - | No equipment was included under the assumption that the work could be performed by ladder |
| | 2 | Install New Temporary Signage | 1.25 | \$ - | |
| | 3 | Install New Permanent Signage | 0.5 | \$ - | |
| | 4 | Remove Existing Signage | 0.25 | \$ - | |
| | | | Material | \$ 2,348.58 | |
| | | | Markup LM&E - 15% | \$ 590.31 | |
| | | | 2nd Tier Subs | \$ - | |
| | | | Markup - 5% | \$ - | |
| | | | Sub. Bond/Insurance 1.50% | \$ 67.89 | |
| | | | Prime Markup - 5% | \$ 229.68 | |
| | | | Prime Bond/Insurance 1.68% | \$ 81.03 | |
| | | | Total | \$ 4,904.32 | |
| | | | RE Recommended NTE Amount: \$ | 6,152.60 | \$4,904.32 (EE) + 955.29 (Truck and Man lift) + 5% (Have not received contractor's cost proposal) |

*The amounts shown in the "Comparison" and "Negotiation Position" columns are fully marked up for easy addition or subtraction from the bottom line

Estimate Summary

General Scope: The scope of work captured in this estimate is for in the removal of 1 existing sign, the installation of 10 new temporary signs and the installation of 3 new permanent signs. There are also 2 existing signs to remain in place, however this is considered a zero cost effort. No removal costs of the new and temporary signs are included in this estimate.

Detailed Scope:

1. Existing Signs to Remain in Place
2. Install New Temporary Signage
3. Install New Permanent Signage
4. Remove Existing Signage

| | Labor | Equipment | Material | Mark Ups | Total |
|----------------------|-------------|-----------|-------------|-----------|-------------|
| Cost Summary: | \$ 1,586.84 | \$ - | \$ 2,348.58 | \$ 968.91 | \$ 4,904.32 |

List of attached documents:

- Detailed Estimate
- Material List
- Prevailing Wage Rates
- Equipment Rates
- Table of Signs & Traffic Detour Plan Legend

Estimate Prepared:
 2/22/2013

| No. | Activity | Days | Hourly rates: | | | | | | | | Labor totals | Equipment | | | | | | | | | | Equipment Totals |
|-----|-----------------------------------|------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------------|--------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------------|------------------|
| | | | Laborer (G3) | Labor Resource | Labor Resource | Labor Resource | Labor Resource | Labor Resource | Labor Resource | Labor Resource | | Equipment | Equipment | Equipment | Equipment | Equipment | Equipment | Equipment | Equipment | Equipment | Equipment | |
| | | | \$ 49.59 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | | |
| 1 | Existing Signs to Remain in Place | 0 | | | | | | | | \$ - | | | | | | | | | | | \$ - | |
| 2 | Install New Temporary Signage | 1.25 | 2 | | | | | | | \$ 991.77 | | | | | | | | | | | \$ - | |
| 3 | Install New Permanent Signage | 0.5 | 2 | | | | | | | \$ 396.71 | | | | | | | | | | | \$ - | |
| 4 | Remove Existing Signage | 0.25 | 2 | | | | | | | \$ 198.35 | | | | | | | | | | | \$ - | |
| 5 | Total | | | | | | | | | \$ 1,586.84 | | | | | | | | | | | \$ - | |

| | | |
|-------------------------------------|-----------|-----------------|
| Labor | \$ | 1,586.84 |
| Material | \$ | 2,348.58 |
| Equipment | \$ | - |
| 2nd Tier Sub | \$ | - |
| Markup on 2nd Tier Sub - 5% | \$ | - |
| 1st Tier Sub OH&P - 15% | \$ | 590.31 |
| 1st Tier Sub Bond/Insurance - 1.50% | \$ | \$67.89 |
| Prime - Markup - 5% | \$ | 229.68 |
| Prime - Bond/Insurance - 1.68% | \$ | \$81.03 |
| Total Amount | \$ | 4,904.32 |

Assumptions:

Labor Burdens: FICA SS 6.2% - FICA Medicare 1.45% - FUTA .12% - SUTA 1.2% - SF Pay 1.5% - WC 4.03%

Shift Duration: 8hrs

Estimated By: Kenneth Barnhart

2/22/2013

Checked By: Charles Dombrowski

2/22/2013

| Material | Qty. | Unit | Unit Price | Extension |
|--|------|------|-----------------|--------------------|
| Sign #7 & 43 - E7 - 4th/101/Ver (Existing to Remain) | | | | |
| Sign #8 & #9 - 101+DV - S101 Detour Ver | 2 | ea. | \$ 133.98 | \$ 267.96 |
| Sign #10 101+DL - S101 Detour Lt | 1 | ea. | \$ 133.98 | \$ 133.98 |
| Sign #11 - 101+80+DR - S101, E80, Detour Rt | 1 | ea. | \$ 210.11 | \$ 210.11 |
| Sign #12, #13, #19 & #20 - 101+80+DV - S101, E80, Detour Ver | 4 | ea. | \$ 210.11 | \$ 840.42 |
| Sign #14 - 101+80+DL - S101, E80, Detour Lt | 1 | ea. | \$ 210.11 | \$ 210.11 |
| Sign #17 - A - Stockton Closed | 1 | ea. | \$ 170.52 | \$ 170.52 |
| Sign #18 - G1 - S101 Ver | 1 | ea. | \$ 73.08 | \$ 73.08 |
| Sign #49 - G4 - E80, Ver | 1 | ea. | \$ 109.62 | \$ 109.62 |
| Sign #50 - G5 - E80, Lt | 1 | ea. | \$ 109.62 | \$ 109.62 |
| | | | | \$ - |
| | | | Sales Tax 8.75% | \$ 180.66 |
| | | | Shipping 2% | \$ 42.51 |
| Total | | | | \$ 2,348.58 |

2nd Tier Sub Quote

\$ -

Prevailing Labor Rates - SF

<http://www.dir.ca.gov>

| | | Social Security | Medicare | FUTA | SUTA | SF Pay | WC | Vacation/Holiday | Other Fringes | |
|--------------------------------|----------|-----------------|----------|---------|---------|---------|---------|------------------|---------------|----------------|
| | | 6.20% | 1.45% | 0.12% | 1.20% | 1.50% | 4.03% | | | Fully Burdened |
| Labor Resource | | | | | | | | | | 0 |
| Carpenter | \$ 38.50 | \$ 2.64 | \$ 0.62 | \$ 0.05 | \$ 0.51 | \$ 0.64 | \$ 1.71 | \$ 4.05 | \$ 21.77 | \$ 70.49 |
| Cement Mason | \$ 28.65 | \$ 2.09 | \$ 0.49 | \$ 0.04 | \$ 0.41 | \$ 0.51 | \$ 1.36 | \$ 5.14 | \$ 16.82 | \$ 55.51 |
| Electrician (Inside Wireman) | \$ 54.87 | \$ 3.72 | \$ 0.87 | \$ 0.07 | \$ 0.72 | \$ 0.90 | \$ 2.42 | \$ 1.64 | \$ 23.95 | \$ 89.16 |
| Flag Person | \$ 26.89 | \$ 1.82 | \$ 0.43 | \$ 0.04 | \$ 0.35 | \$ 0.44 | \$ 1.18 | \$ 2.48 | \$ 14.62 | \$ 48.25 |
| Iron Worker | \$ 33.00 | \$ 2.29 | \$ 0.54 | \$ 0.04 | \$ 0.44 | \$ 0.55 | \$ 1.49 | \$ 3.92 | \$ 21.37 | \$ 63.64 |
| Laborer (G3) | \$ 26.89 | \$ 1.82 | \$ 0.43 | \$ 0.04 | \$ 0.35 | \$ 0.44 | \$ 1.18 | \$ 2.48 | \$ 15.96 | \$ 49.59 |
| Laborer (G2) | \$ 26.99 | \$ 1.83 | \$ 0.43 | \$ 0.04 | \$ 0.35 | \$ 0.44 | \$ 1.19 | \$ 2.48 | \$ 15.96 | \$ 49.70 |
| Operating Engineer (OE) (G2) | \$ 36.24 | \$ 2.48 | \$ 0.58 | \$ 0.05 | \$ 0.48 | \$ 0.60 | \$ 1.61 | \$ 3.70 | \$ 22.77 | \$ 68.50 |
| Operating Engineer (OE) (G3) | \$ 34.76 | \$ 2.38 | \$ 0.56 | \$ 0.05 | \$ 0.46 | \$ 0.58 | \$ 1.55 | \$ 3.70 | \$ 22.77 | \$ 66.81 |
| Pile Driver (PD) (G2) | \$ 37.17 | \$ 2.53 | \$ 0.59 | \$ 0.05 | \$ 0.49 | \$ 0.61 | \$ 1.65 | \$ 3.70 | \$ 22.77 | \$ 69.57 |
| Plumber Utility Pipe Fitter | \$ 51.00 | \$ 3.18 | \$ 0.74 | \$ 0.06 | \$ 0.62 | \$ 0.77 | \$ 2.07 | \$ 0.30 | \$ 29.65 | \$ 88.39 |
| Teamster | \$ 27.43 | \$ 1.83 | \$ 0.43 | \$ 0.04 | \$ 0.35 | \$ 0.44 | \$ 1.19 | \$ 2.15 | \$ 20.42 | \$ 54.29 |
| Traffic Control Person I | \$ 27.19 | \$ 1.84 | \$ 0.43 | \$ 0.04 | \$ 0.36 | \$ 0.45 | \$ 1.20 | \$ 2.48 | \$ 14.62 | \$ 48.59 |
| Traffic Control Person II | \$ 24.69 | \$ 1.68 | \$ 0.39 | \$ 0.03 | \$ 0.33 | \$ 0.41 | \$ 1.09 | \$ 2.48 | \$ 14.62 | \$ 45.73 |
| Scaffold / Shoring Erector | \$ 38.65 | \$ 2.65 | \$ 0.62 | \$ 0.05 | \$ 0.51 | \$ 0.64 | \$ 1.72 | \$ 4.05 | \$ 21.77 | \$ 70.66 |
| Elevator Mechanic/Constructor | \$ 57.29 | \$ 3.77 | \$ 0.88 | \$ 0.07 | \$ 0.73 | \$ 0.91 | \$ 2.45 | \$ 3.44 | \$ 23.84 | \$ 93.37 |
| Elevator Mechanic Helper | \$ 40.10 | \$ 2.70 | \$ 0.63 | \$ 0.05 | \$ 0.52 | \$ 0.65 | \$ 1.75 | \$ 3.44 | \$ 23.84 | \$ 73.69 |
| Asbestos Removal Specialist II | \$ 24.87 | \$ 1.67 | \$ 0.39 | \$ 0.03 | \$ 0.32 | \$ 0.40 | \$ 1.08 | \$ 2.02 | \$ 10.53 | \$ 41.32 |
| Lead Removal Worker | \$ 36.25 | \$ 2.36 | \$ 0.55 | \$ 0.05 | \$ 0.46 | \$ 0.57 | \$ 1.54 | \$ 1.85 | \$ 6.09 | \$ 49.71 |
| Surveyor Chief of Party | \$ 37.19 | \$ 2.51 | \$ 0.59 | \$ 0.05 | \$ 0.49 | \$ 0.61 | \$ 1.63 | \$ 3.32 | \$ 21.18 | \$ 67.56 |
| Surveyor Chainman/Rodman | \$ 31.22 | \$ 2.14 | \$ 0.50 | \$ 0.04 | \$ 0.41 | \$ 0.52 | \$ 1.39 | \$ 3.32 | \$ 21.18 | \$ 60.73 |

| Equipment | Caltrans Page No | CalTrans Category Sub-Category Rental Quote/ Code | Hourly Rate | Delay Factor | Standby Rate |
|---|------------------|---|-----------------|--------------|----------------|
| Equipment | | | \$ - | | |
| 1 Work Truck | 34 | TRUCK | \$ 33.12 | 0.14 | \$ 4.64 |
| 2 Dump truck - 3-axle | 34 | TRUON | \$ 66.43 | 0.16 | \$ 10.63 |
| 3 Tow Behind Trailer | 33 | TRAIT | \$ 5.72 | 0.42 | \$ 2.40 |
| 4 End Dump - 5-axle | 34 | TRUON | \$ 83.50 | 0.16 | \$ 13.36 |
| 5 Generator | 6 | ELGEN | \$ 14.18 | 0.11 | \$ 1.56 |
| 6 Air Compressor | 1 | AIRCP | \$ 34.31 | 0.12 | \$ 4.12 |
| 60-90 Lb. Jack-hammer | 1 | AIRTOL | \$ 1.31 | 0.61 | \$ 0.80 |
| Air compressor, hoses & hammer total | | | \$ 35.62 | | \$ 4.92 |
| 7 Arc Welder | 34 | WELD | \$ 11.87 | 0.18 | \$ 2.14 |
| Welding Rods | N/A | N/A | \$ 5.34 | | \$ - |
| F250 | 34 | TRUCK | \$ 33.12 | 0.14 | \$ 4.64 |
| Welder and Truck | | | \$ 50.33 | | \$ 6.77 |
| 8 Torches and Tanks | 34 | WELD | \$ 0.24 | 0.18 | \$ 0.04 |
| Oxygen Tank and Acetylene Tank | N/A | N/A | \$ 38.70 | | \$ - |
| Total Torches and Tanks | | | \$ 38.94 | | \$ 0.04 |
| 9 Rotohammer | 6 | ELTOL | \$ 0.44 | 0.61 | \$ 0.27 |
| Generator | 6 | ELGEN | \$ 14.18 | 0.11 | \$ 1.56 |
| Rotohammer and Generator | | | \$ 14.62 | | \$ 1.83 |
| 10 Rivet Buster | 1 | AIRTOL | \$ 1.31 | 0.61 | \$ 0.80 |
| Air Compressor | 1 | AIRCP | \$ 20.01 | 0.12 | \$ 2.40 |
| Rivet Buster and Air Compressor | | | \$ 21.32 | | \$ 3.20 |
| 11 Compactor, Hand Guided | 4 | COMHG | \$ 8.82 | 0.18 | \$ 1.59 |
| 12 Bobcat 763 | 31 | TRACS | \$ 25.35 | 0.11 | \$ 2.79 |
| 13 Backhoe (John Deere ID 310G) | 18 | LDDRT | \$ 62.87 | 0.12 | \$ 7.54 |
| Clam Shell Bucket | 1 | N/A | \$ 9.29 | 0.12 | \$ 1.11 |
| Backhoe w/ Clam Shell total | | | \$ 72.16 | | \$ 8.66 |
| 14 Breaker attachment for Backhoe | 7 | HAMMR | \$ 42.26 | 0.23 | \$ 9.72 |
| 15 Mini Excavator (Kubota U45) | N/A | N/A | \$ 63.79 | 0.18 | \$ 11.48 |

| | | | | | |
|---|-----|-----------|-----------------|------|----------------|
| 17 New Holland Excavator (E135) | N/A | N/A | \$ 120.13 | 0.18 | \$ 21.62 |
| 18 Ride-on Sweeper | | 4 BRMSW | \$ 145.11 | 0.14 | \$ 20.32 |
| 19 Bituminous Distributor | | 4 BITDT | \$ 6.52 | 0.14 | \$ 0.91 |
| Work truck | | 33 TRUCK | \$ 33.12 | 0.14 | \$ 4.64 |
| Bituminous Distributor with truck | | | \$ 39.64 | | \$ 5.55 |
| 20 Fork Lift Truck | | 6 FKLFT | \$ 27.14 | 0.20 | \$ 5.43 |
| 21 Concrete Saw | | 28 SAWCO | \$ 19.63 | 0.14 | \$ 2.75 |
| Saw blade 12" x \$18 per hour (100 LF) | | 28 SAWCO | \$ 216.00 | 0.14 | \$ 30.24 |
| Concrete Saw and Blade | | | \$ 235.63 | | \$ 32.99 |
| 22 Water Pump | | 22 PUMWA | \$ 22.61 | 0.35 | \$ 7.91 |
| 23 Confined Space Equipment | | | | | |
| Gas Detector 4-Gas w/ Motorized Integral Pump | | | \$22.79 | | |
| Blower Portable w/ 8"x15' Hose | | | \$8.82 | | |
| Retrieval 65' Winch for Tripod SCBA-NFPA Approved 2216 PSI Complete alrpeck | | | \$11.53 | | |
| | | | \$9.03 | | |
| Total Confined Space | | | \$52.15 | | |
| 24 Traffic Control (per street, intersection = x2 streets) | | | | | |
| Construction Signs | | 32 TR AFC | \$2.43 | | |
| Changeable Message Boards | | 32 TR AFA | \$9.92 | | |
| Arrow Board | | 32 TR AFA | \$3.20 | | |
| No Parking Signs (A-frames) | | 32 TR AFC | \$0.22 | | |
| Cones (per 100) | | 32 TR AFC | \$13.27 | | |
| 25 Interlocking Water Filled Triton Barrier | | N/A N/A | \$1.61 | | |
| \$30 per day /8 plus tax | | | | | |
| 26 Traffic Plates Installed | | | | | |
| Total per Plate (small) | | N/A N/A | \$4.61 | | |
| Total per Plate (large) | | N/A N/A | \$7.19 | | |
| 27 Trench Shoring (4' wide trends) | | | | | |
| Total per trench shore | | | \$0.48 | | |

101+DR
E0+DL

S 101, DETOUR Rt
E00, DETOUR Lt

Existing/Remain 1st
New Temp 1000
New Perm 3rd
Remove 1st

| Sign # | Signs | CEN SUBWAY Legend | Color | Street | Cross Street | Facing | Mounting | Action |
|--------|--------|-----------------------------------|--------|-----------|--------------------------------|--------|-----------------------|----------------|
| 1 | B | Stockton Closed | Orange | Stockton | bush/Portal | SB | Street Light | NEW Temp |
| 2 | 101+DR | S 101 Detour Rt | Orange | Stockton | Sutter (NW) | SD | Street Light | NEW Temp |
| 3 | 101+DV | S 101 Detour Ver | Orange | Sutter | Powell (NW) | WB | Street Light | NEW Temp |
| 4 | 101+DV | S 101 Detour Ver | Orange | Sutter | Mason (NW) | WB | Street Light / Mount | NEW Temp |
| 5 | 101+DV | S 101 Detour Ver | Orange | Sutter | Jones (NW) | WB | Street Light / Mount | NEW Temp |
| 6 | 101+DL | S 101 Detour Lt | Orange | Sutter | Hyde (SE) | WB | Street Light / Mount | NEW Temp |
| 7 | E7 | 4th / 101 / Ver | Orange | Geary | Powell (NW) | WB | | Exist's/Remain |
| 8 | 101+DV | S 101 Detour Ver | Orange | Geary | Mason (NW) | WB | Street Light | NEW Temp |
| 9 | 101+DV | E 101 Detour Ver | Orange | Geary | Jones (NW) | WB | Street Light | NEW Temp |
| 10 | 101+DL | S 101 Detour Lt | Orange | Geary | Hyde (SE) | WB | Street Light | NEW Temp |
| 11 | 101+DR | S 101, E 80, Detour Rt | Orange | Ellis | Garage Exit | 1A | Temp | NEW Temp |
| 12 | 101+DR | S 101, E 80, Detour Ver | Orange | Ellis | Mason (NW) | WB | Street Light | NEW Temp |
| 13 | 101+DR | S 101, E 80, Detour Ver | Orange | Ellis | Jones (NW) | WB | Street Light | NEW Temp |
| 14 | 101+DL | S 101, E 80, Detour Lt | Orange | Ellis | Hyde (SE) | WB | Street Light | NEW Temp |
| 15 | 101+DV | S 101 Detour Ver | Orange | Hyde | Post (SW) | SB | Street Light | NEW Temp |
| 16 | 80+DR | E 80 Detour Rt | Orange | O'Farrell | Larkin Hyde (Midblock) | EB | Street Light | NEW Temp |
| 17 | A | Stockton Closed | Orange | O'Farrell | Hyde (SE) | EB | Street Light | NEW Temp |
| 18 | 101 | S 101 Ver | GREEN | Hyde | O'Farrell (SW) | SB | Street Light | PERM NEW |
| 19 | 101+DR | S 101, E 80, Detour Ver | Orange | Hyde | Eddy (SW) | SB | Street Light | NEW Temp |
| 20 | 101+DR | S 101, E 80, Detour Ver | Orange | Hyde | Golden Gate (SW) | SB | Street Light | NEW Temp |
| 21 | G2 | S 101, E 80, Ver | GREEN | 5th St | Market (SW) | SB | Street Light | PERM NEW |
| 22 | G2 | S 101 Rt / E 80 Ver | GREEN | 5th St | Howard (NE) | SB | Street Light | PERM NEW |
| 23 | G3 | S 101 Lt | GREEN | Howard | 10th St (SE) | WB | Street Light | PERM NEW |
| 24 | G4 | E 80 Ver | GREEN | 5th St | Folsom (SW) | SB | Signal / Street Light | PERM NEW |
| 25 | G5 | E 80 Lt | GREEN | 5th St | Bryant (NW) | SB | Street Light | PERM NEW |
| 26 | E3 | 4th St / 80 / Lt | Orange | Stockton | Sutter-Post (Midblock) | SB | | Exist's/Remain |
| 27 | B | Stockton Closed at Geary | Orange | Post | Powell-Stockton (Midblock-S/W) | EB | Street Light | NEW Temp |
| 28 | 80+DV | E 80 Detour Ver | Orange | Post | Stockton (SW) | EB | Street Light | NEW Temp |
| 29 | 80+DR | Parking / Unload Sq / Ver | Orange | Post | Stockton (SW) | EB | | Remove |
| 29 | 80+DV | E 80 Detour Ver | Orange | Post | Keney (SW) | EB | Street Light | NEW Temp |
| 30 | 80+DR | E 80 Detour Rt | Orange | Post | Montgomery (SE) | EB | Signal | NEW Temp |
| 31 | E4 | 4th St / 80 / Ver | Orange | NewMontg | Market (SE) | SB | | Exist's/Remain |
| 32 | A | Stockton Closed | Orange | O'Farrell | Powell-Stockton (Midblock-N) | EB | Street Light | NEW Temp |
| 33 | 80+DL | E 80 Detour Lt | Orange | O'Farrell | Grant/Market (SW) | EB | Street Light | NEW Temp |
| 34 | 80+DL | 4th St / 80 / Ver | Orange | O'Farrell | Grant/Market (SW) | EB | | Remove |
| 35 | 80+DV | E 80 Detour Ver | Orange | Grant | O'Farrell (NE) | WB | Street Light | NEW Temp |
| 36 | 80+DR | E 80 Detour Rt | Orange | Grant | Post (SE) | WB | Street Light | NEW Temp |
| 36 | G1 | 80, 101 Left Lane | GREEN | NewMontg | Niagara (NE) | SB | | PERM NEW |
| 36 | E1 | 80, 101 Left Lane | Orange | NewMontg | Niagara (NE) | SB | | Remove |
| 37 | G6 | S 101, E 80, Rt | GREEN | NewMontg | Howard (S) | SB | Street Light | PERM NEW |
| 37 | 80+DR | 101, 280 Rt | GREEN | NewMontg | Howard (S) | SB | | Remove |
| 37 | 80+DR | 4th St / Detour Lt | Orange | NewMontg | Howard (S) | SB | | Remove |
| 38 | G7 | S 101, E 80, Lt | GREEN | Howard | Hawthorne (SW) | WB | Signal | PERM NEW |
| 39 | G20 | S 101 Ver / E 80 Lt | GREEN | Hawthorne | Folsom (NW) | SB | | PERM NEW |
| 39 | E5 | S 101 Detour Ver / E 80 Detour Lt | Orange | Hawthorne | Folsom (NW) | SB | | Remove |
| 40 | E6 | 4th St / 101 / Rt | GREEN | Hawthorne | Harban (NW) | SB | | PERM NEW |
| 40 | E6 | 4th St / 101 / Rt | Orange | Hawthorne | Harban (NW) | SB | | Remove |
| 41 | 101+DR | S 101 Detour Rt | Orange | O'Farrell | Van Ness (NW) | EB | Street Light | NEW Temp |
| 42 | E4 | 4th St / 80 / Ver | Orange | Post | Stockton (E/O) | EB | | Exist's/Remain |
| 43 | E7 | 4th St / 101 / Ver | Orange | Geary | Stockton (W/O) | EB | | Exist's/Remain |
| 44 | 80+DR | 4th St / 101 / Lt | Orange | Geary | Mason (NE) | EB | | Remove |
| 45 | E2 | 4th St / Right Lane | Orange | NewMontg | Niagara (NW) | SB | | Exist's/Remain |
| 46 | E7 | 4th St / 101 / Ver | Orange | 5th St | Market (SW) | SB | | Exist's/Remain |
| 47 | E6 | S 101 Ver | Orange | 5th St | Mission (NW) | SB | | Exist's/Remain |
| 48 | E4 | 4th St / 80 / Ver | Orange | O'Farrell | Stockton (E/O) | EB | | Exist's/Remain |
| 49 | G4 | E 80 Ver | GREEN | 4th St | Market (SW) | SB | Street Light | PERM NEW |
| 50 | G5 | E 80 Lt | GREEN | 4th St | Folsom (SE) | SB | Street Light | PERM NEW |

A
B
C
D
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G
H
I
J
K
L
M
N
O

49 G4
50 G5

E 80 Ver Green 4th
E 80 Lt Green 4th

Market (SW) SB Street Light PERM NEW
Folsom (SE) SB Street Light PERM NEW

PROPOSED CONTRACT CHANGE

Contract No. 1252 Tunnels
 PCC No 1252-3 (Revision 01)
 PCC Title Modified Stockton Detour Signage Plan

Date 02/22/2013

Description of PCC:

Summary of Changes:

- 1 10 New Temporary Signs to be installed per attached Table of Signs;
- 2 2 Existing Signs to remain in place per attached Table of Signs;
- 3 3 New Permanent Signs to be installed per attached Table of Signs;
- 4 1 Existing Signs to be removed per attached Table of Signs.

Spec Ref. CN 1252 Tunnels

Drawing Nos. N/A

Attachments Attachment No. 01 - Modified Stockton Detour Signage Plan
 Attachment No. 02 - Table of Signs

The Contractor's proposal in price and time is required on the this proposed contract change to the subject contract in accordance with the General Provisions Section 6.02 B, within 14 days after receipt of a PCC.

Recommended by: 
 Sarah Wilson, Resident Engineer (SFMTA Representative)

Date 2/27/13

Concur in Principle: 
 Mark Benson, Construction Manager (SFMTA Representative)

Date 2/27/13

FINDING OF FACTS

Contract No. & Name: 1252 - Tunnels Date: 02/22/13
 PCC No. & Title: 1252-3 (Revision 01) Modified Stockton Detour Signage Plan
 Initiative (Name & Dept.): Sarah Wilson, Central Subway Project

What (Description of PCC)

Summary of Changes:

1. 10 New Temporary Signs to be installed per attached Table of Signs.
2. 2 Existing Signs to remain in place per attached Table of Signs.
3. 3 New Permanent Signs to be installed per attached Table of Signs.
4. 1 Existing Signs to be removed per attached Table of Signs.

Why (Reason for Requesting PCC)

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. The remainder of the detour signage for Union square will be installed under the 1300 Contract. The following items listed below represent the reasons why the City Traffic Engineer has requested the installation of these detour signs now under the 1252 Contract:

- To avoid having vehicles travel on Mason and 5th Streets because all buses have been rerouted since construction began on Stockton and 4th Streets.
- To discourage drivers from making a left onto SB Powell St. after all vehicles are forced to make a right from SB Stockton St. onto Westbound Geary St. SFMTA has received complaints about how the vehicle traffic on Powell St. impacts the cable car operations.
- To encourage drivers trying to access Hwy 101 to continue on Geary St. until Hyde St.
- To encourage vehicles exiting the Ellis-O'Farrell Garage on Ellis St. to make a right to WB Ellis if they are trying to access Hwy 101 and to make a left to EB Ellis St. if they are trying to access Interstate 80 (Bay Bridge).
- To encourage drivers trying to access Hwy 101 to continue along Ellis until Hyde St. For drivers trying to access the Bay Bridge, this change will have them cross Market St. from Ellis St. onto 4th St.
- SFMTA will work with the operator of the Ellis-O'Farrell Garage to encourage drivers to use the Ellis St. exit instead of the O'Farrell St. exit. Drivers that exit on O'Farrell will end up driving on Market if they are trying to go South of Market, but we are trying to not add traffic to Market Street.

Where (Location, Station)

See Attachment No. 01 - Modified Stockton Detour Signage Plan

| | |
|--|--|
| When (Occurrence date, action date, potential time impact) | Implement Changes described above in Early March 2013 |
| How (Recommendation of Action) | Utilize Contract 1252 to implement Changes described above. |
| Estimate (Summary of Engineer's Estimate w/EE attached) | TBD |
| Spec Ref | CN 1252 Section 01 55 28 Traffic Control |
| Drawing Nos | CN 1252 Temporary Traffic Routing Attachment No. 01 - Modified Stockton Detour Signage Plan Attachment No. 02 - Table of Signs |
| The Contractor's proposal in price and time is required on this proposed contract change to the subject contract in accordance with the General Provisions Section 6 02 B within 14 days after receipt of a POC. | |

Prepared by



Sarah Wilson, Resident Engineer
SFMTA Representative

2/27/13
Date

T:\E_FILES\Construction\Section_PERSONNEL\Broody\Central_Subway\Central_Subway\Detour\Signs\Detour_Signs (used).CmpSubwaying.socopy Tue Sep 25, 2012 - 4:16 pm Layout

DETOUR SIGNS
Black on orange

- A** Stockton CLOSED USE DETOURS 48"x42"
 - 6"UC / 4"LC black on orange
 - orange on black 8"UC
 - black on orange 4"UC
- B** Stockton CLOSED at Geary USE DETOURS 48"x42"
 - 6"UC / 4"LC black on orange
 - orange on black 8"UC
 - black on orange 4"UC
- 101** SOUTH 101 30"x24"
 - 5"-UC
 - 6"-101 black on orange
- 80** EAST 80 30"x30"
 - 5"-UC
 - 8"-80 black on orange
- M4-10R** DR DETOUR 48"x18" black & orange
- M4-10L** DL DETOUR 48"x18" black & orange
- SC3(Ca)** DV DETOUR 48"x18" black & orange

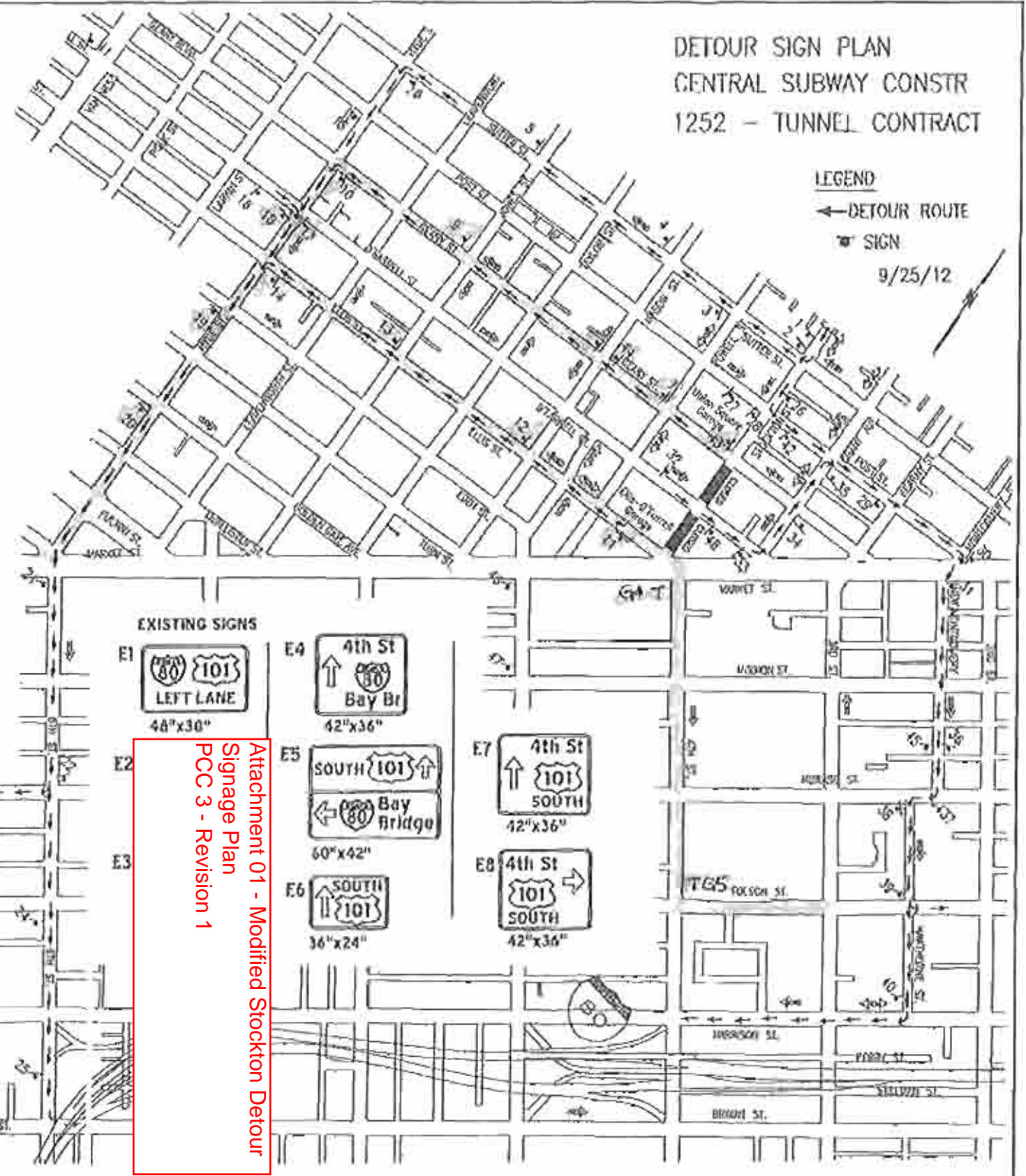
GUIDE SIGNS
white on green (with color shields)

- G1** SOUTH 101 36"x24"
 - 5"-UC
 - 6"-101
- G2** SOUTH 101 36"x24"
 - 5"-UC
 - 6"-101
- G3** SOUTH 101 36"x24"
 - 5"-UC
 - 6"-101
- G4** Bay Br 80 36"x36"
 - 8"-80
 - 6"UC/4"LC
- G5** Bay Br 80 36"x36"
 - 8"-80
- G6** Bay Br 80 101 36"x36"
 - 8"-80
 - 6"-101
- G7** Bay Br 80 101 36"x36"
 - 8"-80
 - 6"-101

- G8** Bay Br 80 SOUTH 101 36"x54"
 - 8"-80
 - 6"UC/4"LC
 - 5"-UC
 - 6"-101
- G9** Bay Br 80 SOUTH 101 36"x54"
 - 8"-80
 - 6"UC/4"LC
 - 5"-UC
 - 6"-101
- G10** Bay Br 101 SOUTH 80 36"x54"
 - 5"-UC
 - 6"-101
 - 8"-80
 - 6"UC/4"LC
- G11** Bay Br 80 101 LEFT LANE 48"x30"
 - 6"-80
 - 6"-101
 - 5"-UC

DETOUR SIGN PLAN
CENTRAL SUBWAY CONSTR
1252 - TUNNEL CONTRACT

LEGEND
 ← DETOUR ROUTE
 ■ SIGN
 9/25/12



NOTES:
 Detour signs to be all black on reflective orange
 Guide signs to be reflective white on green (101: black on white)(80:white on blue and red)
 "UC" = Upper case lettering / "LC" = Lower Case lettering
 Numerals in shields shall be 6" or 8" in height (as shown above)
 "E" Series signs are existing to remain All signs mounted at min 7 feet high.

SFMTA



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

THIRD STREET LIGHT RAIL PROGRAM
PHASE 2 - CENTRAL SUBWAY

TRAFFIC DETOUR PLAN

| | | | |
|------|-------------|----|-----|
| DATE | DESCRIPTION | BY | CHK |
| | | | |
| | | | |
| | | | |
| | | | |

101+DR
80+DL

S 101, Detour E
E 80, Detour LT

| Signal # | Signs | CEN SUBWAY Legend | Colour | Street | Cross Street | Facing | Mounting | Action |
|----------|-----------|-----------------------------------|--------|-----------|--------------------------------|--------|-----------------------|--------------|
| 1 | B | Stockton Closed at Geary | Orange | Stockton | Bush/Park | SB | Street Light | NEW Temp |
| 2 | 101+DR | S 101 Detour Rt | Orange | Stockton | Sutter (NW) | SB | Street Light | NEW Temp |
| 3 | 101+DV | S 101 Detour Ver | Orange | Sutter | Powell (NW) | WB | Street Light | NEW Temp |
| 4 | 101+DV | S 101 Detour Ver | Orange | Sutter | Mason (NW) | WB | Street Light / Muni | NEW Temp |
| 5 | 101+DV | S 101 Detour Ver | Orange | Sutter | Jones (NW) | WB | Street Light / Muni | NEW Temp |
| 6 | 101+DL | S 101 Detour Lt | Orange | Sutter | Hyde (SE) | WB | Street Light / Muni | NEW Temp |
| 7 | 17 | 4th / 101 / Ver | Orange | Geary | Powell (NW) | WB | | Exist/Remain |
| 8 | 101+DV | S 101 Detour Ver | Orange | Geary | Mason (NW) | WB | Street Light | NEW Temp |
| 9 | 101+DV | S 101 Detour Ver | Orange | Geary | Jones (NW) | WB | Street Light | NEW Temp |
| 10 | 101+DL | S 101 Detour Lt | Orange | Geary | Hyde (SE) | WB | Street Light | NEW Temp |
| 11 | 101+80+DR | S 101, E 80 Detour Rt | Orange | Ellis | Garage Exit | SB | Temp | NEW Temp |
| 12 | 101+80+DV | S 101, E 80 Detour Ver | Orange | Ellis | Mason (NW) | WB | Street Light | NEW Temp |
| 13 | 101+80+DV | S 101, E 80 Detour Ver | Orange | Ellis | Jones (NW) | WB | Street Light | NEW Temp |
| 14 | 101+80+DL | S 101, E 80 Detour Lt | Orange | Ellis | Hyde (SE) | WB | Street Light | NEW Temp |
| 15 | 101+DV | S 101 Detour Ver | Orange | Hyde | Post (SW) | SB | Street Light | NEW Temp |
| 16 | 80+DR | E 80 Detour Rt | Orange | O'Farrell | Larkin-Hyde (Midblock) | EB | Street Light | NEW Temp |
| 17 | A | Stockton Closed | Orange | O'Farrell | Hyde (SE) | EB | Street Light | NEW Temp |
| 18 | G1 | S 101 Ver | GREEN | Hyde | O'Farrell (SW) | SB | Street Light | PERM NEW |
| 19 | 101+80+DV | S 101, E 80 Detour Ver | Orange | Hyde | Eddy (SW) | SB | Street Light | NEW Temp |
| 20 | 101+80+DV | S 101, E 80 Detour Ver | Orange | Hyde | Golden Gate (SW) | SB | Street Light | NEW Temp |
| 21 | G8 | S 101, E 80, Ver | GREEN | 15th St | Market (SW) | SB | Street Light | PERM NEW |
| 22 | G9 | S 101 Rt / E 80 Ver | GREEN | 15th St | Howard (SE) | SB | Street Light | PERM NEW |
| 23 | G3 | S 101 Lt | GREEN | Howard | 15th St (SE) | WB | Street Light | PERM NEW |
| 24 | G4 | E 80 Ver | GREEN | 16th St | Folsom (SW) | SB | Signal / Street Light | PERM NEW |
| 25 | G5 | E 80 Lt | GREEN | 16th St | Bryant (SW) | SB | Street Light | PERM NEW |
| 26 | E3 | 4th St / 80 / Lt | Orange | Stockton | Sutter-Post (Midblock) | SB | | Exist/Remain |
| 27 | B | Stockton Closed at Geary | Orange | Post | Powell-Stockton (Midblock S/S) | EB | Street Light | NEW Temp |
| 28 | 80+DV | E 80 Detour Ver | Orange | Post | Stockton (SW) | EB | Street Light | NEW Temp |
| 28 | - | Parking / Italian Sq / Ver | Orange | Post | Stockton (SW) | EB | | Remove |
| 29 | 80+DV | E 80 Detour Ver | Orange | Post | Kearney (SW) | EB | Street Light | NEW Temp |
| 30 | 80+DR | E 80 Detour Rt | Orange | Post | Montgomery (SE) | EB | Signal | NEW Temp |
| 31 | E4 | 4th St / 80 / Ver | Orange | NewMontg | Market (SE) | SB | | Exist/Remain |
| 32 | A | Stockton Closed | Orange | O'Farrell | Powell-Stockton (Midblock-NG) | EB | Street Light | NEW Temp |
| 33 | 80+DL | E 80 Detour Lt | Orange | O'Farrell | Grant/Market (SW) | EB | Street Light | NEW Temp |
| 33 | - | 4th St / 80 / Ver | Orange | O'Farrell | Grant/Market (SW) | EB | | Remove |
| 34 | 80+DV | E 80 Detour Ver | Orange | Grant | O'Farrell (NE) | WB | Street Light | NEW Temp |
| 35 | 80+DR | E 80 Detour Rt | Orange | Grant | Post (SE) | WB | Street Light | NEW Temp |
| 36 | G11 | 80, 101 Left Lane | GREEN | NewMontg | Natoma (NE) | SB | | PERM NEW |
| 36 | E1 | 80, 101 Left Lane | Orange | NewMontg | Natoma (NE) | SB | | Remove |
| 37 | G2 | S 101, E 80, Rt | GREEN | NewMontg | Howard (E) | SB | Street Light | PERM NEW |
| 37 | - | 101, 280 Rt | GREEN | NewMontg | Howard (E) | SB | | Remove |
| 37 | - | 4th St / Detour Lt | Orange | NewMontg | Howard (E) | SB | | Remove |
| 38 | G7 | S 101, E 80, Lt | GREEN | Howard | Hawthorne (SW) | WB | Signal | PERM NEW |
| 39 | G10 | S 101 Ver / E 80 St | GREEN | Hawthorne | Folsom (NW) | SB | | PERM NEW |
| 39 | E5 | S 101 Detour Ver / E 80 Detour Lt | Orange | Hawthorne | Folsom (NW) | SB | | Remove |
| 40 | E8 | 4th St / 101 / Rt | GREEN | Hawthorne | Harrison (SW) | SB | | PERM NEW |
| 40 | E8 | 4th St / 101 / Rt | Orange | Hawthorne | Pierceson (NW) | SB | | Remove |
| 41 | 101+DR | S 101 Detour Rt | Orange | O'Farrell | Van Ness (NW) | EB | Street Light | NEW Temp |
| 42 | E4 | 4th St / 80 / Ver | Orange | Post | Stockton (E/O) | WB | | Exist/Remain |
| 43 | E7 | 4th St / 101 / Ver | Orange | Geary | Stockton (W/O) | EB | | Exist/Remain |
| 44 | - | 4th St / 101 / Lt | Orange | Geary | Mason (NE) | EB | | Remove |
| 45 | E2 | 4th St / Right Lane | Orange | NewMontg | Natoma (NW) | SB | | Exist/Remain |
| 46 | E7 | 4th St / 101 / Ver | Orange | 5th St | Market (SW) | SB | | Exist/Remain |
| 47 | E6 | S 101 Ver | Orange | 5th St | Mission (NW) | SB | | Exist/Remain |
| 48 | E4 | 4th St / 80 / Ver | Orange | O'Farrell | Stockton (E/O) | EB | | Exist/Remain |
| 49 | G4 | E 80 Ver | GREEN | 4th | Market (SW) | SB | Street Light | PERM NEW |
| 50 | G5 | E 80 Lt | GREEN | 4th | Folsom (SE) | SB | Street Light | PERM NEW |

2 Stockton Micropile Interference with Tunnel

In response to SPM's Submittal 100.2, *Pile Cap Layout Elevations*, Design Lead Kenneth Ho (Structus), set top of Dwydag at 18.83' and top of pile cap/wall footing at 19'.

From as-built survey performed for SPM's CNCR #7, top of the Dwydags is 18.84'.

From as-built survey performed for SPM CNCR #8, top of the footing is at 19.04' ±

Length of installed Dwydags for all 20 Micropiles that will encroach into the tunnels is 62.5'. Typical length of installed Dwydags at 2 Stockton is 55' bonded length plus 5' unbounded length (sleeved in PVC) plus a minimum of 25" projection into the minimum 2.5' pile cap/wall footing.

Cut-off on Matt's spread sheet and on the driller's Micro Pile Report is 18.84.

Worse case is 62.5' Dwydag at 18.84' elevation with end of pile at -43.66' – Matt's spread sheet shows the 20 piles, 9 SB and 11 NB and how much they project into the tunnel.

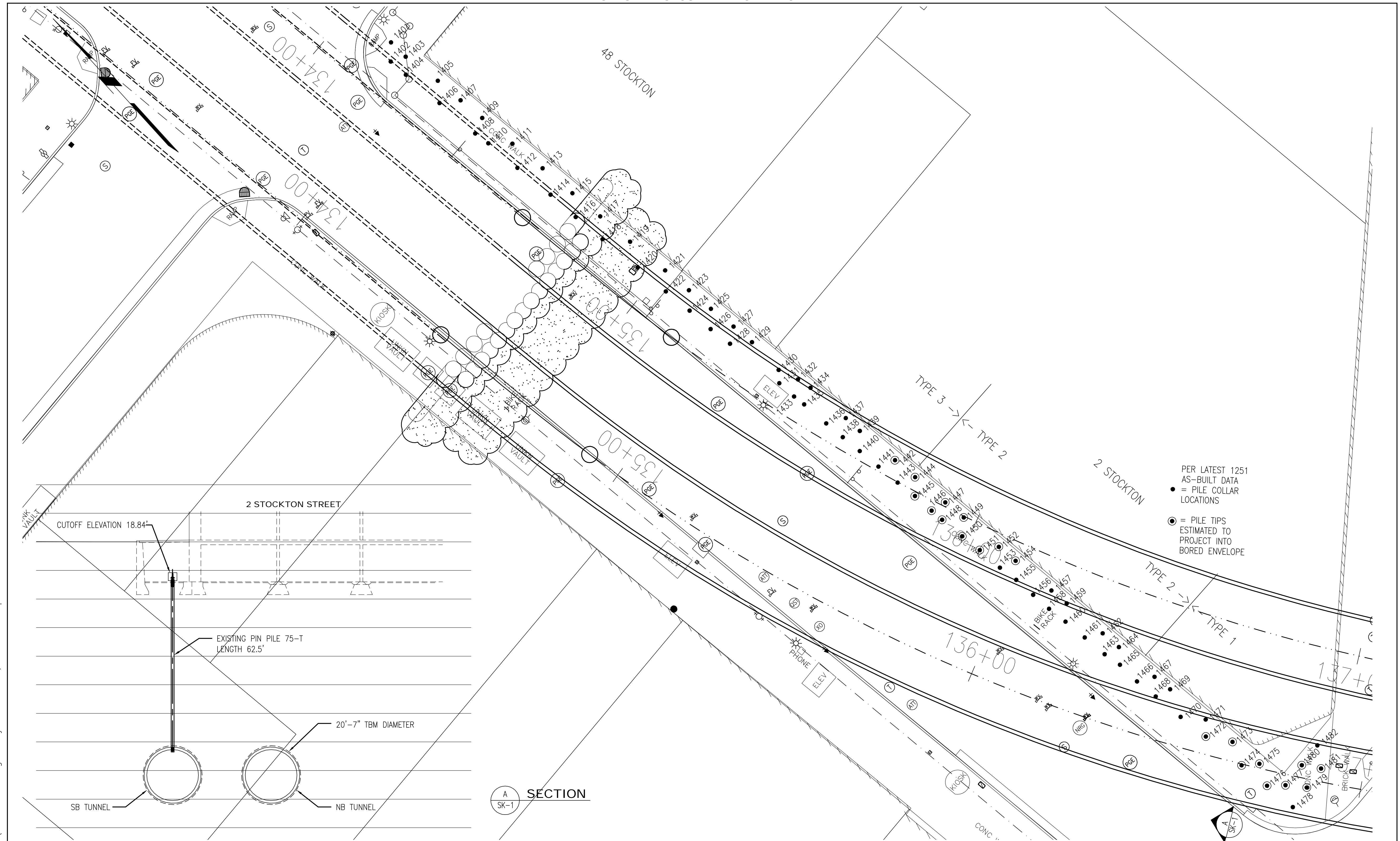
Drill Tech's approved as noted Submittal 100.4, included the following comment from the Designer, "Max pile lengths not shown. Revise to include max pile lengths."

Type 3 Wall from Schedule A requires 55' bond length – which further supports why Drill Tech would use 62.5 foot bars.

No tension piles are battered at 2 Stockton.

MDLatch – 21Feb2013

| CN1251 As-built Records | | | | | | | | | | | | | | | |
|-------------------------|----------------------------------|---|--|--|--------------------------|--|---|--------------------------------|--------------------------------|---|---|--|-------------------------------|--------|--------|
| Pile No. | Equiv. survey marker ID | Date of installation | Indicated as-built bond length | Indicated As-built Length of #18 bar | Top of Footing (Approx.) | Cutoff Elevation | Assumed bar stick-up above cutoff | Track Station at pile location | TOR Elevation at Track Station | Offset from TBM CL to theoretical pile location based on survey | Theoretical elevation of TBM shield at offset from CL | Estimated #18 Bar Tip Elevation | Theoretical Encroachment (ft) | | |
| | Back-side of SR-304 in as-builts | CN1251 sub. # 31-63-33, doc. 12755 Micropile Report 8/9/9 | CN1251 sub. # 31-63-33, doc. 12755 Micropile Report 8/9/10 | CN1251 sub. # 31-63-33, doc. 12755 Micropile Report 8/9/11 | Obtained from CNCR #8 | CN1251 sub. # 31-63-33, doc. 12755 Micropile Report 8/9/11 | 1251 dwgs SR 006 15" min. (T), 25" max. for C | By inspection from CADD | 1252 dwgs TC-134 | Measured from CADD (+ RT / - LT) | Formula provided by MF | Cutoff elevations plus stick-up minus bar length | | | |
| SB tunnel | Type 1 | 82-T | 1481 | 7/7/2011 | 30 | 62.5 | 19.02 | 18.84 | 0.00 | 136+90 | -57.40 | -3.225 | -41.71 | -43.66 | 1.95 |
| | | 83-C | 1482 | 7/7/2011 | 30 | 62.5 | 19.02 | 18.84 | 0.00 | 136+88 | -57.38 | -8.604 | -45.82 | -43.66 | -2.16 |
| | | 80-T | 1479 | 6/28-29/2011 | 30 | 62.5 | 19.02 | 18.84 | 0.00 | 136+87 | -57.37 | 2.078 | -41.37 | -43.66 | 2.29 |
| | | 81-C | 1480 | 7/6/2011 | 30 | 62.5 | 19.02 | 18.84 | 0.00 | 136+85 | -57.35 | -3.045 | -41.60 | -43.66 | 2.06 |
| | | 79-T | 1478 | 6/30/2011 | 30 | 62.5 | 19.02 | 18.84 | 0.00 | 136+85 | -57.35 | 7.49 | -44.38 | -43.66 | -0.72 |
| | | 78-C | 1477 | 6/29/2011 | 30 | 62.5 | 19.02 | 18.84 | 0.00 | 136+82 | -57.32 | 2.607 | -41.45 | -43.66 | 2.21 |
| | | 77-T | 1476 | 7/8/2011 | 30 | 62.5 | 19.04 | 18.84 | 0.00 | 136+77 | -57.27 | 3.747 | -41.77 | -43.66 | 1.89 |
| | | 76-C | 1475 | 7/11/2011 | 30 | 62.5 | 19.03 | 18.84 | 0.00 | 136+74 | -57.24 | -1.099 | -41.09 | -43.66 | 2.57 |
| | | 75-T | 1474 | 7/5/2011 | 30 | 62.5 | 19.05 | 18.84 | 0.00 | 136+70 | -57.20 | 0.315 | -41.00 | -43.66 | 2.66 |
| | | 74-C | 1473 | 7/12/2011 | 30 | 62.5 | 19.07 | 18.84 | 0.00 | 136+66 | -57.16 | -4.718 | -42.10 | -43.66 | 1.56 |
| | | 73-T | 1472 | 7/5/2011 | 30 | 62.5 | 19.05 | 18.84 | 0.00 | 136+60 | -57.10 | -4.31 | -41.84 | -43.66 | 1.82 |
| | | 72-C | 1471 | 6/20/2011 | 48 | 62.5 | 19.04 | 18.86 | 0.00 | 136+60 | -57.10 | -8.389 | -45.22 | -43.64 | -1.58 |
| | | 71-T | 1470 | NO RECORD FOUND | | | | | | | | | | | |
| NB tunnel | Type 2 | 60-C | 1459 | 6/21/2011 | 48 | 62.5 | 19.17 | 18.86 | 0.00 | 136+28 | -57.28 | 9.282 | -46.92 | -43.64 | -3.28 |
| | | 58-C | 1457 | 6/21/2011 | 18 | 62.5 | 19.16 | 18.86 | 0.00 | 136+24 | -57.24 | 7.77 | -44.57 | -43.64 | -0.93 |
| | | 56-T | 1455 | 7/14/2011 | 30 | 62.5 | 19.15 | 18.84 | 0.00 | 136+15 | -57.28 | 8.786 | -46.00 | -43.66 | -2.34 |
| | | 55-C | 1454 | 6/22/2011 | 48 | 62.5 | 19.14 | 18.86 | 0.00 | 136+13 | -57.15 | 4.544 | -42.00 | -43.64 | 1.64 |
| | | 54-T | 1453 | 7/15/2011 | 30 | 62.5 | 19.13 | 18.84 | 0.00 | 136+10 | -57.10 | 7.689 | -44.34 | -43.66 | -0.68 |
| | | 53-C | 1452 | 7/18/2011 | 30 | 62.5 | 19.12 | 18.84 | 0.00 | 136+08 | -57.28 | 3.138 | -41.56 | -43.66 | 2.10 |
| | | 52-T | 1451 | 7/15/2011 | 55 | 62.5 | 19.1 | 18.84 | 0.00 | 136+04 | -57.28 | 5.847 | -42.89 | -43.66 | 0.77 |
| | | 51-T | 1450 | 7/15/2011 | 55 | 62.5 | 19.09 | 18.84 | 0.00 | 135+98 | -56.98 | 4.634 | -41.87 | -43.66 | 1.79 |
| | | 50-C | 1449 | 7/19/2011 | 55 | 62.5 | 19.08 | 18.84 | 0.00 | 135+97 | -56.97 | 0.274 | -40.77 | -43.66 | 2.89 |
| | | 49-T | 1448 | 7/20/2011 | 18 | 62.5 | 19.07 | 18.84 | 0.00 | 135+92 | -56.92 | 3.183 | -41.22 | -43.66 | 2.44 |
| | Type 3 | 48-C | 1447 | 7/20/2011 | 55 | 62.5 | 19.06 | 18.84 | 0.00 | 135+91 | -56.91 | 0.953 | -40.75 | -43.66 | 2.91 |
| | | 47-T | 1446 | 7/21/2011 | 55 | 62.5 | 19.06 | 18.84 | 0.00 | 135+89 | -56.89 | 2.354 | -40.95 | -43.66 | 2.71 |
| | | 46-T | 1445 | 7/21/2011 | 55 | 62.5 | 19.04 | 18.84 | 0.00 | 135+84 | -56.84 | 1.007 | -40.68 | -43.66 | 2.98 |
| | | 45-C | 1444 | 6/23/2011 | 55 | 62.5 | 19.03 | 18.84 | 0.00 | 135+82 | -56.82 | -3.087 | -41.09 | -43.66 | 2.57 |
| | | 44-T | 1443 | 6/24/2011 | 30 | 37.5 | 19.02 | 18.84 | 0.00 | 135+78 | -56.78 | 0.136 | -40.57 | -18.66 | -21.91 |
| | | 43-C | 1442 | 6/23/2011 | 55 | 62.5 | 19.02 | 18.84 | 0.00 | 135+75 | -56.75 | -4.371 | -41.52 | -43.66 | 2.14 |
| | | 42-T | 1441 | 6/24/2011 | 30 | 37.5 | 19.01 | 18.84 | 0.00 | 135+72 | -56.72 | -1.054 | -40.57 | -18.66 | -21.91 |
| | | 40-T | 1440 | 3/14/2012 | 23 | 30.5 | 19.05 | 18.84 | 0.00 | 135+67 | -56.67 | -2.093 | -40.68 | -11.66 | -29.02 |
| | | 39-C | 1439 | 3/21/2012 | 39 | 46.5 | 19.05 | 18.84 | 0.00 | 135+64 | -56.64 | -6.797 | -43.00 | -27.66 | -15.34 |
| | | 38-T | 1438 | 3/13/2012 | 23 | 30.5 | 19.05 | 18.84 | 0.00 | 135+61 | -56.61 | -2.937 | -40.83 | -11.66 | -29.17 |
| 37-C | 1437 | 3/21/2012 | 39 | 46.5 | 19.05 | 18.84 | 0.00 | 135+59 | -56.59 | -7.373 | -43.49 | -27.66 | -15.83 | | |
| 36-T | 1436 | 3/2/2012 | 23 | 30.5 | 19.05 | 18.84 | 0.00 | 135+56 | -56.56 | -3.723 | -41.05 | -11.66 | -29.39 | | |
| 35-T | 1435 | 8/2/2011 | 30 | 37.5 | 19.05 | 18.84 | 0.00 | 135+48 | -56.48 | -4.902 | -41.51 | -18.66 | -22.85 | | |
| 34-C | 1434 | 8/1/2011 | 55 | 62.5 | 19.05 | 18.84 | 0.00 | 135+48 | -56.48 | -9.16 | -45.87 | -43.66 | -2.21 | | |
| 33-T | 1433 | 8/2/2011 | 30 | 37.5 | 19.05 | 18.84 | 0.00 | 135+45 | -56.45 | -5.184 | -41.64 | -18.66 | -22.98 | | |
| 32-C | 1432 | 8/9/2011 | 55 | 62.5 | 19.05 | 18.84 | 0.00 | 135+44 | -56.44 | -9.208 | -45.93 | -43.66 | -2.27 | | |
| 31-T | 1431 | 8/4/2011 | 30 | 37.5 | 19.05 | 18.84 | 0.00 | 135+40 | -56.40 | -5.977 | -42.11 | -18.66 | -23.45 | | |
| 30-C | 1430 | 8/8/2011 | 55 | 62.5 | 19.05 | 18.84 | 0.00 | 135+38 | -56.38 | -8.61 | -44.83 | -43.66 | -1.17 | | |



PER LATEST 1251 AS-BUILT DATA
 ● = PILE COLLAR LOCATIONS
 ● = PILE TIPS ESTIMATED TO PROJECT INTO BORED ENVELOPE

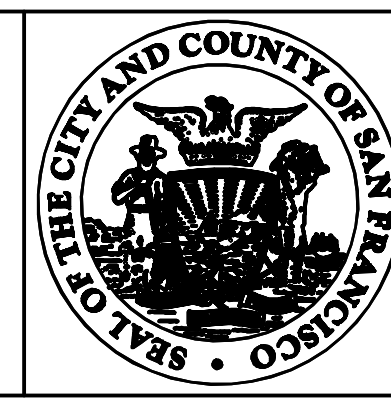
A SECTION
 SK-1

T:\13286 CS DP2\Anna\PLAN-PILE.dwg harveyai Fri Feb 08,2013 - 6:14 pm Anna

| DATE | DESCRIPTION | REV. NO. | BY | CHECKED | APPROVED |
|------|-------------|----------|----|---------|----------|
| | | | | | |
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| | | | | | |
| | | | | | |

PB TELAMON
PB PB AMERICAS, INC.

| | |
|-------------|-----------|
| DESIGNED | A. HARVEY |
| DRAWN | A. HARVEY |
| CHECKED | M. FOWLER |
| REVIEWED | |
| RECOMMENDED | |
| APPROVED | |
| DATE | 2/8/2013 |



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED
 EXECUTIVE DIRECTOR/CEO

THIRD STREET LIGHT RAIL PROGRAM
 PHASE 2 - CENTRAL SUBWAY
 TUNNELS

1251 MICROPILE AS-BUILT LOCATIONS

| | |
|-------------------|------|
| CONTRACT NO. | 1252 |
| SFMTA CONTROL NO. | |
| DRAWING NO. | |
| REVISION | |
| SHEET NO. | SK-1 |

Synergy Project Management, Inc.
 150 Executive Park Blvd. Suite 4750
 San Francisco, CA 94134
 Phone (415) 467-3000 Fax (415) 467-3001

EX-1015

SUBMITTAL CONTROL FORM
SFMTA Central Subway Contract 1251
Union Square / Market St. Station Utilities Relocation

To: SFMTA Central Subway
 821 Howard Street, 2nd Floor
 San Francisco, CA 94103
 Attn: Mike Acosta, Resident Engineer

Submital Control No. 100.2

Spec Section & Subsection No. 31.63.33

Date Submitted to SFMTA: 6/06/11

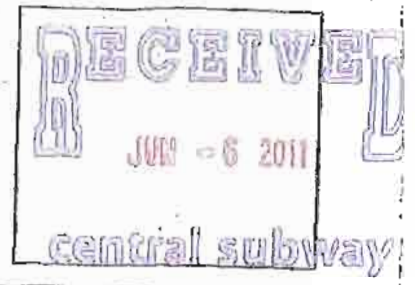
Prepared By: Synergy Project Management

Date Received by SFMTA:

Name of Contractor/Subcontractor/Supplier
 Contact: Javier Romero 925-963-5031
 Name Tel. No.

Contractor's QC Manager's/Team's Certification that
 Submittal is in Compliance with Contract Requirements:

[Signature]
Javier N. Romero
 Manuel Arce /
 Donovan Gilliland
 Date 6-6-11



| SUBMITTALS | | | | |
|------------|--|----------------------------|---------------------------|------------------------------|
| Item | No. Of Copies, 6 (unless noted otherwise in Spec.) | Description | SFMTA Action ^a | SFMTA Action By: (Signature) |
| 1 | 2 | Pile Cap Layout Elevations | B | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 6 | | | | |

central subway

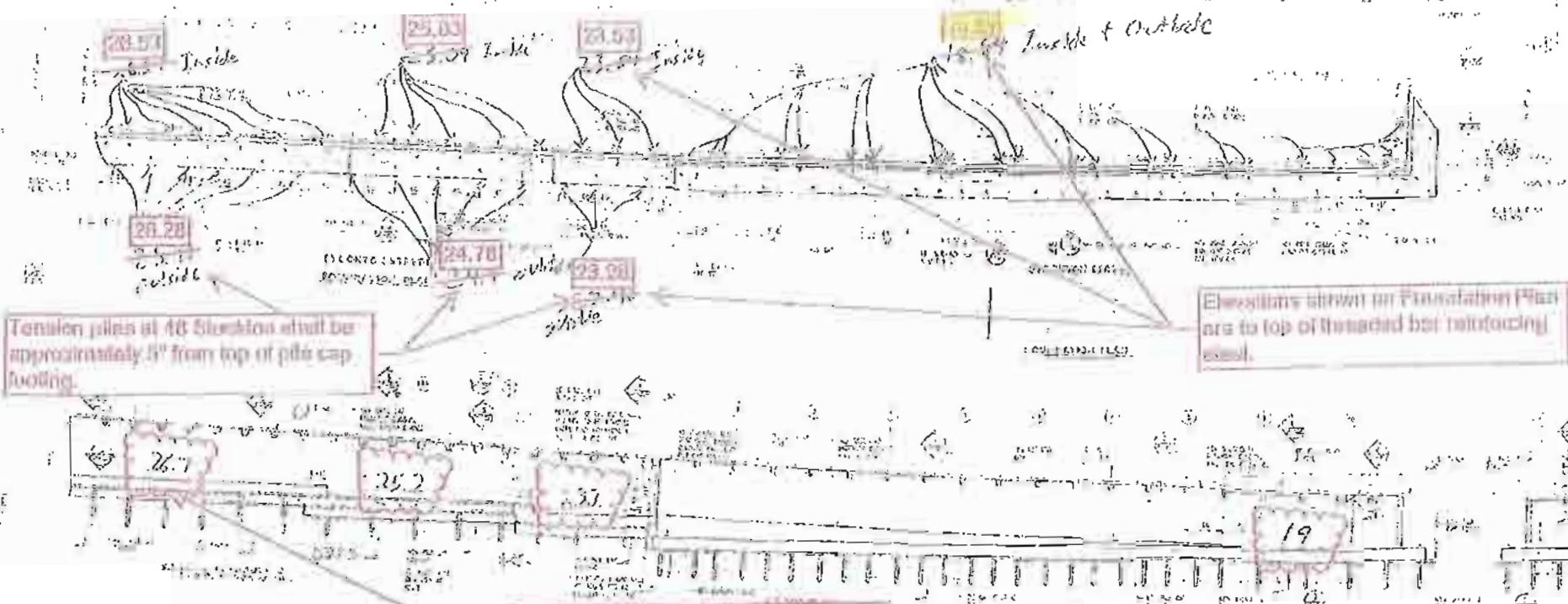
FOR REVIEW

| To: | Affiliation | Name | Copies | Sent Date | Requested Return Date | Date Rcvd by Reviewer | Return Date to RE |
|-------------------------------------|-------------|--------------------|--------|-----------|-----------------------|-----------------------|-------------------|
| <input checked="" type="checkbox"/> | PBT PE | <i>Manner Chan</i> | 1 | 6/8/11 | 6/15/11 | | 6/17/11 |
| <input type="checkbox"/> | DPW - BCM | <i>Doug Zwirng</i> | | | | | |
| <input type="checkbox"/> | DPW - BOE | | | | | | |
| <input type="checkbox"/> | OTHER: | | | | | | |

Reviewer's Remarks: SEE ATTACHED FOR COMMENTS. MAKE CORRECTIONS NOTED.
 Date Transmitted to Contractor: _____

Lead Reviewer: KENNETH HO *[Signature]* STRUCTUS 6/15/11
 Print Name Signature Title Affiliation Date
 RE PBT PE *[Signature]* 6/17/11 Print Name Signature Date

^aSFMTA Action - Legend:
 A: Approved B: Approved as Noted C: Disapproved - Resubmit D: Rejected N: No Action Required



Tension piles at A6 Station shall be approximately 5' from top of pile cap footing.

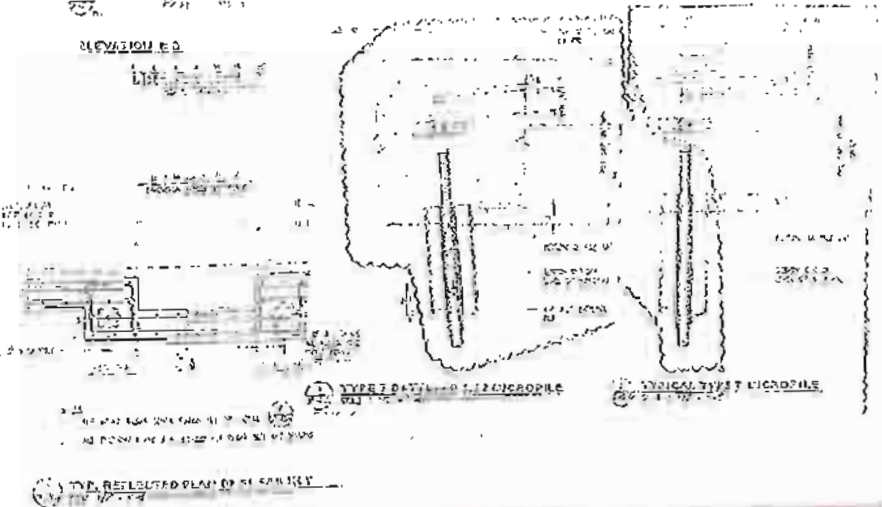
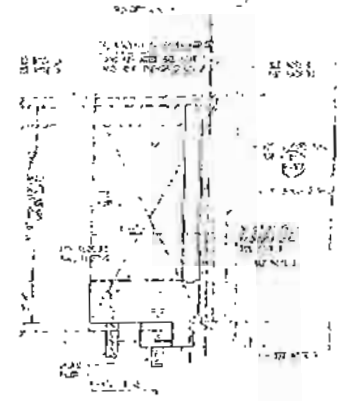
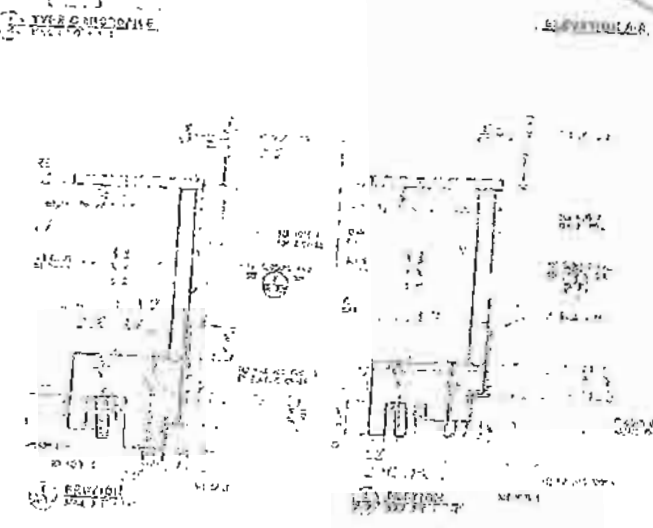
Elevations shown on Foundation Plan are to top of finished bar reinforcing.

All elevation elevations shown on Elevation A-A are to top of pile cap footing.

Contractor shall confirm in field elevations shown shall not exceed max. heights indicated on detail 3/ 84-400 for various Wall Types.

Elevations shall be confirmed and coordinated to not interfere with proposed Joint Trench.

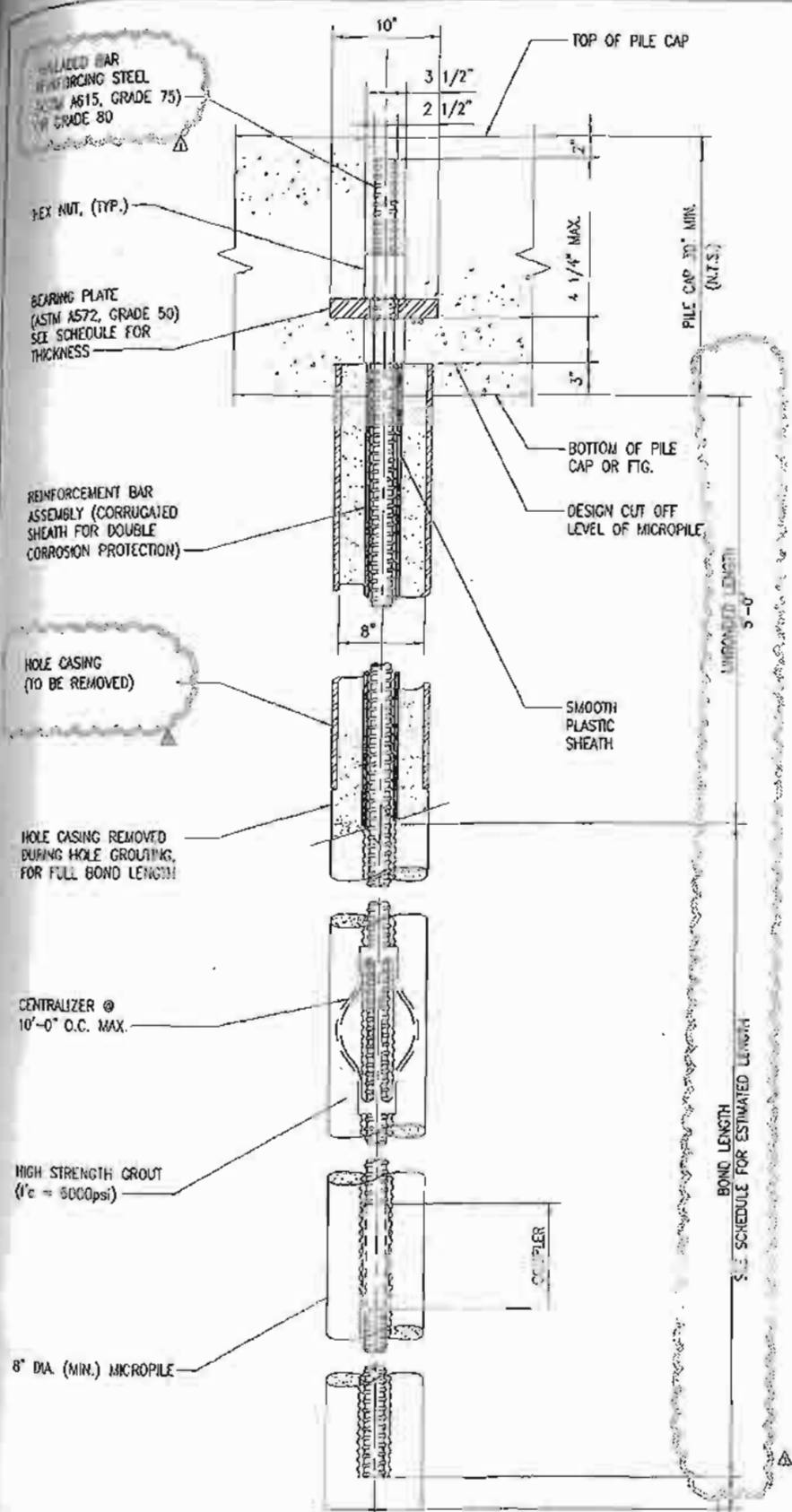
| NO. | DESCRIPTION | DATE | BY | CHECKED |
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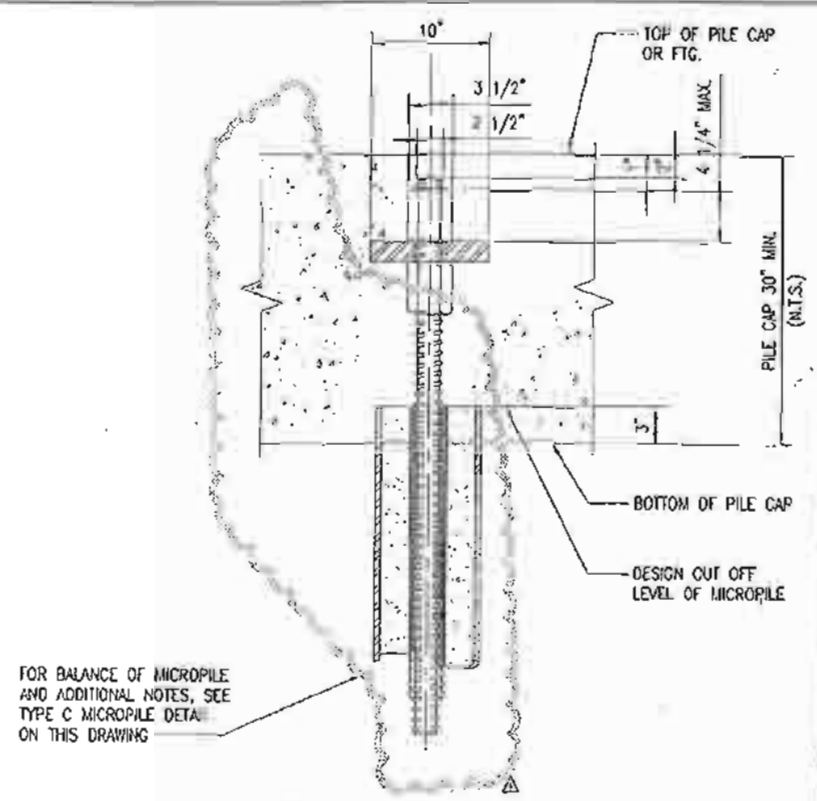
GENERAL COMMENTS

1. CONTRACTOR SHALL PROVIDE AS-BUILTS OF INSTALLED

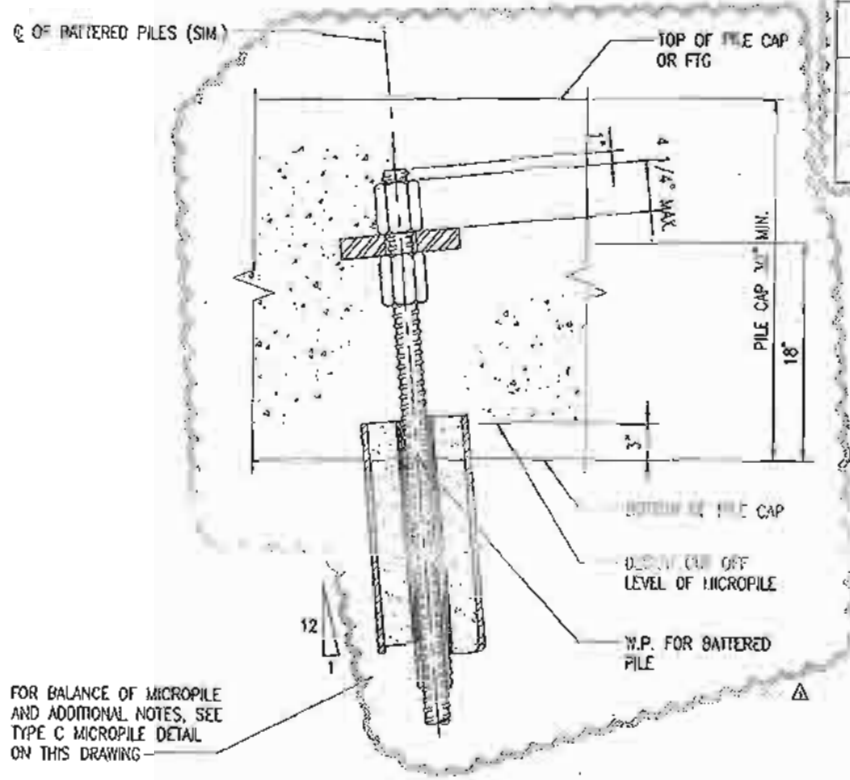
Pile Cap Layout Elevations



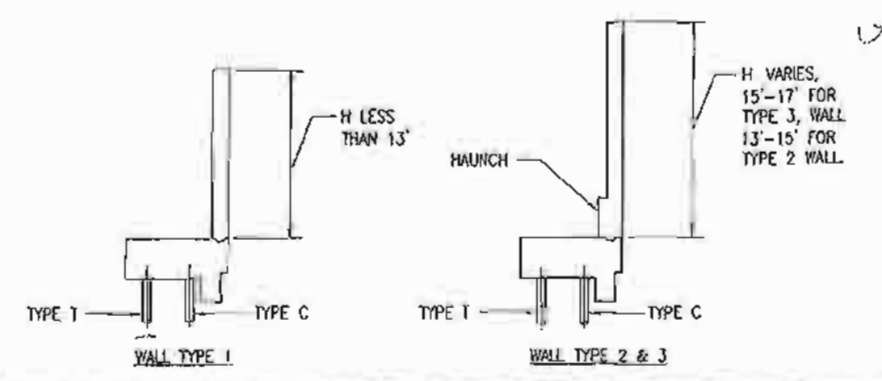
1 TYPE C MICROPILE
SR-005 SCALE: 1 1/2" = 1'-0"



2 TYPICAL TYPE T MICROPILE
SR-006 SCALE: 1 1/2" = 1'-0"



3 TYPE T BATTERED 1:12 MICROPILE
SR-006 SCALE: 1 1/2" = 1'-0"



Virginia

| | WALL TYPE 1 | | WALL TYPE 2 | | WALL TYPE 3 | |
|-----------------------|--------------|----------------|--------------|----------------|----------------|----------------|
| | TYPE C PILES | TYPE T PILES | TYPE C PILES | TYPE T PILES | TYPE C PILES | TYPE T PILES |
| ESTIMATED BOND LENGTH | 48 FT | 30 FT | 48 FT | 18 FT | 60 FT | 30 FT |
| BEARING PLATE | 2"x10"x10" | 1-3/4"x10"x10" | 2"x10"x10" | 1-3/4"x10"x10" | 2 1/2"x10"x10" | 1-3/4"x10"x10" |
| PILE DESIGN LOAD | 240 KIPS | 150 KIPS | 240 KIPS | 90 KIPS | 300 KIPS | 150 KIPS |
| MAX LENGTH | 60 FT | 60 FT | 60 FT | 60 FT | - | - |

Barneys of New York

| | WALL TYPE 1 | |
|-----------------------|--------------|----------------|
| | TYPE C PILES | TYPE T PILES |
| ESTIMATED BOND LENGTH | 39 FT | 23 FT |
| BEARING PLATE | 2"x10"x10" | 1-3/4"x10"x10" |
| PILE DESIGN LOAD | 195 KIPS | 115 KIPS |
| MAX LENGTH | 45 FT | - |

| | TYPE C PILES | TYPE T PILES |
|-----------------------|--------------|----------------|
| ESTIMATED BOND LENGTH | 52 FT | 30 FT |
| BEARING PLATE | 2"x10"x10" | 1-3/4"x10"x10" |
| PILE DESIGN LOAD | 260 KIPS | 150 KIPS |

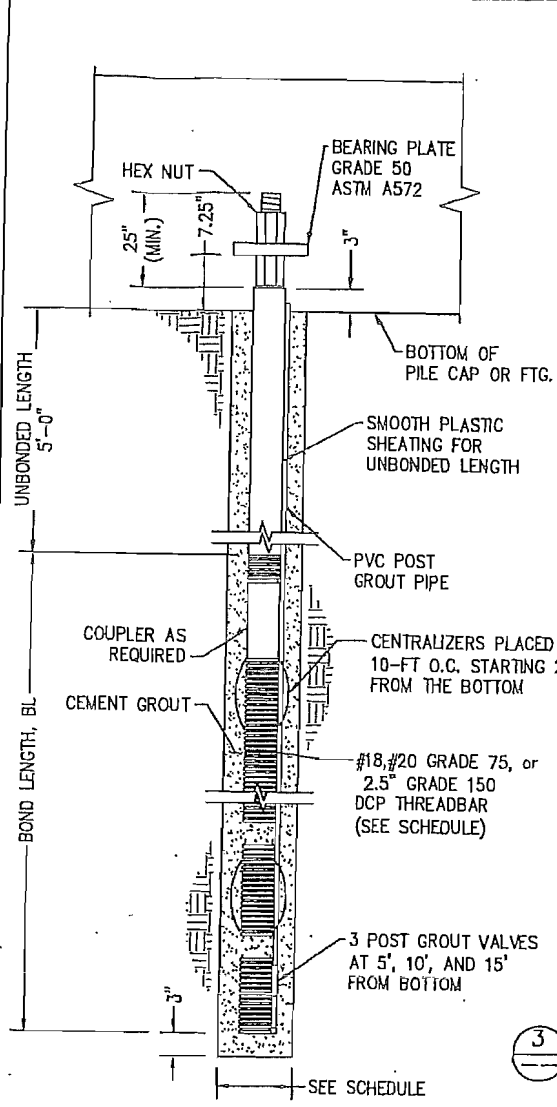
- FOR MORE DETAILED REQUIREMENTS, SEE THE CONTRACT SPECIFICATIONS.
- FINAL BOND LENGTHS SHALL BE ESTABLISHED BY FIELD TESTING
 - THE TEST LOAD SHALL BE 133 PERCENT OF THE DESIGN LOAD
 - PERFORMANCE TESTS, CREEP TESTS AND PROOF TESTS SHALL BE PER SPECIFICATIONS
- SEE DETAIL 1 FOR TYPICAL TYPE C PILE DETAILS, AND DETAIL 2 FOR TYPICAL TYPE T PILE DETAILS.
- FOR 48 STOCKTON SEE DETAIL 3 FOR TYPE T (BATTERED) PILE DETAILS AND DETAIL 1 FOR TYPE C DETAILS.

3 MICROPILE SCHEDULE
SR-005 SCALE: NIS

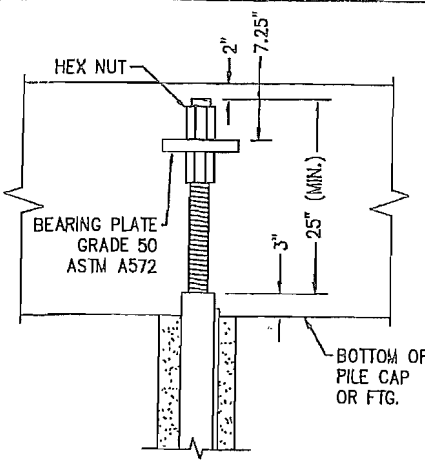
| BUILDING ADDRESS | MICROPILE SCHEDULE |
|------------------|--------------------|
| # 2 STOCKTON | USE SCHEDULE A |
| # 17-19 STOCKTON | USE SCHEDULE B |
| # 48 STOCKTON | USE SCHEDULE B |

FOR ORIGINAL SIGNATURES, SEE CL-17856 REV. 0.

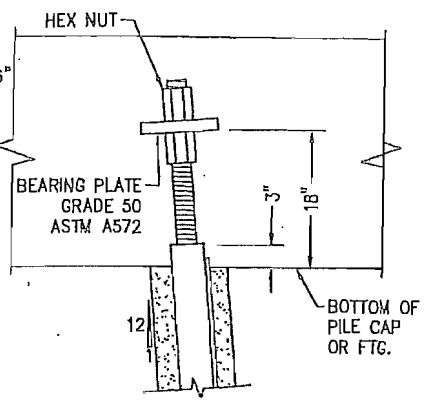
| | | | | | |
|--|--|---|---|--|------------------|
| | | DESIGNED BY: JL CHECKED BY: JIC APPROVED BY: JIC DATE: | CITY AND COUNTY OF SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY APPROVED: | THIRD STREET LIGHT RAIL PROGRAM PHASE 2 - CENTRAL SUBWAY UNION SQUARE/MARKET STREET STATION UTILITIES RELOCATION | 1251 CL-17856 |
| | | STRUCTURAL DESIGN AND ENGINEERING | DIRECTOR | STRUCTURAL MICROPILE DETAILS | SR-006 169 |



1 TYPE C MICROPILE
NO SCALE



2 TYPE T MICROPILE
NO SCALE



3 TYPE T BATTERED MICROPILE
NO SCALE

INSTALLATION PROCEDURE:

- EXCAVATION FOR THE FOOTING SHALL BE COMPLETED TO TOP OF FOOTING ELEVATION. REMOVE (BY OTHERS) EXISTING STRUCTURES PER CONTRACT PLANS TO PROVIDE SPACE FOR MICROPILE INSTALLATION. THE DRILLING AND INSTALLATION OF THE MICROPILES WILL BE COMPLETED FROM TOP OF FOOTING ELEVATION. 15 FOOT OF HEADROOM, AND A 15 FOOT WIDE LEVEL BENCH IS NECESSARY FOR THE MICROPILE DRILL RIG.
- THE CENTERLINE OF EACH MICROPILE SHALL BE LAID OUT AND STAKED IN THE FIELD. THE IDENTIFICATION NUMBER OF THE MICROPILE WILL BE CLEARLY MARKED ON EACH STAKE. PRIOR TO DRILLING, THE DRILL CREW SHALL SET OFFSETS FROM THE CENTERLINE STAKE. DURING DRILLING THE CREW SHALL CHECK THE OFFSETS IN ORDER TO INSURE THAT THE LOCATION OF THE DRILLED HOLE AND THE MICROPILE ARE WITHIN THE TOLERANCES SHOWN IN THE SPECS. CENTERLINE OF MICROPILE SHALL NOT BE MORE THAN 3 INCHES FROM PLAN LOCATION. MICROPILE SHALL BE PLUMB WITHIN 2 PERCENT OF TOTAL-LENGTH PLAN ALIGNMENT.
- A HOLLOW STEM AUGER DRILLING METHOD WILL BE USED TO DRILL THE 12-INCH DIAMETER HOLE AND TEMPORARILY CASE THE MICROPILE HOLE. THE DRILL RIG WILL BE A DRILL TECH PROPRIETARY EXCAVATOR MOUNTED RIG OR KLEMM 806 OR SIMILAR. THE MICROPILE HOLES SHALL BE DRILLED TO THE DEPTHS AS INDICATED IN THE MICROPILE SCHEDULE AND PER THE MICROPILE TYPICAL DETAIL.
- DRILL CUTTINGS SHALL BE CONTROLLED, COLLECTED, AND REMOVED FROM THE DRILLING AREA DURING DRILLING (BY OTHERS). CUTTINGS THAT ARE CONSIDERED SPOILS SHALL BE DISPOSED OF PER PROJECT SPECIFICATIONS (BY OTHERS).
- DURING DRILLING, THE DRILL CREW SHALL FREQUENTLY CHECK THE AUGER STEEL WITH A LEVEL TO INSURE THAT THE HOLE IS DRILLED VERTICAL.
- AFTER REACHING THE MICROPILE TIP ELEVATION WITH THE HOLLOW STEM AUGER, INSTALL THE ANCHOR BAR THROUGH THE HOLLOW STEM AUGER CASING. PERFORM THE FOLLOWING: 1) CLEAN THE ANCHOR BAR SO THAT IT IS FREE OF OIL, GREASE, OR OTHER EXTRANEOUS SUBSTANCES 2) AS NECESSARY, DUE TO HEADROOM CONSTRAINTS, FIELD SPLICE THE ANCHOR BAR PER THE COUPLER DETAIL, 3) ATTACH THE POST GROUT TUBE COMPLETE WITH POST GROUT VALVES TO THE ANCHOR BAR.
- BATCH GROUT USING A CHEMGROUT (OR EQUIVALENT) HIGH PRESSURE GROUT PLANT WITH AGITATING MIXING TANKS. THE GROUT PUMP SHALL BE ABLE TO CONTINUOUSLY AGITATE THE GROUT AND CONTINUOUSLY GROUT THE MICROPILE IN ONE OPERATION. THE PUMP WILL BE EQUIPPED WITH A PRESSURE GAUGE. CHECK GROUT QUALITY BY PERFORMING CALTRANS' 541 TEST.
- TREMIE GRAVITY GROUT THE MICROPILE FROM THE TIP (BOTTOM) OF THE AUGER CASED HOLE TO BOTTOM OF FOOTING (B.O.F) ELEVATION IN ONE CONTINUOUS OPERATION. WITHDRAW THE HOLLOW STEM AUGER CASING DURING GROUTING, TAKING CARE TO CONTINUE ADDING GROUT AFTER REMOVAL OF EACH AUGER SEGMENT DURING WITHDRAWAL. THE GROUT SHOULD BE FREE OF VOIDS OR INCLUSION OF FOREIGN MATERIAL. SEE THE MIX DESIGN FOR THE MICROPILE GROUT WITHIN THE "GROUTING PLAN" PORTION OF THE WORKING DRAWINGS.
- MONITOR INSTALLED GROUT VOLUME BY A GROUT FLOW METER. RECORD THE QUANTITY OF GROUT IN THE MICROPILE LOG.
- PROVIDE POST-GROUTING IN ACCORDANCE WITH THE POST GROUTING PROCEDURES OUTLINED IN THE "GROUTING PLAN" PORTION OF THIS SUBMITTAL.
- RECORD ALL MICROPILE INFORMATION IN THE MICROPILE INSTALLATION LOG (SEE WORKING DWG SUPPLEMENT).
- THE PRIMARY GROUT SHALL CURE FOR A MINIMUM OF SEVEN DAYS OR UNTIL FULL GROUT STRENGTH HAS BEEN ATTAINED AS DEMONSTRATED BY TEST RESULTS PRIOR TO ANY LOAD TESTING.

GROUTING PLAN:

- GROUT MIX DESIGN SHALL BE MODELED AFTER CALTRANS STANDARD SPECIFICATIONS 50-1.09.
5 - 94 POUND SACKS OF PORTLAND TYPE II CEMENT
25 GALLONS OF POTABLE WATER CONFORMING TO AASHTO T28
CALIFORNIA TEST 541 MINIMUM 11 SECONDS
- STANDARD SPECIFICATIONS SECTION 50-1.09 ALLOWS THE USE OF WATER REDUCING ADDITIVES. WHEN MIXED IN THE ABOVE PROPORTIONS, IF THE NATURAL CHEMISTRY OF THE CEMENT VARIES RESULTING IN AN EXCESSIVE EFFLUX TIME OR TOO RAPID AN INITIAL SET, THE USE OF A WATER REDUCING AGENT WILL TEMPORARILY ALTER THESE PROPERTIES TO MAKE THE GROUT FLUID.

WATER REDUCING ADDITIVE MASTER BUILDERS "RHEOBUILD 1000" (CONFORMS TO ASTM C494)
DOSAGE BETWEEN 8-12 FLUID OUNCES PER 94-POUND SACK OF CEMENT.

NOTE : ALTHOUGH THE CEMENT WATER GROUT MAY BE EXCESSIVELY THICK WHEN INITIALLY TESTED, THE ADDITION OF THE WATER REDUCING ADDITIVE MAY ON OCCASIONS REDUCE THE GROUT'S EFFLUX TIME BELOW THE MINIMUM 11 SECONDS SPECIFIED IN THE CALIFORNIA TEST 541, DEPENDING ON THAT BATCH'S CEMENT CHEMISTRY.
- MINIMUM 28-DAY UNCONFINED COMPRESSIVE CUBE STRENGTH OF 5,000 PSI. AND MINIMUM 3-DAY STRENGTH OF 2000 PSI. MAXIMUM WATER TO CEMENT RATIO OF 0.45 BY WEIGHT. CORRELATION OF WATER-CEMENT RATIO AND STRENGTH IS PROVIDED IN THE WORKING DWG SUPPLEMENT.
- A GROUT PRESSURE GAUGE SHALL BE PROVIDED IN THE FIELD.
- MONITOR INSTALLED GROUT VOLUME BY A GROUT FLOW METER OR COUNTING SACKS OF CEMENT USED (1-94LB SACK OF CEMENT MIXED = 1 CUBIC FEET OF GROUT). RECORD THE QUANTITY OF GROUT IN THE MICROPILE LOG.
- THE EQUIPMENT USED FOR GROUTING IS A DRILL TECH PROPRIETARY GROUT PUMP OR SIMILAR CHEMGROUT GP 60D GROUT PUMP WITH SOURCE OF COMPRESSED AIR, INGERSOLL-RAND HP 400 CFM (OR EQUIVALENT) TO POWER IT. THE PUMP WILL BE FURNISHED WITH A PRESSURE GAUGE.
- THE GROUT PLANT HAS A DOUBLE MIX TANK DESIGN WHICH PERMITS CONTINUOUS PUMPING AS EACH MIX TANK ALTERNATES FEEDING THE PUMP. THE GROUT PLANT WILL BE CAPABLE OF PUMPING UP TO 20 GALLONS OF GROUT PER MINUTE.

POST-GROUTING PLAN:

- A 1/2" DIAMETER SCHEDULE 40 POST-GROUT TUBE WILL BE ATTACHED TO THE MICROPILE BAR PRIOR TO INSTALLATION.
- THE POST GROUT TUBE SHALL HAVE 3 POST GROUT VALVES LOCATED WITHIN THE BOTTOM 20 FEET OF THE BONDED LENGTH OF THE MICROPILE.
- THE VALVES SHALL BE 5 FOOT ON CENTER WITH THE FIRST VALVE LOCATED 5 FEET FROM THE END TIP OF THE MICROPILE.
- AFTER THE PRIMARY GROUT HAS SET, POST GROUTING OF THE MICROPILE WILL TAKE PLACE AT THE DISCRETION OF THE DRILL TECH JOBSITE FOREMAN.
- POST GROUT SHALL HAVE A WATER-CEMENT RATIO OF 0.45 MAX.
- THE POST GROUTING SHALL BE PERFORMED AT A MINIMUM PRESSURE OF 300 PSI.
- THE POST GROUT TUBE MAY BE WASHED OUT WITH LOW-PRESSURE WATER TO ALLOW FOR THE NEXT POST-GROUTING STAGE AS NECESSARY.
- SEE THE MICROPILE DETAIL FOR POST-GROUT VALVE LOCATIONS.

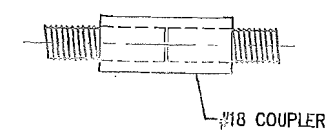
PHYSICAL PROPERTIES OF #18 GR. 75 DYWIDAG THREADBAR

| | | |
|-----------------|------|---------|
| EFFECTIVE AREA: | 4.00 | SQ. IN. |
| YIELD STRENGTH: | 75 | KSI |
| ULTIMATE LOAD: | 400 | KIPS |
| YIELD LOAD: | 300 | KIPS |
| MAX. TEST LOAD: | 270 | KIPS |
| WEIGHT: | 13.6 | LBS/FT |

LARGER BAR SIZES WITH GREATER YIELD OR EQUAL YIELD STRENGTH MAY BE SUBSTITUTED FOR #18 GRADE 75

| BUILDING ADDRESS | MICROPILE SCH. |
|------------------|----------------|
| #2 STOCKTON | USE SCH. A |
| #17-19 STOCKTON | USE SCH. B |
| #48 STOCKTON | USE SCH. B |

NOTE FROM PBT RESPONSE TO SUBMITTAL WORKING
"micropile logs, not show."
"pile logs, not show."



- COUPLER INSTALLATION PROCEDURE:
- WIRE BRUSH BAR ENDS (HALF THE LENGTH OF THE COUPLER) AND COUPLER INSIDE TO REMOVE RUST, DIRT, AND ALL LOOSE MILL SCALE.
 - MARK HALF THE COUPLER LENGTH ON END OF EACH BAR SEGMENT.
 - TORQUE BARS AGAINST EACH OTHER INTO THE COUPLER.

4 COUPLER DETAIL
NO SCALE

MICROPILE SCHEDULE A

| | WALL TYPE 1 | | WALL TYPE 2 | | WALL TYPE 3 | | SCHEDULE B | | SCHEDULE C | |
|-----------------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|
| | TYPE C PILES | TYPE T PILES | TYPE C PILES | TYPE T PILES | TYPE C PILES | TYPE T PILES | TYPE C PILES | TYPE T PILES | TYPE C PILES | TYPE T PILES |
| BL | 30 FT | 30 FT | 30 FT | 30 FT | 55 FT | 30 FT | 30 FT | 30 FT | 30 FT | 30 FT |
| MAX LENGTH | 30 FT | 30 FT | 30 FT | 30 FT | - | - | 15 FT | - | - | - |
| PLATE | 2"x10"x10" | 1.75"x10"x10" | 2"x10"x10" | 1.75"x10"x10" | 2.5"x10"x10" | 1.75"x10"x10" | 2"x10"x10" | 1.75"x10"x10" | 2"x10"x10" | 1.75"x10"x10" |
| PILE DESIGN LOAD | 240 K | 150 K | 240 K | 90 K | 300 K | 150 K | 195 K | 115 K | 260 K | 150 K |
| PILE PROOF TEST LOAD | N/A | 225 K | N/A | 180 K | N/A | 225 K | N/A | 172.5 K | N/A | 225 K |
| PILE VER. TEST LOAD | N/A | 270 K | N/A | 162 K | N/A | 270 K | N/A | 207 K | N/A | 270 K |
| MINIMUM PILE DIAMETER | 12 INCH | 8 INCH | 12 INCH | 12 INCH | 12 INCH | 12 INCH | 12 INCH | 12 INCH | 12 INCH | 12 INCH |
| PRODUCTION BAR SIZE | #18 GR75 | #18 GR75 | #18 GR75 | #18 GR75 | #18 GR75 | #18 GR75 | #18 GR75 | #18 GR75 | #18 GR75 | #18 GR75 |

| | | | | | | | |
|-----------|-------|---------------------|-----------------------------|----------------------|--|---|-------------|
| REVISION: | DATE: | DESCRIPTION/REASON: | DESIGN BY: S. MCCULLOUGH | SCALE: AS SHOWN | DRILLING & GRouting, INC. 2200 Wymore Way - Antioch, CA 94509-8548 Phone: 925/978-2060 - Fax: 925/978-2063 | THIRD STREET LIGHT RAIL PROGRAM PHASE 2 - CENTRAL SUBWAY - CONTRACT NO. 1251 MICROPILE WORKING DRAWINGS | SHEET: 1 |
| | | | CHECKED BY: B. MAINER | JOB NUMBER: 1037 | | | |
| | | | DATE: 4/26/11 | CONTRACT NO: 1251 | | | |

it is understood and agreed, that there is included in each lump sum, or unit price bid item, the entire cost of all Work, incidental to the completion of that part of the Work covered by such lump sum, or unit price bid item, or if not directly incidental to any specific bid item, the cost thereof has been distributed among those items deemed most appropriate by the Contractor.

9.09 RETENTION AND ESCROW AGREEMENT

A. Retention. As authorized and provided in San Francisco Administrative Code section 6.22.J, the SFMTA shall withhold retention from each progress payment, as provided below. Unless otherwise provided in the Special Provisions, progress payments will be made in the following manner:

1. As soon as practical after estimating the progress of the Work, the City will pay to Contractor in a manner provided by law an amount equal to 90 percent of the value, based upon Contract prices, of labor and Materials incorporated in the Work at the Site until midnight of the 25th Day of the current month, less the aggregate of the amount of previous payments. Payments, however, may be withheld at any time that the Work, in the City's estimation, is not proceeding in accordance with the Contract, or as otherwise provided in this Section.
2. When the City determines that the Work is 50 percent or more complete, that Contractor is making satisfactory progress, and that there is no specific cause for greater withholding, the City, at its sole option and discretion and upon the written request of Contractor, may (a) release part of the retention to the Contractor so that the amount held in retention by the City, after release to Contractor, is reduced to not less than 5 percent of the total value of the labor and Materials furnished, and the City shall proceed to retain 5 percent of any subsequent progress payment under the contract; or (b) continue to hold the already withheld retention amount, up to 5 percent of the total contract price, and shall not deduct further retention from progress payments. The Engineer shall make his or her decision in this regard at the conclusion of a performance review conference with the Contractor. Such reduction will only be made upon the written request of the Contractor and shall be approved in writing by the surety on the Performance Bond and by the surety on the Labor and Material Bond. The signature of the officer executing the approval for the surety shall be properly acknowledged and the power of attorney authorizing him to give such consent must either accompany the document or be on file with SFMTA.
3. Except as provided in the Special Provisions, when the City determines that the Work is 98 percent or more complete, the City may reduce retention funds to an amount equal to 200 percent of the estimated value of work yet to be completed, provided that the contract is free of offsets by the City and is free of stop notices, forfeitures, and other charges. The City will release retention in accordance with San Francisco Administrative Code section 6.22(J)(5).
4. In agreeing to such a revised method of progress payments as set forth in Subsections 9.09.A.2 and 9.09.A.3, above, the Engineer reserves the right to return to the method of progress payments as set forth in Subsection 9.09.A.1 above, if at any time the Engineer finds that either the Contractor is not making satisfactory progress or there is a specific cause for greater withholding.

ROLL CALL AND PLEDGE OF ALLEGIANCE

AGENDA CHANGES

APPROVAL OF MEETING MINUTES

Approval of the September 4, 2012, and September 11, 2012, Board Meeting Minutes.

COMMUNICATIONS

CONSENT AGENDA

All matters listed hereunder constitute a Consent Agenda, are considered to be routine by the Board of Supervisors and will be acted upon by a single roll call vote of the Board. There will be no separate discussion of these items unless a member of the Board so requests, in which event the matter shall be removed from the Consent Agenda and considered as a separate item.

Questions on the Consent Agenda are on final passage, first reading, adoption, or approved, as indicated.

Items 1 through 6

Recommendations of the Government Audit and Oversight Committee

Present: Supervisors Chiu, Chu, Wiener

- 1. 120750 [Administrative Code - Retention of Progressive Payments for Public Works Construction Contracts]**
Sponsors: Mayor; Chu
Ordinance amending the San Francisco Administrative Code Section 6.22(J) to reduce the amount of retention withheld from progress payments in construction contracts from ten to five percent; and to make minor clarifying corrections.

10/16/2012; PASSED, ON FIRST READING.

Question: Shall this Ordinance be FINALLY PASSED?

[Administrative Code - Retention of Progressive Payments for Public Works Construction Contracts]

Ordinance amending the San Francisco Administrative Code Section 6.22(J) to reduce the amount of retention withheld from progress payments in construction contracts from ten to five percent; and to make minor clarifying corrections.

NOTE: Additions are *single-underline italics Times New Roman*; deletions are ~~*strike-through italics Times New Roman*~~. Board amendment additions are double-underlined; Board amendment deletions are ~~strikethrough normal~~.

Be it ordained by the People of the City and County of San Francisco:

Section 1. The San Francisco Administrative Code is hereby amended by amending Section 6.22(J), to read as follows:

(J) **Retention of Progressive Payments.** Any contract *for construction services* may provide for progressive *or milestone* payments, if the Advertisement For Bids shall so specify. Each progress *or milestone* payment shall constitute full compensation for the value of work performed and materials furnished for a specified period, less amounts withheld as a result of dispute or as required by law.

(1) *For all contracts entered into on or after the effective date of this Ordinance, from ~~From~~ every progress payment, the City shall hold ~~5~~10 percent in retention.*

(2) *Notwithstanding the subparagraph above, the City may hold greater than 5 percent but not more than 10 percent in retention if the Department head responsible for the public work determines that the work or improvement is substantially complex and therefore warrants a higher retention amount, and the retention amount is specified in the Advertisement For Bids. For contracts with retention amounts greater than 5 percent, ~~iff~~ the Department head responsible for*

1 the public work determines that the contract is 50 percent or more complete, that the
2 contractor is making satisfactory progress, and that there is no specific cause for greater
3 withholding, the Department head, upon the written request of contractor, may authorize one
4 of the following two options: (a) the City shall release part of the retention to the contractor so
5 that the amount held in retention by the City, after release to the contractor, is reduced to an
6 amount not less than 5 percent of the total value of the labor and materials furnished, and the
7 City shall proceed to retain 5 percent of any subsequent progress payment under the contract;
8 or (b) the City shall continue to hold the already withheld retention amount, up to 5 percent of
9 the total contract price, and shall not deduct further retention from progress payments.

10 (3) The Department head shall authorize the release of retention, in
11 whole or in part, for work completed by subcontractors certified by the HRC as LBEs. The
12 Department head shall do so only upon a written request by the contractor certifying (i) the
13 work by the certified LBE subcontractor is completed and satisfactory in accordance with the
14 plans and specifications for the project; (ii) the total ~~final~~ amount paid to the certified LBE
15 subcontractor by the contractor as of the date of the written request and the total amount of the
16 subcontract; and (iii) the amount of retention associated with the work performed by the
17 certified LBE subcontractor. Following a release of such retention, and in order to calculate
18 retention and retention withholding from further progress or milestone payments, the City will
19 reduce the total retention required under the foregoing paragraphs (1) and (2) by the amount
20 paid to the certified LBE subcontractor(s) for whom the City released the retention. The
21 release of retention under this subparagraph shall not reduce the responsibilities or liabilities
22 of the contractor or its surety under the contract or applicable law. For any contract awarded
23 under this Chapter prior to the enactment of this subparagraph, a Department head may in his
24 or her sole discretion incorporate this subparagraph by change.

1 (4) The Department head shall authorize the release of retention, in
2 whole or in part, for work completed by subcontractors under any public work contract
3 awarded under this Chapter with a construction duration of more than two years. The
4 Department head shall do so only upon a written request by the contractor certifying (i) the
5 work by the subcontractor is completed and satisfactory in accordance with the plans and
6 specifications for the project; (ii) the total ~~final~~ amount paid to the subcontractor by the contractor
7 as of the date of the written request and the total amount of the subcontract; and (iii) the amount of
8 retention associated with the work performed by the subcontractor. The City may issue or
9 authorize the release of retention within six months of the date of the request. Following a
10 release of such retention, and in order to calculate retention and retention withholding from
11 further progress or milestone payments, the City will reduce the total retention required under
12 the foregoing paragraphs (1) and (2) by the amount paid to the subcontractor(s) for whom the
13 City released retention. The release of retention under this subparagraph shall not reduce the
14 responsibilities or liabilities of the contractor or its surety under the contract or applicable law.
15 For any contract awarded under this Chapter prior to the enactment of this subparagraph with
16 a construction duration of more than two years, a Department head may in his or her sole
17 discretion incorporate this subparagraph by change order.

18 (5) Retention shall be withheld solely for the benefit and protection of
19 the City,

20 (6) When the Department head responsible for the public work determines
21 that the contract is 98 percent or more complete, the Department head may reduce retention funds to
22 an amount equal to 200 percent of the estimated value of work yet to be completed, plus any amount
23 necessary to cover offsets by the City for liquidated damages, defective work, stop notices, forfeitures,
24 and other charges. The City shall release retention to the contractor upon the following
25 conditions: (a) the contractor has reached final completion under the contract terms and

1 conditions and (b) the contract is free of offsets by the City for liquidated damages, defective
2 work and the like, and is free of stop notices, forfeitures, and other charges. ~~When the~~
3 ~~Department head responsible for the public work or his/her designee determines that the contract is 98~~
4 ~~percent or more complete, the Department head or his/her designee may reduce retention funds to an~~
5 ~~amount equal to 200 percent of the estimated value of work yet to be completed, provided that the~~
6 ~~contract is free of offsets by the City and is free of stop notices, forfeitures, and other charges.~~

7 (7) For all contracts awarded under this Chapter, in no event shall the
8 City be liable for interest or charges arising out of or relating to the date the City issues any
9 progress, milestone or other payment or the date the City releases all or part of the retention,
10 except that the City will pay interest at the legal rate, as set forth in section 685.010(a) of the
11 California Code of Civil Procedure as that section may be amended from time to time, on any
12 improperly withheld amounts commencing no earlier than 90 days after the date the City
13 should have made any progress payment or released all or part of the retention. Under no
14 circumstances shall the legal rate of interest paid by the City under this provision exceed 10
15 percent per annum. The payment of interest under this provision is the limit of the City's
16 liability with respect to any claim for interest on improperly withheld amounts.

17 (8) For contracts entered into between January 1, 2012 and the effective
18 date of this Ordinance, upon the written request of the contractor, the Department head responsible for
19 the public work shall have the discretion to reduce retention to 5 percent, pursuant to one of the two
20 options set forth in subparagraph (2).

21 Section 2. Effective Date. This ordinance shall become effective 30 days from the
22 date of passage.

23 Section 3. This section is uncodified. In enacting this Ordinance, the Board intends to
24 amend only those words, phrases, paragraphs, subsections, sections, articles, numbers,
25 punctuation, charts, diagrams, or any other constituent part of the Administrative Code that

RFI#2: Mobilization Percentage Increase.

General Provision Pages 84 & 85 and Contract Specification Page 3. GP 9.08 E and Section 01-20-00 (1.04) A.

After careful review of the contract provisions for contract 1300 related to Mobilization and Demobilization we request an increase in the percentage from 2.5% to 9%. This rate along with the materials on hand specification in 9.08 as given would be much more realistic. Our cost history is much higher for similar projects in urban environments requiring high rent offices, specialized equipment, and design fees for temporary works, extensive public safety, and large work forces just to name a few elements. Further, the combination of the four separate projects into one large project has added a resource constraint requiring a larger startup in three work areas whereby the mobilization cost is not proportional to four smaller projects. These factors should increase rather than decrease the Mobilization from the normal 5% - 10% values that are customary.

Rich Redmond (12/21/12): Raise the mobilization to 5%, but only payable with actual "paid invoices" which demonstrate those allowable costs in the specs under mobilization item, e.g. receipts for 1 year of office rent, 1 year insurance premium, major equipment purchase, etc.

Updated 1/10/13: Revisit estimate and determine ~value of mob.
(Eric)

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Precast Tunnel Segment Liner – RFI 203.1

| BIH's RFI 203.1 | General | Comments/Discussion |
|---|---|--|
| <p>With reference to the following two requirements of the specifications.</p> <p>Specification Section 31 74 17 3.01.D.7., “At a minimum frequency of one of every one hundred castings from each form, segments will be picked at random or by the Engineer and assembled on the Master rings to ensure that tolerances and interchangeability of segments are being maintained.”</p> <p>Specification section 31 74 17 1.05.I.2. requires a minimum gauging of every 100th segment cast from each mould.</p> <p>“BIH JV plans to gauge 6 segments and 6 moulds on a daily basis. When casting all 10 mould sets on a two shift per day basis, either the gauging of an individual segment or the mould it was cast from would occur within a maximum period of 14 castings. This frequency significantly exceeds the Specifications.</p> <p>In light of this 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”</p> | <p>Measurements are to be of the cast segment for every 50th segment cast per mold or at least once weekly (3.01.D.4) and 3.01.D.7 which says to randomly select from each sequence of 100 segments casts from each form are to be checked on the Demonstration (Master) Rings.</p> <p>RFI 203.1 revises the requirements of 3.01.D.4 from every 50th segment cast to 6 per day and 3.01.D.7 from 1 ring every 100 rings cast to 1 ring every 500 rings cast, to be assembled on the Master Rings</p> | <p>Predicated upon PMC production schedule for 25Feb2013 there will be 90 segments cast. There will be 90 segments x 5 days or 450 segments cast for the week beginning 25Feb2013.</p> <p>PMC, per RFI 203.1, will gauge 30 (6 segments per day x 5 days) segments and 30 (6 molds per day x 5 days) molds for the 450 segments that are to be cast for the week beginning 25Feb2013. Our Specifications (31 74 17. 3.01.D.4) require 9 (450 segments ÷ 5 days) segments to be gauged VS 30 (6 segments per day x 5 days) segments that will be gauged per RFI 203.1 – this is 3 1/3 times as many segments being gauged than what is required by the Specifications.</p> <p>There is no requirements for checking dimensions of the molds during production but per RFI 203.1, PMC will check 6 molds per day.</p> <p>For the production week beginning 25Feb2013, there will be 3 1/3 times more gauging of cast segments than what is required by the Specifications. In addition, 6 molds per day will be gauged – no gauging of forms is required. Assembly on Master Rings of 1 ring per 100 cast to 1 ring per 500 cast is 20 percent of the Specification requirement, however, the Specifications were written for a completely different type of gasket and therefore, the requirement for Master Ring assembly may no longer be appropriate.</p> |

TITLE: Segment Measuring Frequency
PROJECT: 1252 TBM, Launch Box and Tunnel
TO: Attn: Sarah Wilson
San Francisco MTA
821 Howard St.
2nd Floor
San Francisco, CA 94103
Phone: 415-701-5276 Fax: 415-701-5222

DATE: 12/21/2012
JOB: 1252
STARTED:
COMPLETED:
REQUIRED: 12/28/2012

QUESTION:

With reference to the following two requirements of the Specifications.

Specification Section 31 74 17 3.01 D. 7. , “At a minimum frequency of one of every one hundred castings from each form, segments will be picked at random or by the Engineer and assembled on the Master rings to ensure that tolerances and interchangeability of segments are being maintained.”

Specification Section 31 74 17 1.05 I.2. requires a minimum gauging of every 100th segment cast from each mould.

BIH JV plans to gauge 6 segments and 6 moulds on a daily basis. When casting all 10 mould sets on a two shift per day basis, either the gauging of an individual segment or the mould it was cast from would occur within a maximum period of 14 castings. This frequency significantly exceeds the Specifications.

In light of this 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.

Please confirm the alternative interval is acceptable.

ANSWER:

The proposed change is acceptable.

BIH is reminded that all other testing specified in the contract is still applicable.

Requested By: Barnard Impregilo Healy J.V.

Date: 12/21/2012

Signed: _____
Matt Paulisich

CENTRAL SUBWAY PROJECT
Project Trend/Change Control Log

Trend Log

| Contract Cost Estimate and Allocated Contingencies | | | | | | | | | | | |
|---|----------------|----------|---|-------------|-----------------|---------------|--|--|--|------------------------|--|
| Item # | Date Initiated | CMB No. | Change Description | Change Type | Change Status | | Projected Cost Impact +Exposure/(Benefit) | Comments | Contract Modification Number | Utility Reimbursements | |
| | | | | | Approval Action | Approval Date | | | | | |
| 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 | | |

- 1 - Owner Directed Change in Scope
- 2 - Unforeseen Conditions
- 3 - Errors and Omissions
- 4 - Quantity Variation
- 5 - Value Engineering
- 6 - Private Utilities
- 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 | | | | | |
| 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) |
| 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 | |

- 1 - Owner Directed Change in Scope
- 2 - Unforeseen Conditions
- 3 - Errors and Omissions
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- 7 - Other

CENTRAL SUBWAY PROJECT
Project Trend/Change Control Log

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|-----------|----------------|--------------------|---|---------|-----------------|---------------|--|----------|---|------------------------|-----------------|
| | | | | | Approval Action | Approval Date | | | | | Actual/Forecast |
| 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. | | |
| 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 | |

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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 |
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| | | | | | Approval Action | Approval Date | | | | |
| 1250-0035 | 12/08/10 | 081-0035 Premium cost for requesting contractor to accelerate work on 4th Street between Howard and Folsom | 2 | | | | | 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 | | |
| 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 | | Due to archaeological discoveries, contractor may potentially claim for compensation for his equipment that were idle for the duration of the waiting period. RE's estimate is based on Caltrans rate for equipment standby for 5 months (May to October). RE has not received any change order request related to this item. RE to verify if his equipment were indeed idle during this time period. 2/15: Rental/Maintenance Costs for Support (Part 2 of 4); -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 | | | | | 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 | | | | | 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 | |

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| | | | | | Approval Action | Approval Date | | | | |
| 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) |
| Contract 1251 - Utilities Relocation #2 (UMS) | | | | | | | | | | |
| 1251-0001 | 03/18/11 | 082-0001 | 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 | 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 subsidewalk 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 | 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 | 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 | 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 | 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 | 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 | |

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| | | | | | Approval Action | Approval Date | | | | |
| 1251-0008 | 04/20/11 | 082-0008 | 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 | 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 Geary/Stockton and O'Farrell/Stockton. 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 | 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 | |
| 1251-0011 | 06/22/11 | 082-0011 | 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 | 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 | 7 | | | | -0- | 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 | 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 is 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 | 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 | 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 | 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 | 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) |

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| | | | | | Approval Action | Approval Date | | | | |
| 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) |
| 1251-0021 | 09/07/11 | 082-0021 Revise PG&E service points and layout of primary lines at various locations, and delete Muni Vault 1850 A at Stockton/Ellis. | 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 Change OCS supports at SF Hilton Hotel on Mason Street from embedded eyebolts to poles w/foundations. | 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 4th Street & Folsom Trolley Bypass | 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 Install a 5" slurry wall between the gas line and wet utilities if the separation is less than 3 feet | 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 Additional PG&E conduit crossings at Geary and O'Farrell to minimize service interruption during future UMS Station construction | 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 Install cantilever footing in lieu of regular OCS foundation at 2 locations on Mason Street between Geary and O'Farrell | 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 Accelerate installation of AT&T facilities in order for AT&T to start cut-over sooner | 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 Furnish and install AT&T Manholes 5828 (Stockton), 5831 (Geary), 5832 (O'Farrell) and 113 (O'Farrell) | 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) |

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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 | | | | |
| 1251-0029 | 10/26/11 | 082-0029 | Rebuild existing AT&T vault 133 at Post/Stockton and demolish existing AT&T vaults 403 (Ellis) and 113 (O'Farrell) | 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 | Enlarge existing PG&E vault 873 at SW Geary/Stockton | 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 | Additional PG&E conduits crossing O'Farrell on east side of Stockton (Task Order #32) | 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 | Excavation and restoration cost for PG&E gas tie-in and kill holes. | 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) |
| 1251-0033 | 11/23/11 | 082-0033 | Install secondary enclosure wall at One Stockton (Apple Store) | 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 | Install temporary support as required to protect existing live utilities that are encroaching into the City right-of-way in front of 17-25 Stockton Street. | 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 | Potholing on Stockton between Post and Geary for UMS Station design | 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 | Install three 6" PG&E conduits from vault 5800 to PG&E "A" pullbox at 4th/Bryant. | 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 upon 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 | Install sewer lateral from the Gucci building (240 Stockton) to the main sewer on Maiden Lane. Work will involve plumbing modification inside building to raise invert. | 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 | |

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| | | | | | Approval Action | Approval Date | | | | | Actual/Forecast |
| 1251-0038 | 01/04/12 | 082-0038 | Reimburse Synergy for JCDecaux work to remove kiosks | 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 | Furnish and install 2ea benches along 5th Street | 1 | | | | +4,752 | Requested by Muni Operation. COMPLETE, NO FURTHER ACTION; CMOD #22 | CMod #22 Approved | |
| 1251-0040 | 02/15/12 | 082-0040 | Furnish and install AT&T Manholes 133 at Post/Stockton | 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 | Install additional 55 LF of AT&T trench to extend conduits from vault 5832 to vault 113 on O'Farrell Street | 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 | Install additional 95 LF of AT&T trench to extend conduits from vault 5831 to vault 129 on Geary Blvd. | 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) |
| 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. | | |

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| | | | | | Approval Action | Approval Date | | | | | Actual/Forecast |
| 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 | |
| 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 | |

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| | | | | | | Approval Action | Approval Date | | | | |
| 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) |
| 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) |

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| | | | | | | Approval Action | Approval Date | | | | |
| 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 subsidewalk 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 | |
| 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) |

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| | | | | | | Approval Action | Approval Date | | | | |
| 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. | |
| 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 #16 | |
| 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 #16 | |
| 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 #16 | (16,015) |

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| | | | | | | Approval Action | Approval Date | | | | |
| 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 | (7,402) |
| 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. 01/16/13 - 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 #16 | |
| 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 #18 | |
| 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 | | |
| 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 #21 | |
| 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 #18 | |

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| | | | | | | Approval Action | Approval Date | | | | |
| 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 | 0 | |
| 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 #15 | |
| 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. | | |
| 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. | | |

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| | | | | | | Approval Action | Approval Date | | | | |
| 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 #15 | |
| 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 | | | | +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. | | |
| 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. | | |
| 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. | | |

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| | | | | | | Approval Action | Approval Date | | | | |
| 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 | +1,250 | 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 #13 | |
| 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 #19 | |
| 1252-0044 | 09/04/12 | 33 | 0 Ret Shaft - 20" Water Line Conflict | 2 | | Agree to Merit | 11/14/12 | +67,000 | 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 #14 | |
| 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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Project Trend/Change Control Log

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| | | | | | | Approval Action | Approval Date | | | | |
| 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 | (\$1,217) |
| 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 #19 | |
| 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 #19 | |
| 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 | +1,800 | 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 #14 | |
| 1252-0055 | ? | 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 | 7,475.28 | 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. 12/20/12 - CMB agreed with Evaluation of Merit 01/23/13 - CMB - NOT TO EXCEED Amount \$7,461 | CMOD #17 | |
| 1252-0057 | 09/25/12 | 47 | Ret Shaft - Credit for reduced AT&T conduits | 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 #13 | |
| 1252-0058 | 09/28/12 | 48 | UMS - Unmarked steel pipes (6", 12", 14") / Duct Bank | 6 | | Agree to Merit | 12/06/12 | +15,115 | 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 | CMOD #17 | |
| 1252-0059 | 01/00/00 | 49 | Ret Shaft - unmarked 10" steel pipe/duct bank | 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. | | |
| 1252-0060 | 10/10/12 | 50 | UMS - 3'x5' brick sewer at south headwall | 6 | CMB-0110 | Agree to Merit Agree to Cost | 12/12/12 02/27/13 | +2,600 | BIH/SFMTA to finalize labor rates 12/21/12 - CMB agreed with Evaluation of Merit 2/27/13 - Cost presented to CMB - Agreed to NTE \$2,600 | CMOD #13 | |
| 1252-0061 | 10/11/12 | 51 | Ret Shaft - Tree trimming debris haul off | 3 | | | | +26,000 | 0 | | |
| 1252-0062 | 09/07/12 | 53 | Ret Shaft - 12" steel pipe removal at Union/Columbus | 7 | | | | -0- | Closed. | | |

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| | | | | | | Approval Action | Approval Date | | | | |
| 1252-0063 | - | 54 | Ret Shaft - Elevation design conflict (30" low psi water / sewer) | 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 | | | | +153,740 | 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, 1/2-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. | | |
| 1252-0066 | 10/10/12 | | PCC No. 5 - Ret Shaft Water Dist. Pipe Material Change | 1 | | | | (31,012) | 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 | +861 | 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 #13 | |
| 1252-0068 | 10/10/12 | | PCC No. 3 - General Detour Signage | 1 | CMB-0112 | Agree to Cost | 02/27/13 | +6,153 | BIH/SFMTA to finalize labor rates 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). | | |
| 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 #20 | |
| 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 #20 | |
| 1252-0073 | 11/08/12 | 63 | UMS - 48" Steel Pipe @ southwest headwall | 2 | | Agree to Merit | 01/23/13 | -0- | 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. 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 COR has been changed to PCC09. | 0 | |

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| | | | | | | Approval Action | Approval Date | | | | |
| 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. | CMOD #20 | |
| 1252-0075 | 11/19/12 | 66 | Retrieval Shaft - Unmarked 12" Steel Pipe | 2 | | Agree to Merit | 01/23/13 | +3,800 | 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. | CMOD #13 | |
| 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 #20 | |
| 1252-0077 | 12/21/12 | | 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 | | 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 | |
| 1252-0079 | 01/09/10 | | Relocation of TBM Retrieval Shaft | 1 | | | | -0- | Modify Bid Item ST -4 Construction of Base Bid Permanent Retrieval Shaft to relocate the TBM retrieval Shaft to 1731-1741 Powell Street - 02/20/13 - COST IS NOT REFLECTED HERE - SCOPE IS FUNDED BY OTHER CPT 690 \$\$\$\$ | | |
| 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 an 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 | 0 | |
| 1252-0084 | 01/24/13 | | 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 | |

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| | | | | | | Approval Action | Approval Date | | | | |
| 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. | | |
| 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 | | | | +2,000 | 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. | | |
| Contract 1252 Totals | | | | | | | | (904,236) | Total Changes to the contract n the amount of (905,236) represents an UNDERRUN of allocated contingency. | | (24,965) |
| CONSTRUCTION TRENDS (Based on #1250, #1251 & #1252 Trending Log and CMod) - SUBTOTALS: | | | | | | | | (904,236) | | | (1,412,786) |
| 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.] | | |
| FD-002 | 07/12/10 | 084-0002 | Redux of Station Emergency Ventilation Fans (UMS) | 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 | Redux of Station Emergency Ventilation Fans (CTS) | 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 | Redux of Station Emergency Ventilation Fans (MOS) | 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 | Lowering of CTS | 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 | UMS Structural Configuration | 1 | CMB-0007 | Agree | 08/18/10 | (8,000,000) | [In "Current Forecast" - Sep2010 Cost Report.] | | |
| FD-005 | 08/22/10 | 084-0004 | UMS Alternate Station Access/Vent Shaft @ Union Square | 1 | CMB-0010 | Agree | 12/29/10 | (22,500,000) | Documentation to be filed. | | |
| FD-006 | 08/03/10 | 084-0005 | Station Headwalls - UMS | 1 | CMB-0008 | Agree | 08/18/10 | -0- | | | |
| FD-006 | 08/03/10 | 086-0002 | Station Headwalls - MOS | 1 | CMB-0008 | Agree | 08/18/10 | -0- | | | |
| FD-007 | 08/03/10 | | Cross-passages | 1 | CMB-0018 | Agree | 09/15/10 | -0- | | | |
| FD-008 | 07/30/10 | | Trolley Re-route @ Columbus & Powell | 1 | CMB-0017 | Agree | 09/15/10 | +2,000,000 | | | |
| FD-009 | 10/06/10 | 082-0003 | ECP to Modify Sidewalk Vault Demolition and Construction Sequence to Facilitate Construction of Joint Utilities Trench and Future UMS Station | 1 | CMB-0019 | Agree | 12/15/10 | +3,000,000 | | | |

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| | | | | | | Approval Action | Approval Date | | | | |
| FD-010 | 10/06/10 | 082-0004 | Redesign Stockton Street Sanitary Sewer to conform to SFPUC Sewer Criteria that preclude placement of relocated sanitary sewer under sidewalks | 1 | CMB-0020 | Agree | 11/17/10 | +2,000,000 | | | |
| FD-011 | 10/06/10 | 082-0005 | Reconfigure Routing of Water, Sewer and Gas laterals from buildings on north side of Ellis Street | 1 | CMB-0021 | Agree | 11/17/10 | +500,000 | | | |
| FD-012 | 10/06/10 | 082-0006 | Recognize cost transfers from design allowances allocated to contingency to explicit line items in final design estimates | 1 | CMB-0022 | Disagree | 11/17/10 | -0- | | | |
| FD-013 | 10/06/10 | 082-0007 | Increase Extent of Sub-sidewalks Vault Secondary Closure Walls and Waterproofing | 1 | CMB-0023 | Agree | 11/17/10 | +4,100,000 | | | |
| FD-014 | 10/06/10 | 082-0008 | Include OCS system for rerouting trolley buses to Fifth Street | 1 | CMB-0024 | Agree | 12/15/10 | +3,100,000 | | | |
| FD-015 | 10/06/10 | 082-0009 | Subsidewalk Vault Secondary Closure Walls for Buildings at 800 Market and 838 Market | 1 | CMB-0025 | Agree | 11/17/10 | +1,000,000 | | | |
| FD-016 | 10/06/10 | 085-0003 | Underpinning of Mandarin Tower | 1 | CMB-0011 | over taken by FD-021 | 01/19/11 | +5,000,000 | Additional Information Pending. | | |
| FD-017 | 10/06/10 | 085-0004 | CTS Ground Improvement | 1 | CMB-0012 | over taken by FD-021 | 01/19/11 | +10,300,000 | Additional Information Pending. | | |
| FD-018 | 10/06/10 | 084-0006 | UMS Apple Store Entrance | 1 | CMB-0013 | Disagree | 11/10/10 | -0- | Additional Information Pending. | | |
| FD-019 | 10/06/10 | 086-0003 | MOS TOD Configuration | 1 | CMB-0014 | Agree | 11/10/10 | TBD | | | |
| FD-020 | 10/06/10 | 084-0007 | UMS Emergency Stair #4 Relocation | 1 | CMB-0015 | Agree | 11/10/10 | TBD | | | |
| FD-021 | 01/14/11 | 085-0005 | CTS Lowering and Stations Reconfiguration | 1 | CMB-0027 | Agree | 01/19/11 | (18,000,000.00) | 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 | Sewer Replacement along Geary & O'Farrell | 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 | Emergency walkways through crossover cavern changed from outside the main tracks to between the main tracks. | 1 | CMB-0032 | Agree | 07/27/11 | | | | |
| FD-024 | 11/17/10 | 087-0002 | Diamond crossover on surface segment to a tandem (universal) crossover. | 1 | CMB-0033 | Agree | 08/24/11 | (350,000) | | | |
| FD-025 | 04/13/11 | 083-0001 | Bid Option for TBM Retrieval Shaft | | 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. | | |
| 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. | | |

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- 7 - Other

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Project Trend/Change Control Log

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|--|----------------|----------|--|-------------|----------|-----------------------|---------------|--|---|---------------------------------------|------------------------|
| | | | | | | Approval Action | Approval Date | | | | |
| 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 | | -0- |
| 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 | | -0- |
| 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 | | |
| 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 with 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 YOY | 7 | CMB-0044 | Agree | 07/27/11 | | Adjust construction budget in Section 6 of Contract No. CS 155-2 to Year of Expenditure | | |

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| | | | | | | Approval Action | Approval Date | | | | |
| 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 \$XX increase from the 65% base amount in 2010\$. Increase would deplete current YOY 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 YOY | 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 YOY | 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. | | |
| 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 | |

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| | | | | | | Approval Action | Approval Date | | | | |
| 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. | | (1,412,786) |
| 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 | |

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| | | | | | Approval Action | Approval Date | | | | |
| 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 |
| 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. | |

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- 3 - Errors and Omissions
- 4 - Quantity Variation
- 5 - Value Engineering
- 6 - Private Utilities
- 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 | | | | |
| 1552-0012 | 08/23/11 | 072-0012 | - | | 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 | - | | | | -0- | Cost charged to Task 2.70- part of base work | | |
| 1552-0014 | 09/22/11 | 072-0014 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | |
| 1553-0010 | | 073-0010 | 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 | 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 | 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 | 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 | | | 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 | 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 | 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 | 1 | | Authorized | 05/04/12 | +34,483 | Signed by Director of Transportation 5/14/12 COMPLETE, NO FURTHER ACTION; Amendment #3 | Amendment 3 Approved | |

- 1 - Owner Directed Change in Scope
- 2 - Unforeseen Conditions
- 3 - Errors and Omissions
- 4 - Quantity Variation
- 5 - Value Engineering
- 6 - Private Utilities
- 7 - Other

CENTRAL SUBWAY PROJECT
Project Trend/Change Control Log

| Item # | Date Initiated | CMB No. | Change Description | Change Type | Change Status | | Projected Cost Impact +Exposure/(Benefit) | Comments | Contract Modification Number | Utility Reimbursements |
|--------------------------------|----------------|----------|---|-------------|-----------------|---------------|--|--|------------------------------|------------------------|
| | | | | | Approval Action | Approval Date | | | | |
| 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- |

- 1 - Owner Directed Change in Scope
- 2 - Unforeseen Conditions
- 3 - Errors and Omissions
- 4 - Quantity Variation
- 5 - Value Engineering
- 6 - Private Utilities
- 7 - Other

CMB LOG

CENTRAL SUBWAY PROJECT - Configuration Management Board Change Control Log

**Dollar value listed for Cost Impact amount reflects the CMB agreed amount, the actual Cost Impact amount may differ as shown on the Project Trend Log to reflect actual final agreed to value. Amount on Trend log will not be greater than agreed CMB amount without prior additional action by CMB.*

| Initial Implementing Procedure | | | | CMB | | |
|--------------------------------|---|-----------------|----------------------|-----------|-----------------------|----------------------------|
| Change Form No. | Title of Change | Schedule Impact | *Cost Impact (X,000) | CMB No. | Agree / Disagree | Final Decision Record Date |
| 1250-0002 | Chgs to Sewer on 4th between Howard and Folsom | | \$ 107 | CMB-0001 | Agree | 07/12/10 |
| 1250-0003 | Quantity Adjustment for JT-6 and JT-7 | | \$ 192 | CMB-0002 | Agree | 08/04/10 |
| 1250-0004 | Demolition of existing brick and concrete footing on 4th between Howard and Folsom | | \$ 170 | CMB-0003 | Agree | 07/12/10 |
| 1250-0005 | Modify AWSS at 4th/Bryant and 4th/Harrison | | \$ 586 | CMB-0004 | Agree | 08/04/10 |
| 1250-0006 | Install four additional piles and reinforce existing foundation at 401 4th Street | | \$ 130 | CMB-0005 | Agree | 08/25/10 |
| FD-001 | Narrowing of Platform at UMS | | \$ (800) | CMB-0006 | Agree | 08/04/10 |
| FD-004 | UMS Structural Configuration | | \$ (8,000) | CMB-0007 | Agree | 08/18/10 |
| FD-006 | Station Headwalls - UMS/MOS | | \$ - | CMB-0008 | Agree | 08/18/10 |
| FD-002 | Redux of Station Emergency Ventilation Fans - UMS/CTS/MOS | | \$ (3,000) | CMB-0009 | Agree (Conditionally) | 08/25/10 |
| FD-005 | UMS Alternate Station Access/Vent Shaft @ Union Square | | \$ (22,500) | CMB-0010 | Agree | 12/29/10 |
| FD-016 | Underpinning of Mandarin Tower | | \$ 5,000 | CMB-0011 | Over Taken by FD-021 | 01/19/11 |
| FD-017 | CTS Ground Improvement | | \$ 10,300 | CMB-0012 | Over Taken by FD-021 | 01/19/11 |
| FD-018 | UMS Apple Store Entrance | | \$ - | CMB-0013 | Disagree | 11/10/10 |
| FD-019 | MOS TOD Configuration | | TBD | CMB-0014 | Agree | 11/10/10 |
| FD-020 | UMS Emergency Stair #4 Relocation | | TBD | CMB-0015 | Agree | 11/10/10 |
| 1250-0016 | Additional AWSS modification at 4th/Harrison | | \$ 156 | CMB-0016 | Agree | 11/10/10 |
| FD-008 | Trolley Re-route @ Columbus & Powell | | \$ 2,000 | CMB-0017 | Agree | 09/15/10 |
| FD-007 | Cross-passages | | \$ - | CMB-0018 | Agree | 09/15/10 |
| FD-009 | ECP to Modify Sidewalk Vault Demolition and Construction Sequence to Facilitate Construction of Joint Utilities Trench and Future UMS Station | | \$ 3,000 | CMB-0019 | Agree | 12/15/10 |
| FD-010 | Redesign Stockton Street Sanitary Sewer to conform to SFPUUC Sewer Criteria that preclude placement of relocated sanitary sewer under sidewalks | | \$ 2,000 | CMB-0020 | Agree | 11/17/10 |
| FD-011 | Reconfigure Routing of Water, Sewer and Gas laterals from buildings on north side of Ellis Street | | \$ 500 | CMB-0021 | Agree | 11/17/10 |
| FD-012 | Recognize cost transfers from design allowances allocated to contingency to explicit line items in final design estimates | | \$ - | CMB-0022 | Disagree | 11/17/10 |
| FD-013 | Increase Extent of Sub-sidewalks Vault Secondary Closure Walls and Waterproofing | | \$ 4,100 | CMB-0023 | Agree | 11/17/10 |
| FD-014 | Include OCS system for rerouting trolley buses to Fifth Street | | \$ 3,100 | CMB-0024 | Agree | 12/15/10 |
| FD-015 | Subsidewalk Vault Secondary Closure Walls for Buildings at 800 Market and 838 Market | | \$ 1,000 | CMB-0025 | Agree | 11/17/10 |
| 1250-0022 | Install additional 30 feet of DIP and new AWSS at 4th/Harrison | | \$ 160 | CMB-0026 | Agree | 01/12/11 |
| FD-021 | CTS Lowering and Stations Reconfiguration | | \$ (18,000) | CMB-0027 | Agree | 01/19/11 |
| 1250-0026 | Supporting working around and protecting SFWD existing facilities | | \$ 66 | CMB -0028 | Agree | 02/09/11 |
| 1251-003 | Extending Sewer lines on O'Farrell and Geary - CMod 001 | | \$ 149 | CMB-0029 | Agree | 02/23/11 |

CMB LOG

CENTRAL SUBWAY PROJECT - Configuration Management Board Change Control Log

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| Initial Implementing Procedure | | | | CMB | | |
|--------------------------------|--|-----------------|----------------------|----------|------------------|----------------------------|
| Change Form No. | Title of Change | Schedule Impact | *Cost Impact (X,000) | CMB No. | Agree / Disagree | Final Decision Record Date |
| 1250-0030 | Differing site conditions during utility installations - CMod #16 - Public only | | \$ 238 | CMB-0030 | Agree | 04/13/11 |
| 1251-0004 | Additional work related to secondary basement closure wall, 150 Stockton Street | | \$ 190 | CMB-0031 | Agree | 04/13/11 |
| FD-023 | Change to the emergency walkway configuration in the cross cavern at CTS | | \$ - | CMB-0032 | Agree | 07/27/11 |
| FD-024 | Change No. 5 diamond X-over on surface segment to tandem (universal) crossover | | \$ (350) | CMB-0033 | Agree | 08/24/11 |
| FD-025 | Bid Option for TBM Retrieval Shaft | | \$ (10,000) | CMB-0034 | Agree | 04/13/11 |
| 1251-0002 | Installation of concrete slab under joint trench at Stockton and O'Farrell CMod #02 <i>(Not to Exceed Total)</i> | | \$ 71 | CMB-0035 | Agree | 04/20/11 |
| 1250-0029 | Adjustment to Additional Excavation and Backfill Bid Item CMod #17 | | \$ 112 | CMB-0036 | Agree | 05/04/11 |
| 1250-0034 | Supplement Bid Item TR -6 DPT Traffic Control Allowance CMod #18 | | \$ 69 | CMB-0037 | Agree | 05/04/11 |
| 1251-0009 | Supplement Bid Item TR-07- Allowance for Manual Traffic Control with Add'l funds | | \$ 263 | CMB-0038 | Agree | 06/01/11 |
| 1251-0006 | Revising layouts of utilities, northern portion of Stockton Street | | \$ 399 | CMB-0039 | Agree | 06/08/11 |
| FD-026 | Air Replenishment Systems in the three underground stations | | \$ 1,245 | CMB-0040 | Agree | 07/13/11 |
| 1250-0036 | <i>Rental/Maintenance costs for support of Archeological Trenches - 05/30: SFMTA Board approval due to contract value exceeding the 25% threshold remaining item will be handled through the claims process. CM will provide and update at a later date. 09/12/12: Rental/Maintenance costs for support of Archeological Trenches (Part 1 of 4), (Part 2 of 4), (Part 3 of 4), (Part 4 of 4)</i> | | \$ 597 | CMB-0041 | Agree | 09/12/12 |
| 1251-0012 | Compensate Contractor for additional expenses to modified installation of AWSS on O'Farrell East on Stockton St CMod #07 representing change, now CMod #06 <i>(Refer to Approve CMB-0050, which notes the contract modification amount for this work)</i> | | - | CMB-0042 | Agree | 08/03/11 |
| FD-027 | 1 Stockton Street (Apple Store) Secondary Closure Wall | | \$ 500 | CMB-0043 | Agree | 08/03/11 |
| X53-001 | CS 155-2 (DP2) CBP4 (UMS) - Construction Budget Adjustment YOЕ | | - | CMB-0044 | Agree | 07/27/11 |
| X54-001 | CS 155-2 (DP2) CBP5 (CTS) - Construction Budget Adjustment YOЕ | | - | CMB-0045 | Agree | 07/27/11 |
| X55-001 | CS 155-2 (DP2) CBP6 (MOS) - Construction Budget Adjustment YOЕ | | - | CMB-0046 | Agree | 07/27/11 |
| 1250-0012 & 0013 | Differing site conditions during utility installations - CMod #21 - Private only | | \$ 98 | CMB-0047 | Agree | 08/03/11 |
| 1250-0024 | Costs associated with support, workaround and protection of existing AT&T utilities - CMod #19 | | \$ 95 | CMB-0048 | Agree | 08/24/11 |
| 1251-0007 | Costs associated with design changes to utility layouts along Ellis Street - CMod #05 | | \$ (435) | CMB-0049 | Agree | 08/24/11 |
| 1251-0012 | Additional expenses related to modified installation of the AWSS on O'Farrell East of Stockton St - CMod #06 <i>(Ref. CMB-0042 for original CMod presented for this work)</i> | | \$ 278 | CMB-0050 | Agree | 09/21/11 |
| 1251-0017 & 0018 | Installation of AT&T manholes 5829 and 5830 located on Geary at Stockton - CMod #07 | | \$ 56 | CMB-0051 | Agree | 09/21/11 |
| FD-028 | MOS Revisions to Emergency Ventilation Requirements | | \$ 500 | CMB-0052 | Agree | 09/07/11 |

CMB LOG

CENTRAL SUBWAY PROJECT - Configuration Management Board Change Control Log

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| Initial Implementing Procedure | | | | CMB | | |
|--------------------------------|---|-----------------|----------------------|----------|------------------|----------------------------|
| Change Form No. | Title of Change | Schedule Impact | *Cost Impact (X,000) | CMB No. | Agree / Disagree | Final Decision Record Date |
| FD-029 | CTS Revisions to Emergency Ventilation Requirements | | \$ 1,000 | CMB-0053 | Agree | 09/07/11 |
| FD-030 | UMS Revisions to Emergency Ventilation Requirements | | \$ 1,000 | CMB-0054 | Agree | 09/07/11 |
| 1251-0014 | Increase Bid Item WD-10 Allowance for Add'l Excavation and Backfill - CMod #09 | | \$ 200 | CMB-0055 | Agree | 09/14/11 |
| 1251-0027 | AT&T installation additional cost to accelerate work - CMod #10 | | \$ 281 | CMB-0056 | Agree | 11/30/11 |
| 1251-0019 & 0028 | Installation of AT&T manholes 5828, 5831, 113, 5832 and 403 - CMod #11 | | \$ 188 | CMB-0057 | Agree | 10/26/11 |
| 1251-0020, 0030 & 0031 | PG&E Field Changes - Cost will be part of the Form B calculations and be included in the reimbursement from PG&E. (Formally CMod #12 New CMod number is pending assignment) | | \$ 89 | CMB-0058 | Agree | 11/02/11 |
| 1251-0024 & 0032 | PG&E Field Changes - (Formally CMod #13 New CMod number is pending assignment) 1/25: Revision to the number of Kill Tie in locations will reduced this CMod to \$315K when conditions are satisfactorily met. 04/11 : Discovery of the 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 . 05/02: Previously approved CMod for \$349K on 11/16/11. Revised CMod approved for 12 Kill hole locations and "not to exceed" value. PGE email concurrence presented 05/23/12 | | \$ 303 | CMB-0059 | Agree | 11/16/11 |
| X54-005 | Revisions to MPS - CTS Construction Schedule | | \$ - | CMB-0060 | Agree | 12/28/11 |
| X55-002 | MPS - STS Construction Schedule Revision for Procurement of Equipment | | \$ - | CMB-0061 | Agree | 12/28/11 |
| FD-034 | STS 4th and King Operational Performance and Safety Enhancements. 12/14/11: Agree contingent up "Buy America" waiver. 03/14: "Buy America" contingency no longer applicable. Revised ECP change element - Removing H&K switches and replace with hydraulic/120V. Revised CSP Design Criteria to reflect element design change. CMB approval of replacement agreed on 03/14/12. Revision made to the approved ECP at Mtgs. #71 & #72. | | \$ 450 | CMB-0062 | Agree | 12/14/11 |
| CS-155-2 | CS 155-2 (DP2) CTS Construction Budget Adjustment - (65% Submittal) | | \$ 45,261 | CMB-0063 | Agree | 12/21/11 |
| 1251 -0038 (TO-035) | CN1251 (3EA) Kiosk Removal; previous work, and Addl (2EA) new work (see CMB 0080 approved on 10/24/12 for \$29,267.83) for all (5EA) Kiosks. | | \$ - | CMB-0064 | Agree | 01/04/12 |
| 1251-0023 | Overhead Contact System (OCS) Facilities along Folsom St. between 4th & 5th Streets and Installation of Foundations and Poles - CMod #12 (Formally CMod #15) 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. | | \$ 542 | CMB-0065 | Agree | 02/29/12 |
| CS-155-2 | CS 155-2 (DP2) UMS Construction Budget Adjustment - (65% Submittal) | | \$ 27,986 | CMB-0066 | Agree | 02/01/12 |
| CS-155-2 | CS 155-2 (DP2) MOS Construction Budget Adjustment - (65% Submittal) | | \$ 22,947 | CMB-0067 | Agree | 02/01/12 |
| 1251 - 0033 | Installation of Secondary Closure Wall at 1 Stockton St. (Apple Store) - CMod #13 (Formally CMod #14) (Negotiated Direct Cost \$264K, & Negotiated OH Cost \$143K) | | \$ 409 | CMB-0068 | Agree | 03/07/12 |

CMB LOG

CENTRAL SUBWAY PROJECT - Configuration Management Board Change Control Log

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| Initial Implementing Procedure | | | | CMB | | |
|--------------------------------|---|-----------------|----------------------|----------|-----------------------|----------------------------|
| Change Form No. | Title of Change | Schedule Impact | *Cost Impact (X,000) | CMB No. | Agree / Disagree | Final Decision Record Date |
| 1251-0034 | Additional work related to discovery of conflicting utilities within the subsidewalk basement at 17-19 Stockton Street. (Worst case scenario - "Not to Exceed" value) <i>CM team will report actual amount value at a later date.</i> | | \$ 346 | CMB-0069 | Agree | 04/04/12 |
| 1251-0040, 0041, & 0042 | Installation of approximately 150LF in additional AT&T trenching (including conduit packages) and the installation of AT&T Vault No.133 (Reimbursement to SFMTA for this compensation value via the Form B process - CMod #14 | | \$ 100 | CMB-0070 | Agree | 04/11/12 |
| FD-035 | Tunnel Air Replenishment System (ARS) | | \$ 1,215 | CMB-0071 | Agree | 07/11/12 |
| FD-036 | Surface Segment Sewers - 4th St. Base and SFPUC Option | | \$ 2,200 | CMB-0072 | Agree | 07/18/12 |
| 1252-025 | UMS Reduced Duration - <i>08/01/12 :Condition upon incorporating correctness to backup documentation as required by & documented in CMB mtg.</i> | | \$ - | CMB-0073 | Agree (Conditionally) | 08/01/12 |
| 1251-0050, 0067, 0074 & 0075 | Trend #50 - Installation of MUNI 770 Pole at 5th and Folsom Trend #67 - OCS Feeder Work On Folsom Trend #74 - Traffic Signal Modifications At 5th And Folsom Trend #75 - Unforeseen Conditions During Pole Foundation Installation On Folsom | | \$ 1,100 | CMB-0074 | Agree | 08/15/12 |
| 1251-0068 | Additional time related overhead (TRO) costs resulting from the 29EA calendar day Contract extension | | \$ 107 | CMB-0075 | Agree (Conditionally) | 10/03/12 |
| 1251-0043, 0072 & 0080 | Trend #43 FAR for Demolition of existing AT&T Vault #113 and 403 Trend #72 Additional AT&T trench from Vault #5829 and 127 Trend #80 Additional work related to installation of AT&T Vaults #5828, 5829, 5830, 5831, 5832 and 5833. | | \$ 129 | CMB-0076 | Agree (Conditionally) | 10/03/12 |
| FD-037 | Platform Display System Signs - <i>08/29/12 : Condition follow up action to evaluate procumbent by CN1260</i> | | \$ 500 | CMB-0077 | Agree (Conditionally) | 08/29/12 |
| 1251-0037, 0044 & 0045 | Gucci Store, Macy's West and Union Square Garage Sewer Installations | | \$ 71 | CMB-0078 | Agree | 09/12/12 |
| 1251-0052, 0065 and 0070 | Trend #52 - Reroute Unforeseen existing waterline discovered along Geary St (east of Stockton St.) Trend #65 - Additional fittings for AWSS lateral and chipping of pole foundation at Market/Ellis Streets Trend #70 - Core drill primary wall and install interior plumbing at Armani and Disney for the completion of fire service water cutover work. | | \$ 65 | CMB-0079 | Agree | 10/10/12 |

CMB LOG

CENTRAL SUBWAY PROJECT - Configuration Management Board Change Control Log

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| Initial Implementing Procedure | | | | CMB | | |
|-------------------------------------|---|-----------------|----------------------|----------|-----------------------|----------------------------|
| Change Form No. | Title of Change | Schedule Impact | *Cost Impact (X,000) | CMB No. | Agree / Disagree | Final Decision Record Date |
| 1251-0038, 0039, 0054,0062 and 0073 | Trend #38 - Reimburse Synergy for JCDecaux's removal of 2EA kiosks and other Central Subway related work (TO #35 for this work approved on 01/04/12 - CMB 0064). Trend #39 - Furnish and install 2EA benches along 5th Street. Trend #54 - Additional waterproofing at FIDM and north end of Crate and Barrel. Trend #62 - Additional waterproofing at Macy's Men's wall . Trend 73 - Additional work to install water and electrical utilities for flower stand on Geary west of Stockton. | | \$ 86 | CMB-0080 | Agree | 10/24/12 |
| 1251-0077 | Additional Work Related to Qwest, TCG and UCCO Infrastructure - Contingent CMod pig to include evidence from all utilities that cost are reimbursable to SFMTA | | \$ 41 | CMB-0081 | Agree (Conditionally) | 10/31/12 |
| 1251-0047, 0058, 0076, and 0078 | Muni Vault 900A, Additional SL Work, Additional OCS Work | | \$ 76 | CMB-0082 | Agree | 10/31/12 |
| 1251-0049, 0053, 0059 and 0064 | Contract Acceleration work and Additional Rebar work at 1 Stockton Street Trend #49 Additional cost related to installation of additional rebar at 1 Stockton Street Trend #53 Additional costs to accelerate Contract work related to AT&T and PG&E vaults Trend #59 Additional costs to accelerate Contract work as required to clear Barneys | | \$ 41 | CMB-0083 | Agree | 11/07/12 |
| 1252 | Retrieval Shaft Options (Board Action) for approval presented to the Directors by J.F. | | - | CMB-0084 | Agree | 12/05/12 |
| 1252-COR26 | MOS - Asbestos Pipe at south headwall - Not To Exceed \$30K | | \$ 30 | CMB-0085 | Agree | 01/09/13 |
| 1252-COR02 | Pre-excavation to remove concrete encased sewer line. \$13K increase of original \$45K for a total of \$58K Not To Exceed | | \$ 58 | CMB-0086 | Agree | 12/19/12 |
| 1252-COR15 | Additional work to restrain the AWSS line - Not To Exceed \$96K | | \$ 96 | CMB-0087 | Agree | 12/19/12 |
| 1252-COR06 | PG&E live electrical delays - Not To Exceed \$7,600 | | \$ 8 | CMB-0088 | Agree | 01/09/13 |
| 1252-COR27 | MOS Oil Filled Pipe at south headwall - Not To Exceed \$8,600 | | \$ 9 | CMB-0089 | Agree | 01/09/13 |
| 1252-COR22 | MOS Asbestos Pipe at north headwall - Not To Exceed \$6K | | \$ 6 | CMB-0090 | Agree | 01/09/13 |
| 1252-COR01 | AWSS Conflict with Low Pressure Water - Not To Exceed \$16,900 | | \$ 17 | CMB-0091 | Agree | 01/16/13 |
| 1252-COR03 | AT&T Vault Conflict -4th & Harrison - Not To Exceed \$21,089 | | \$ 21 | CMB-0092 | Agree | 01/16/13 |
| 1252-COR07 | Oil Filled pipe @ Launch Box - Not To Exceed \$10K | | \$ 10 | CMB-0093 | Agree | 01/16/13 |
| 1252-COR10 | MOS - Demo Pea duct bank / SF City 911 fiber optic line - Not To Exceed \$4,915 | | \$ 5 | CMB-0094 | Agree | 01/16/13 |
| 1252-COR11 | MOS - Traffic Signal line re-route south headwall - Not To Exceed \$37,500 | | \$ 38 | CMB-0095 | Agree | 01/16/13 |
| 1252-COR12 | MOS - Archaeological Standby North Headwall - Not To Exceed \$16,892 | | \$ 17 | CMB-0096 | Agree | 01/16/13 |
| 1252-COR29 | MOS - Todco scaffolding reimbursement - Not To Exceed \$1,717 | | \$ 2 | CMB-0097 | Agree | 01/16/13 |

CMB LOG

CENTRAL SUBWAY PROJECT - Configuration Management Board Change Control Log

**Dollar value listed for Cost Impact amount reflects the CMB agreed amount, the actual Cost Impact amount may differ as shown on the Project Trend Log to reflect actual final agreed to value. Amount on Trend log will not be greater than agreed CMB amount without prior additional action by CMB.*

| Initial Implementing Procedure | | | | CMB | | |
|---|--|-----------------|----------------------|----------|------------------|----------------------------|
| Change Form No. | Title of Change | Schedule Impact | *Cost Impact (X,000) | CMB No. | Agree / Disagree | Final Decision Record Date |
| 1252-COR41 | LB Impacts due to live PG&E electrical lines (Flagging) Not To Exceed \$1,245 | | \$ 1 | CMB-0098 | Agree | 01/16/13 |
| 1252-PCC01 | Revisions to Moscone North Headwall Elevation (Top) <i>Not To Exceed \$20,500</i> | | \$ 21 | CMB-0099 | Agree | 01/16/13 |
| 1252 PCC09 | UMS Headwall - Unknown Buried Pipe - <i>Not To Exceed \$75K</i> | | \$ 75 | CMB-0100 | Agree | 01/16/13 |
| 1252-COR.38 | Manhole in West side Guidewalls Footprint - <i>Not To Exceed \$4,052.17</i> | | \$ 4 | CMB-0101 | Agree | 01/23/13 |
| 1252-COR39 | MOS - 16" Steel Pipe Removal at North east Headwall - <i>Not To Exceed \$2,951.99</i> | | \$ 2 | CMB-0102 | Agree | 01/23/13 |
| 1252-COR46 | UMS - Unmarked Steel Pipes (6", 12" and 14") & Duct Bank - <i>Not To Exceed \$7,461.14</i> | | \$ 7 | CMB-0103 | Agree | 01/23/13 |
| 1252-COR47 | Retrieval Shaft - Unmarked 10" Steel Pipe / Duct Bank Removal - <i>NTE \$2,201.54</i> | | \$ 2 | CMB-0104 | Agree | 01/23/13 |
| 1252-PCC11 | Cap and Removal of 48" Steel Pipe - Not To Exceed \$150,000 | | \$ 150 | CMB-0105 | Agree | 01/23/13 |
| 1252-PCC07 | BART Annex Wall - Not To Exceed \$15,380 | | \$ 15 | CMB-0106 | Agree | 01/30/13 |
| 1251-05, 46, 51, 61, 63, 66, 69, 79, 81 | CMod #24 PG&E: 1. Trend 05 – Additional work to work around and shift existing PG&E conduits on Gary Blvd. at two locations 2. Trend 46 – Additional cost for enlarging PG&E Vault No. 584 on O'Farrell east of Stockton 3. Trend 51 – Intercept existing PG&E ductbank and terminate into Vault No. 5464 Market/Ellis 4. Trend 61 – Excavate for PG&E service cut-over at 177 Stillman 5. Trend 63 – Excavation and restoration for PG&E gas tie-in and kill holes (Pt.2) 6. Trend 66 – Intercept PG&E conduits at Vault No. 573 at Geary east of Stockton 7. Trend 69 – Removal of abandoned PG&E gas valve (8EA and installation of anodes 8. Trend 79 – Additional work related to the installation of PG&E Vault Nos. 467, 571, 573, 586 and 594 (including joint trench leading to these vaults). 9. Trend 81 – Use of regular concrete as opposed to cover PG&E electrical ductbanks. | | \$ 333 | CMB-0107 | Agree | 02/13/13 |
| 1252-031 | Retrieval Shaft Unmarked 12" Steel Pipe - <i>Not To Exceed \$1,250</i> | | \$ 1 | CMB-0108 | Agree | 02/27/13 |
| 1252-044 | MOS - 16" Steel pipe removal at headwall - <i>Not To Exceed \$1,800</i> | | \$ 2 | CMB-0109 | Agree | 02/27/13 |
| 1252-050 | MOS - 12" Steel pipe removal at Union/Columbus Streets - <i>Not To Exceed \$2,600</i> | | \$ 3 | CMB-0110 | Agree | 02/27/13 |
| 1252 - 058 | 10" Steel pipe removal at Union and Columbus Streets - <i>Not To Exceed \$860.86</i> | | \$ 1 | CMB-0111 | Agree | 02/27/13 |
| 1252 - 066 | MOS - 12" Steel pipe removal intersection of Union and Columbus - <i>Not To Exceed \$3,800</i> | | \$ 4 | CMB-0112 | Agree | 02/27/13 |
| 1252-PCC03 | Modified Stockton St. Detour Signage Plan - <i>Not To Exceed \$6,152.60</i> | | \$ 6 | CMB-0113 | Agree | 02/27/13 |
| Total | | | \$ 82,018 | | | |