


Memorandum

CS Memorandum No. 1312

To: Distribution
From: Susan MacKenzie, Document Control Manager 
Date: December 18, 2012
Reference: Project No. M544.1, Contract No. CS-149
Task No. 1-8.02, Change Control
Subject: Configuration Management Board Meeting No. 103

Attached please find minutes for Configuration Management Board Meeting No. 103 held on November 28, 2012.

Attachments: CMB Meeting No. 103 Rev. 0 Minutes with attachments

Cc: David Kuehn, STV (w/attachments) david.kuehn@stvinc.com
Matt Lee, SFCTA (w/attachments) matt@sfcta.org
Shahnam Farhangi, SFMTA (w/attachments)
Joon Park, SFMTA (w/attachments)
Roger Nguyen, SFMTA (w/attachments)
Arthur Wong, SFMTA (w/attachments)
Jane Wang, SFMTA (w/attachments)
Quon Chin, CSP (w/attachments)
Mark Latch, CSP (w/attachments)
Carlos Campillo, CSP (w/attachments)
Beverly Ward, CSP (w/attachments)
Chuck Morganson, HNTB/B&C (w/attachments)
Aileen Read, CSDG (w/attachments)
CS File No. M544.1.5.0890

Distribution:

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Mark Benson, CSP
Eric Stassevitch, CSP
Sarah Wilson, CSP
Matt Hembd, CSP
Michael Acosta, DPW
Ken Barnhart, Hill International

CMB Meeting Minutes #103

DATE: December 11 , 2012

MEETING DATE: **November 28, 2012**

LOCATION: 821 Howard St, Main Conference Room

TIME: 3:00 PM

ATTENDEES: J Funghi (JF), A. Hoe (AH), R. Edwards (RE), Richard Redmond (RR), M. Benson (MB), E. Stassevitch (ES), S. Wilson (SW), M. Hembd (MH), M. Acosta (MA), K. Barnhart (KB), L. Zurinaga (LZ), B. Lebovitz (BL)

COPIES TO: Attendees: S. Farhangi (SF), J. Park (JP), A. Wong (AW), R. Nguyen (RN), M. Latch (ML), B. Ward (BW), Q. Chin (QC), C. Campillo (CC), J. Wang (JW), C. Morganson (CM), A. Read (AR), M. Lee (ML), 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 # 103– Rev. No. 0

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

ITEM #	DISCUSSION	ACTION BY DUE DATE
3- 11/14/12	1252 - Sarah Wilson presented Evaluation of Merit of, COR 33 Ret Shaft - 20" Water Line Conflict – Contract drawings depict 20" water line being installed further east to the Muni (MRY) electrical duct bank instead of to the side as depicted on the contractor drawings to be installed to the side. Due to the proximity of MRY duck bank the Contractor must excavate and shore a larger hole in order to demolish the concrete around the duct bank to allow for 18" for welding all around the pipe. Based on the information presented the CMB found some merit for additional labor and material costs but were unable to clearly establish what element of work constituted the change as presented in the COR. RE will proceed with scoping the work to better define and quantify the change. <i>11/21: COR revisited due to confusion from some members resulting from last week's discussion. 11/28 Status: This item was not discussed at this week's meeting.</i>	
1-	1251 – M. Acosta presented for approval for Additional Work Related to PG&E Facilities. Trends #05 Additional work to work around and shift existing PG&E conduits on Geary Blvd. at 2 locations, #46 Additional cost for enlarging PG&E Vault No. 584 on O'Farrell east of Stockton, #51 Intercept existing PG&E duct bank and terminate into Vault No. 5464 at Market/Ellis, #55 Install Swiveloc lids on 7EA PG&E vaults, #61 Excavate for PG&E service cut-over at 177 Stillman, #63 Excavation and restoration for PG&E gas tie-in and kill holes (Part II) , #66 Intercept PG&E conduits at Vault No. 573 at Geary east of Stockton, #69 Removal of abandoned PG&E gas valve (8EA) and installation of anodes, and #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). The RE reported he has yet to receive confirmation on all the trends related to PG&E's additional work	

ITEM #	DISCUSSION	ACTION BY DUE DATE
	with the exception of Trend #5. The RE reported that PG&E contends Trend #05 could possibly be a MTA engineering error due to the fact that their information was not properly depicted on the As-Built drawing submitted to the Contractor. CMB suggested the RE get PG&E involved immediately in the proposal evaluation submitted by the Contractor if the work involved is at the request of the Utilities. This item will be brought back to the CMB once the RE has met with PG&E and has agreed upon a negotiated cost for the work.	
2-	1252 - Sarah Wilson presented Evaluation of Merit of, COR 006 MOS – PG&E live electrical delays – To complete the Launch box guide walls, PG&E Vault #2975 and utilities connected were required to be abandoned prior to excavation, the Contract documents indicated these utilities were abandoned. PG&E Inspector found live electrical & fiber optic lines during an inspection inside PG&E vault #2975. De-energization of the PG&E line and the SFDT cutover were not completed until a month and a half after discovery. The Contractor is claiming they experienced inefficiencies but haven't quantified what the inefficiencies were. The CMB agreed with partial merit for work associated with guide wall excavation and inefficiencies due to the live PG&E utilities. The CMB recommended the Construction Manager/RE track this issue under CN1251 PG&E Form B work.	
3-	1252 - Sarah Wilson presented Evaluation of Merit of, COR 013 – MOS - SL conduit from PG&E vault @ north headwall – Permanent power was installed to an existing street light on 4 th Street. PG&E de-energized vault #1494 to accommodate 1252 construction and existing street light located at the NW sided of the north headwall at Moscone Station (dwg UD-402 Rev. 0 and UT-402 Rev 0) lost its power. After inspection from PG&E vault #1622 on Clementina it was discovered that it is not available as a permanent power source. SFMTA requested that the Contractor install conduit from PG&E vault #1493 to the street light for permanent power. The work was not show on the contract drawings. The CMB agreed with merit for work associated with installing conduit for permanent power, but the work has not yet been performed and other possibilities may exist. Suggestion that the COR be forwarded to the Design team for their review prior to making final determination of work to be performed.	
4-	1252 - Sarah Wilson presented Evaluation of Merit of, COR 015 – LB - Pre-Excavation for Slurry Walls – During construction of slurry wall west of the tunnel launch box Contractor uncovered an existing 8" vitrified clay pipe (VCP) sewer main encased in concrete extending 9'–11' below the top of guide wall or street surface. The contractor drawings show it as abandoned and to be removed, also incorrectly show it to be approximately 4'– 5' below the street surface. The sewer line encased in concrete was a differing site condition. Additional costs were incurred to remove the concrete and additional slurry was required to fill the over-excavated wall. The CMB agreed with merit of a differing site condition for work associated with removal of the concrete encased sewer line.	
5-	1252 - Sarah Wilson presented Evaluation of Merit of the occurrence of wood pile within slurry diaphragm wall - COR 032 – (SW) Panel W29, COR 034 (SW) Panel W28, COR 042 – (SW) Panel W25, and COR 043 – (SW) Panel W30. The Contractor discovered wood piles within slurry wall panels at the TMB Launch Box, which caused the slurry walls to deviate from the designed excavation limits. The contract document does not show the presence of wood piles within the footprint of SW panels. To correct the issue the panels were backfilled with lean concrete and re-excavated. The Contractor is claiming the presence of the wood pile caused a four day (4) delay to the SW work. A TIA associated with these COR's has not been determined as yet. The CMB agreed with merit for work associated with the differing site condition for SW panels.	
6-	1252 - Sarah Wilson presented Evaluation of Merit of COR 63 – 48 inch Pipe at UMS Headwall South - During excavation of UMS headwall south, the Contractor encountered a 48-inch pipe not shown on the contract drawing. The location of	

ITEM #	DISCUSSION	ACTION BY DUE DATE
	the unforeseen pipe impacted construction of the head wall work. This discovery constitutes a differing site conditions. The RE evaluated the conditions outlined in spec sec. 3.04 Unforeseen or Differing Conditions. The CMB agreed with merit of the COR providing direction to the RE to issue a change order directing the Contractor to investigate the pipe and provide recommendation for removal or partial removal of the pipe.	

ACTION ITEMS

ITEM #	MTG DATE	MTG ACTION DATE	DESCRIPTION	BIC	DUE DATE	STATUS
5	08/08/12	08/29/12	1252 – PCC 1252-02 UMS Headwalls	M. Benson	10/10/12	Open
1	11/07/12	11/07/12	1300 – WP 1254 – SF Planning Request	R. Edwards	11/28/12	Open
3	11/14/12	11/14/12	1252 – COR 033 – Retrieval Shaft – 20" Water Line	S. Wilson	11/21/12	Open
1	11/28/12	11/28/12	1251 – Negotiated cost for additional work Related to PG&E Facilities Trends #05, 46, 51, 55, 61, 63, 66, 69 & 79	M. Acosta	12/05/12	Open

Meeting adjourned at 5:10pm

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: BW ES [Initials of preparer & reviewer] Date: 14 Dec 12 [Date review completed]

Meeting Agenda

copy

Project No. M544.1, Contract No. CS-149
Program/Construction Management
Configuration Management Board (CMB) Meeting No. 103
November 28, 2012
3:00pm – 5:00pm
 Central Subway Project Office
 821 Howard St. 2nd Floor
 Main Conference Room

Attendees:

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

1. **1250** – Nothing to Report
2. **1251** – Trends 5, 46, 51, 55, 61, 63, 66, 69 and 79
3. **1252** –
 - COR 006 - MOS - PG&E live electrical delays - Merit
 - COR 015 - LB – Preexcavation for Slurry Walls – Merit
 - COR 017 - MOS - Standby Time @ south headwall due to live TS lines – Merit
 - DSC XXX – 42 " Pipe at UMS Headwall South
4. **1253 (UMS)** – Nothing to Report
5. **1254 (CTS)** – Nothing to Report
6. **1255 (MOS)** – Nothing to Report
7. **1256 (STS)** – Nothing to Report
8. **Trend/Change Log** – Review Current update
9. **Other Business** –

Meeting Attendance Sheet

Project No. M544.1, Contract No. 149
 Program/Construction Management
 Configuration Management Board Meeting No. 103
 November 28, 2012
 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.				
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Farhangi, Shahnam	SFMTA	(415) 554-0721	Shahnam.Farhangi@sfmta.com	
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Lee, Matt	SFCTA	(415) 522-4813	matt@sfcta.org	

central **T** subway

NAME	AFFILIATION	PHONE	E-MAIL (for minutes)	INITIALS
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Zurinaga, Luis	SFCTA	(415) 716-6956	Luis.zurinaga@sfcta.org	<i>[Signature]</i>
<i>Hembel, Matt</i>	<i>SFMTA</i>	<i>415-243-0949</i>	<i>matthew.hembel@sfmta.com</i>	<i>MH</i>
<i>Sarah Wilson</i>	<i>SFMTA</i>	<i>415.243.0950</i>	<i>sarah.wilson@sfmta.com</i>	<i>SHW</i>
<i>Mike Acosta</i>	<i>CSP</i>	<i>701-5282</i>		<i>[Signature]</i>
<i>Ken Barnhart</i>	<i>PCC</i>	<i>415-701-5274</i>	<i>Kenneth.Barnhart@sfmta</i>	<i>[Signature]</i>
	<i>Eric Stassevitch was part of the meeting but did not sign.</i>			
			<i>[Signature]</i>	

TREND NUMBERS 5, 46, 51, 55, 61, 63, 66, 69 AND 79

SFMTA Contract No. 1251
UNION SQUARE/MARKET STREET STATION
UTILITIES RELOCATION

Contractor: Synergy Project Management Inc.
30 Grant Street, Suite 300
San Francisco, CA 94108

SUPPLEMENTAL CHANGE ANALYSIS (FOR CMB APPROVAL)

SCOPE OF WORK:

Trend 05: Additional work to work around and shift existing PG&E conduits on Geary Blvd. at 2 locations (east and west of Stockton Street) during installation of AWSS.

Trend 46: Additional cost for enlarging PG&E Vault No. 584 on O'Farrell east of Stockton.

Trend 51: Intercept existing PG&E ductbank and terminate into Vault No. 5464 at Market/Ellis.

Trend 55: Install Swiveloc lids on 7EA PG&E vaults.

Trend 61: Excavate for PG&E service cut-over at 177 Stillman.

Trend 63: Excavation and restoration for PG&E gas tie-in and kill holes (Part II).

Trend 66: Intercept PG&E conduits at Vault No. 573 at Geary east of Stockton.

Trend 69: Removal of abandoned PG&E gas valve (8EA) and installation of anodes.

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).

REASON FOR CHANGE:

Trend 05: Contract Plans AW-501.1, 501.2, 501.4 and 501.5 show the existing AWSS to be replaced in place. However, existing PG&E conduits were found to be on top of and parallel to the existing AWSS (whereas Contract Plans JT-308 and 309 showed the existing electrical and AWSS to be in separate trenches). See attached sketch.

Trend 46: The 2 existing PG&E ductbanks that were supposed to be intercepted by vault 584 were further apart than shown on Contract Plans. It was therefore necessary to enlarge Vault No. 584 to capture the 2 ductbanks.

Trend 51: PG&E requested that the Contractor reroute an existing ductbank running north out of Manhole 1803 at 4th/Pioneer Place into Manhole 5464 at Market/Ellis.

Trend 55: PG&E requested that the SFMTA add these lids for safety reasons.

Trend 61: PG&E requested that the Contractor excavate for service cut-over at 177 Stillman Street.

Trend 63: PG&E originally intended to self-perform the excavation and restoration work at all gas tie-in/kill holes. However, due to a lack of available crews, PG&E instructed that the Contractor to finish excavation and restoration work for the last remaining tie-in/kill holes.

Trend 66: During installation of intercept Vault No. 573, PG&E had incorrectly identified the conduits to be intercepted. This error was discovered during cut-over process by PG&E.

Trend 69: PG&E instructed that the Contractor remove all abandoned gas valves (8EA)

Trend 79: Unforeseen conditions were encountered during installation of select PG&E vaults including joint trenches leading to these vaults.

COST SUMMARY TABLE:

Trend Number:	Description of Additional Work Performed:	Contractor's Cost Proposal	Forecasted Cost:	Trended Amount
05	AWSS/PG&E Conflict on Geary Blvd.	\$250,605.02	\$136,416.15	\$127,892.53
46	PG&E Vault No. 584 Enlargement	\$115,660.47	\$67,949.78	\$60,053.76
51	Rerouting of Existing PG&E Ductbank at Vault No. 5464	\$33,531.01	\$24,951.91	\$15,000.00
55	Installation of Swiveloc Vault Lids	\$29,254.85	\$29,254.85	\$29,254.85
61	Excavation for Cut-Over at 177 Stillman	\$15,000.00	\$7,672.67	\$15,000.00
63	Excavation and Restoration for Gas Kill/Tie-In Holes (Part II)	\$88,539.87	\$59,522.73	\$40,000.00
66	Intercept Conduits at Vault No. 573	\$7,269.84	\$6,948.72	\$15,000.00
69	Removal of Abandoned Gas Valves	\$1,308.46	\$1,048.14	\$15,000.00
79	Unforeseen Conditions Encountered During Vault Installation	\$120,872.36	\$47,933.42	\$50,000.00
TOTAL		\$662,041.88	\$381,698.37	\$367,201.14

COST ANALYSIS:

Each of the FARs, CORs and/or invoices submitted by the Contractor was thoroughly reviewed by the SFMTA Resident Engineer. After this comprehensive review it was determined that the final compensation value of these items will be \$381,698.37 as shown in the Cost Summary Table.

Approval of the Contract Modification cost contained herein will allow the Resident Engineer to conduct final negotiations with the Contractor which in turn will facilitate the compilation and execution of a Contract Modification for the work contained herein.

SCHEDULE ANALYSIS:

This work does not impact the Substantial Completion Date. There is no time adjustment associated with this Contract Modification.

SUMMARY TABLE FOR TRENDS 5/46/51/55/61/63/66/69/79

Additional Costs Related to PG&E Facilities

SFMTA Central Subway Contract Number 1251 - Union Square/Market Street Station Utilities Relocation

Index #	FA #	Description	Synergy Requested Amount	SFMTA Current Approved Amount	Forecasted Final Amount	Outstanding Cost Differences
1.1	N/A	PG&E electrical and AWSS conflict at Geary east and west of Stockton Street	\$250,605.02	\$136,416.15	\$136,416.15	\$0.00
Trend No. 05 Subtotal			\$250,605.02	\$136,416.15	\$136,416.15	
2.1	N/A	Lump sum cost for PG&E Vault No. 584 enlargement	\$115,660.47	\$67,949.78	\$67,949.78	\$0.00
Trend No. 46 Subtotal			\$115,660.47	\$67,949.78	\$67,949.78	
3.1	3167	Clean PG&E vault 7730 & 5464 on Ellis not shown on contract documents. (Per Tom).	\$905.53	\$889.50	\$1,138.95	\$249.45
3.2	3168	Clean PG&E vault 7730 & 5464 on Ellis not shown on contract documents. (Per Tom).	\$692.60	\$374.49	\$623.94	\$249.45
3.3	3358	Dig for PGE intercept to PGE vault 5464 on Market/Ellis intersection.	\$6,352.40	\$5,032.94	\$5,132.94	\$100.00
3.4	3362	Dig for PGE Y-Cast for PGE vault 5464.	\$7,980.39	\$3,984.08	\$4,748.13	\$764.05
3.5	3366	PGE Y-Cast @ Market & Stockton PGE vault 5464	\$7,296.94	\$3,508.46	\$3,508.46	\$0.00
3.6	3369	Installation of conduits to PGE vault 5464 (located on Markey & Stockton) + PEC FAR	\$5,806.35	\$2,920.15	\$6,321.13	\$3,400.98
3.7	3379	Backfill & pour base on PGE tie-in to vault 5454.	\$4,496.80	\$2,808.65	\$3,478.36	\$669.71
Trend No. 51 Subtotal			\$33,531.01	\$19,518.27	\$24,951.91	
4.1	N/A	Lump sum cost for PG&E Swiveloc installation	\$29,254.85	\$29,254.85	\$29,254.85	\$0.00
Trend No. 55 Subtotal			\$29,254.85	\$29,254.85	\$29,254.85	
5.1	2589	Excavate for PGE cutover at 4th/Stillman	\$15,000.00 (COR #60)	\$4,002.11	\$4,002.11	\$0.00
5.2	4th/Stillman (1/2)	Restoration		\$2,393.66	\$2,393.66	\$0.00
5.3	4th/Stillman (2/2)	Support for PGE cutover work (2 occasions at 2 hours each)		\$1,276.90	\$1,276.90	\$0.00
Trend No. 61 Subtotal			\$15,000.00	\$7,672.67	\$7,672.67	
6.1	3303	Dig PG&E gas connection on O'Farrell (east)	\$4,447.01	\$3,691.06	\$3,691.06	\$0.00
6.2	3305	Dig for PG&E gas connection on O'Farrell east and west.	\$7,322.46	\$5,280.22	\$5,280.22	\$0.00
6.3	3311	Support for PG&E gas crews on O'Farrell east and west.	\$7,388.19	\$4,479.23	\$4,479.23	\$0.00
6.4	3338	PG&E gas tie-in holes at O'Farrell. Excavate holes on O'Farrell west and Stockton west north of O'Farrell	\$3,933.45	\$2,376.11	\$2,376.11	\$0.00
6.5	3339	PG&E gas tie-in holes at Stockton at Forever 21 and Armani Exchange	\$7,771.37	\$4,556.90	\$4,556.90	\$0.00
6.6	3343 rev1	Excavate for PG&E gas on Stockton south of O'Farrell. Support/dig tie-in connections. Work performed from 7AM - 5:30PM	\$8,584.56	\$5,948.67	\$5,948.67	\$0.00
6.7	3344	Excavate for PG&E gas on O'Farrell west. Dig/support gas.	\$5,849.62	\$3,602.95	\$3,602.95	\$0.00
6.8	3347	Support and dig for PG&E gas on O'Farrell west	\$4,858.10	\$1,801.47	\$1,801.47	\$0.00
6.9	3348 rev1	Support PG&E gas on Stockton south of O'Farrell. Dig tie-in holes	\$8,458.88	\$5,032.94	\$5,032.94	\$0.00
6.10	3356 rev1	Gas tie in on O'Farrell West test line.	\$579.75	\$514.22	\$514.22	\$0.00
6.11	3389	O'Farrell East-Backfill of gas tie-in hole. Backfill of manhole not installed per SFMTA deeming it as an unsafe condition.	\$5,048.64	\$3,530.45	\$3,530.45	\$0.00
6.12	3394	Backfill & base PGE tie in holes directed by Mike Acosta @ O'Farrell West.	\$2,602.90	\$2,427.89	\$2,427.89	\$0.00
6.13	3419	Dig PGE gas tie in holes on O'Farrell East and West.	\$5,095.87	\$4,431.10	\$4,431.10	\$0.00
6.14	3420	Support PGE gas tie in on O'Farrell & Stockton. Crew size directed by Dave V. of PGE.	\$6,645.95	\$4,809.16	\$4,809.16	\$0.00
6.15	3422	Redig PGE gas tie ins on O'Farrell. Saw cut both East and West tie-ins.	\$1,030.33	\$912.10	\$912.10	\$0.00
6.16	3428	Backfill and street base PGE gas tie connections on O'Farrell & Stockton (South of O'Farrell). East & West side of O'Farrell.	\$7,473.99	\$4,772.95	\$4,772.95	\$0.00
6.17	3492	Backfill and base PG&E kill holes on Stockton	\$1,448.80	\$1,355.31	\$1,355.31	\$0.00
Trend No. 63 Subtotal			\$88,539.87	\$59,522.73	\$59,522.73	
7.1	3351	Locate PGE electrical line for vault 573 on Geary East.	\$1,277.70	\$927.78	\$927.78	\$0.00
7.2	3355	Core drill a 6" hole in PGE vault 573. Remove plates and replace.	\$814.89	\$744.47	\$1,367.72	\$623.25
7.3	3373	PGE conduit tie-in to 573. Missed conduits.	\$995.29	\$849.62	\$849.62	\$0.00
7.4	3392	PGE vault 573 preparation for conduit installation. Chipping of vault wall on Geary.	\$1,630.00	\$1,332.90	\$1,332.90	\$0.00
7.5	3468	Backfill missed conduits into PGE vault 573.	\$699.68	\$656.59	\$656.59	\$0.00
7.6	3469b	Concrete base & repair parking strip on Geary East for PGE vault 573 lines added.	\$1,852.28	\$1,814.11	\$1,814.11	\$0.00
Trend No. 66 Subtotal			\$7,269.84	\$6,325.47	\$6,948.72	
8.1	3489	Demo PG&E gas valves on Stockton and Ellis. Also patch back valves.	\$1,308.46	\$1,006.26	\$1,048.14	\$41.88
Trend No. 69 Subtotal			\$1,308.46	\$1,006.26	\$1,048.14	
9.1	2094	Excavation of PG&E vault 573 was reduced due to 8" water line not shown on plans.	\$3,136.55	\$931.11	\$1,158.77	\$227.66
9.2	2096	Loss of production on excavation PG&E vault 573 due to water line not depicted in vault location.	\$5,653.60	\$1,294.69	\$1,294.69	\$0.00
9.3	2098	Loss of production on excavation PG&E vault 573 due to water line not depicted in vault location.	\$5,532.85	\$1,226.48	\$1,226.48	\$0.00
9.4	2099	Loss of production on excavation PG&E vault 586 due to old water pipes not depicted in vault location.	\$6,402.61	\$1,294.69	\$1,294.69	\$0.00
9.5	2102	Lose of production on excavation PGE vault 573 due to water line not depicted in vault location.	\$2,261.96	\$953.27	\$953.27	\$0.00
9.6	2169	Demolition of concrete not shown on contract drawings at PGE vault 594 on Ellis Street	\$339.55	\$339.55	\$339.55	\$0.00
9.7	2170	Cutting beams that are not shown on contract drawings at PGE vault 594 on Ellis Street	\$1,785.42	\$1,670.53	\$1,670.53	\$0.00

Index #	FA #	Description	Synergy Requested Amount	SFMTA Current Approved Amount	Forecasted Final Amount	Outstanding Cost Differences
9.8	2174	Remove forms, broken concrete, metal studs, and debris from the excavation of PGE vault 467. Materials were left from the construction work performed by Skyline Construction.	\$3,657.59	\$708.28	\$708.28	\$0.00
9.9	2272	Remove water line and existing ductbank in front of PG&E vault 467	\$5,588.78	\$1,980.21	\$1,980.21	\$0.00
9.10	2298	PG&E JT (O'Farrell) Joint trench to vault 586. Remove pipes and existing structure not shown on plans.	\$7,224.77	\$2,543.30	\$2,543.30	\$0.00
9.11	2299	PG&E JT (O'Farrell) Joint trench to vault 586. Remove pipes and existing structure not shown on plans.	\$14,520.15	\$5,327.62	\$5,327.62	\$0.00
9.12	2300	Geary east, chip Muni ductbank for joint trench to PG&E vault 571. Chipping was needed to install joint trench.	\$3,460.43	\$1,880.54	\$2,111.24	\$230.70
9.13	2455	Geary/Stockton - excavation production of trench for PG&E conduits from vault 573 to vault 873 was reduced due to existing PG&E conduits. Conduits were cut and removed for installation of new conduits.	\$4,464.33	\$1,216.62	\$1,370.42	\$153.80
9.14	2521	Geary east - excavate and remove existing 8" waterline not shown on the project documents. LPWM conflict with PG&E vault 573	\$4,334.49	\$3,188.43	\$3,188.43	\$0.00
9.15	2525	Geary east - excavate and remove existing 8" waterline not shown on the project documents. Impact on excavation productivity due to additional PG&E line not shown on project documents. LPWM conflict with PG&E vault 573	\$3,149.45	\$1,904.30	\$1,904.30	\$0.00
9.16	2541	Geary east - excavate and remove 8" waterline not shown on the project documents. Impact on excavation productivity due to additional PG&E lines now shown on the project documents. LPWM conflict with PG&E vault 573.	\$3,543.19	\$3,041.81	\$3,041.81	\$0.00
9.17	2306	Geary east- chip Muni ductbank for joint trench to PG&E vault 571. Chipping was needed to install joint trench	\$2,068.68	\$1,408.15	\$1,635.81	\$227.66
9.18	2317	Additional work per request from PG&E vault 469. Removal of abandoned utility lines.	\$28,405.71	\$6,158.16	\$6,158.16	\$0.00
9.19	2330	O'Farrell - PG&E joint trench to vault 586. Remove pipes and existing structure not shown on plans.	\$6,718.98	\$3,104.88	\$3,104.88	\$0.00
9.20	2347	O'Farrell - PG&E joint trench to vault 586. Remove pipes and existing structure not shown on plans.	\$8,623.27	\$6,920.98	\$6,920.98	\$0.00
Trend No. 79 Subtotal			\$120,872.36	\$47,093.60	\$47,933.42	

	Synergy Request Amount	SFMTA Current Approved Amount	Forecasted Final Amount	Trended Amount
<i>Trend No. 05 Subtotal</i>	\$250,605.02	\$136,416.15	\$136,416.15	\$127,892.53
<i>Trend No. 46 Subtotal</i>	\$115,660.47	\$67,949.78	\$67,949.78	\$60,053.76
<i>Trend No. 51 Subtotal</i>	\$33,531.01	\$19,518.27	\$24,951.91	\$15,000.00
<i>Trend No. 55 Subtotal</i>	\$29,254.85	\$29,254.85	\$29,254.85	\$29,254.85
<i>Trend No. 61 Subtotal</i>	\$15,000.00	\$7,672.67	\$7,672.67	\$15,000.00
<i>Trend No. 63 Subtotal</i>	\$88,539.87	\$59,522.73	\$59,522.73	\$40,000.00
<i>Trend No. 66 Subtotal</i>	\$7,269.84	\$6,325.47	\$6,948.72	\$15,000.00
<i>Trend No. 69 Subtotal</i>	\$1,308.46	\$1,006.26	\$1,048.14	\$15,000.00
<i>Trend No. 79 Subtotal</i>	\$120,872.36	\$47,093.60	\$47,933.42	\$50,000.00
TOTAL CONTRACT MODIFICATION VALUE	\$662,041.88	\$374,759.78	\$381,698.37	\$367,201.14

RESERVE ZONE (4)

MATCH LINE
SEE JT-309

APN 0309-011
212 STOCKTON

APN 0313-018
150 STOCKTON

DT FP
A 9+65±
FSET: 14'± RT

SFDPT PB B
CTL 130+18±
OFFSET: 27'± LT

SFDPT PB D
CTL 130+15±
OFFSET: 27'±

SL PB A
CTL 130+12±
OFFSET: 27'± LT

MTA PB A
GEA 9+47±
OFFSET: 11'±

QWEST MH A
GEA 9+49±
OFFSET: 15'± LT

SFDPT PB N
CTL 130+15±
OFFSET: 22'± LT

SL PB B
CTL 130+68±
OFFSET: 27'± LT

STOCKTON STREET

PG&E PE
CTL 130
OFFSET:
27'± LT

MATCH LINE
SEE JT-309

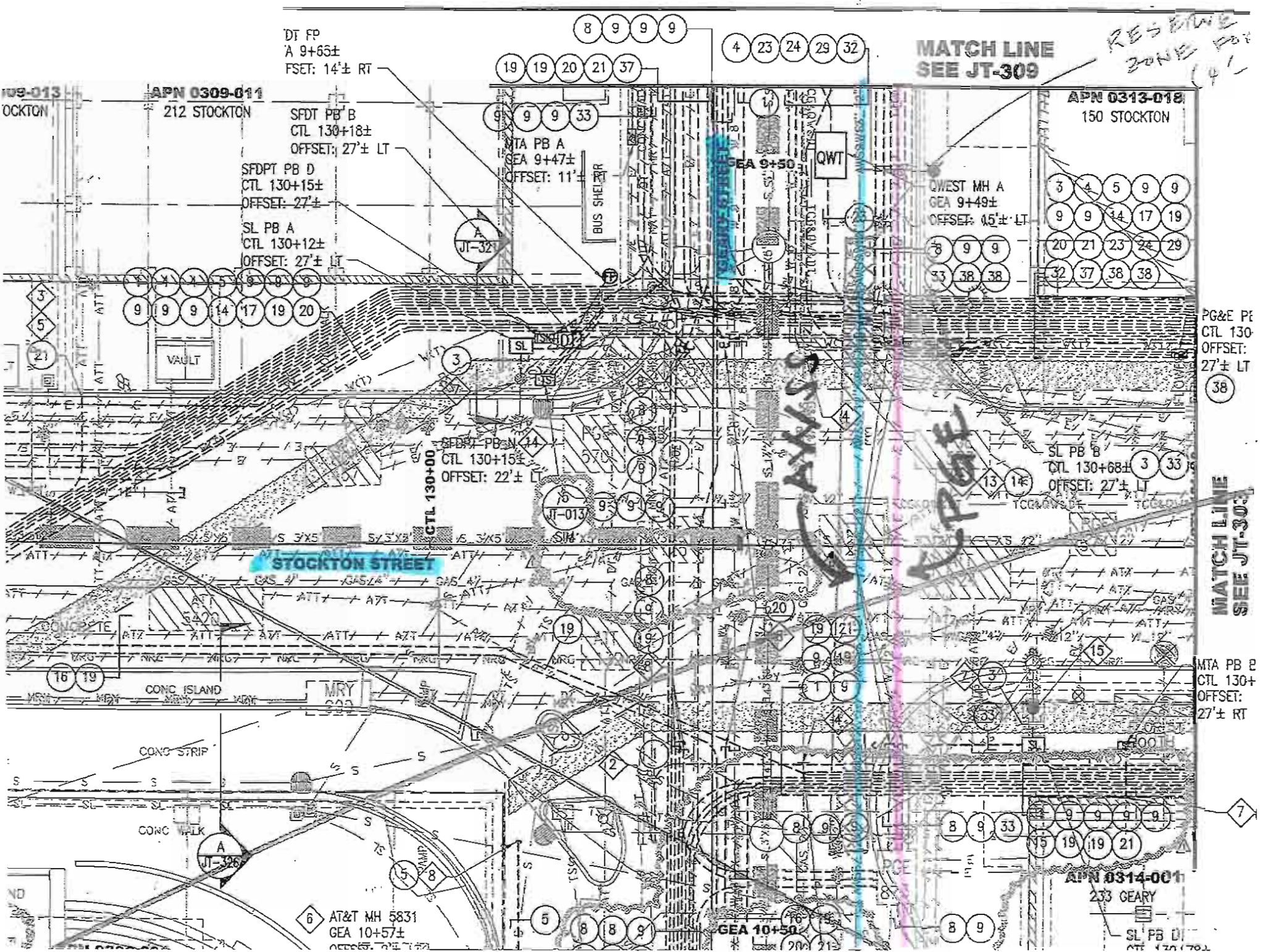
MTA PB B
CTL 130+
OFFSET:
27'± RT

APN 0314-001
233 GEARY

AT&T MH 5831
GEA 10+57±
OFFSET: 27'± LT

GEA 10+50

SL PB D
CTL 130+70±



SFMTA Contract No. 1252

Contractor: Barnard Impregilo Healy JV (BIH)

EVALUATION OF MERIT

COR 006

Recommendation: Partial acceptance of Merit for COR 006. Merit shall only include additional costs for guide wall excavation and forming inefficiencies due to the presence of live PG&E utilities. Merit shall not be granted for costs associated with sewer work, which is part of the contract. The Contractor did not submit a request for time extension for this work.

Facts: In order for the completion of the Launch box guide walls to take place PG&E Vault #2975 and the utilities connected to it were required to be abandoned prior to excavation. The contract documents indicated that these utilities were abandoned; however SFMTA was informed on April 5, 2012 that PG&E Inspector Tom Reimer found live electrical and fiber optic lines when performing an inspection inside PGE Vault #2975. The de-energization of PG&E line and the SFDT cutover were not completed until May 23rd.

As a result of the PG&E utilities not being abandoned BIH subcontractor Condon Johnson – Nicholson Construction Company (CJA-NCC) state that they experienced inefficiencies beginning on May 17th and ending on May 24th, 2012.

In addition BIH claims that CJA-NCC incurred additional costs as they performed work required to shutoff an active sewer line shown to be abandoned on the contract drawings. However, BIH later acknowledged the fact that this was contract work as was documented in an email sent to SFMTA on November 11th, 2012.

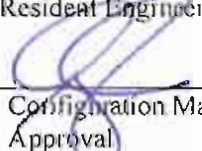
Rationale for COR: CJA-NCC planned their work based on the understanding that the PG&E utilities would be abandoned prior to guide wall construction and thus additional costs were incurred due to the discovery of live utilities.

Justification: CJA-NCC experienced inefficiencies due to the presence of live utilities which were shown to be abandoned within the Launch box construction area. The extent and duration of the inefficiencies requires further evaluation.

By:

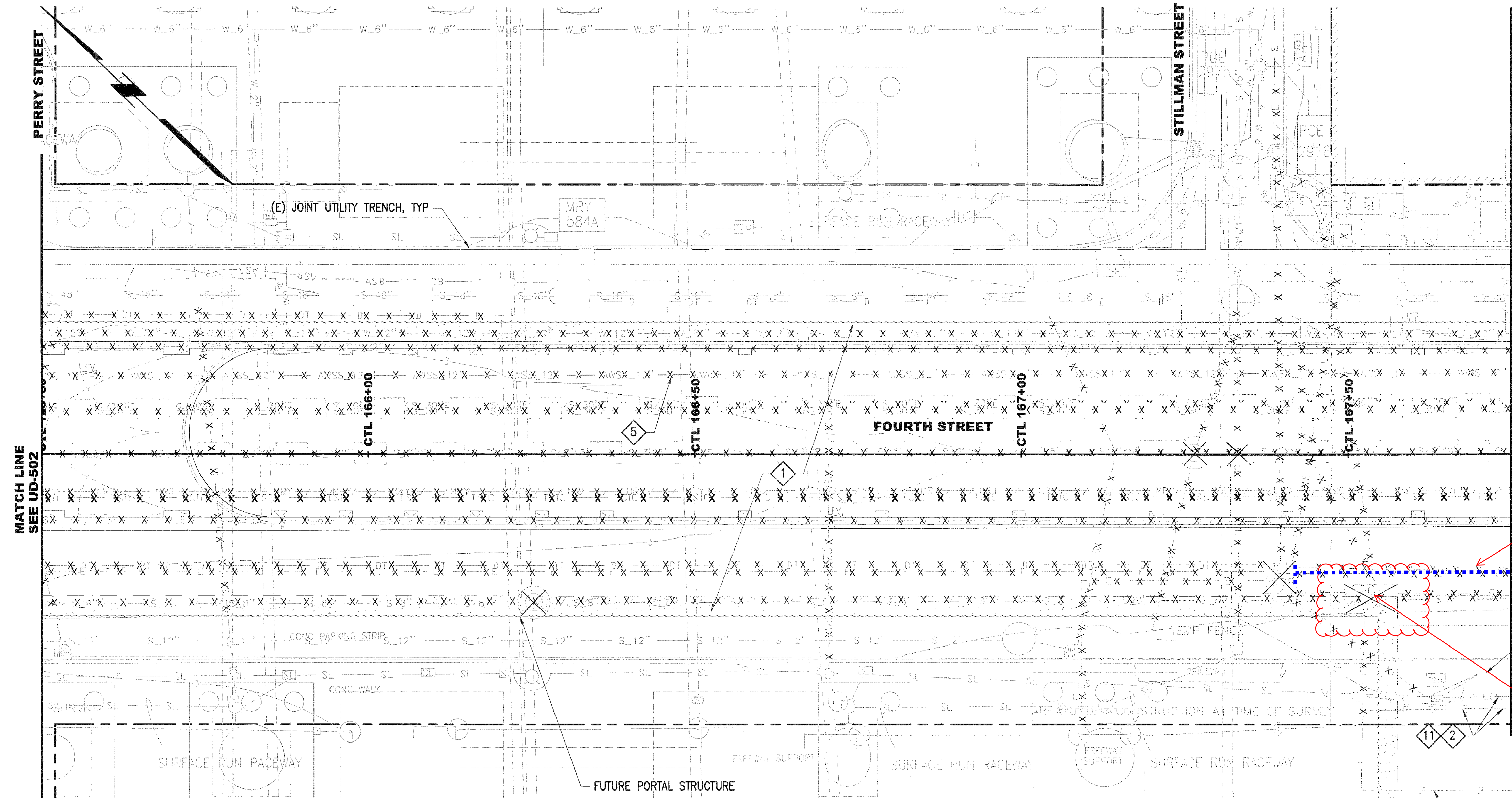

Sarah Wilson
Resident Engineer

11/28/12
Date


Configuration Management Board
Approval

11-28-12
Date

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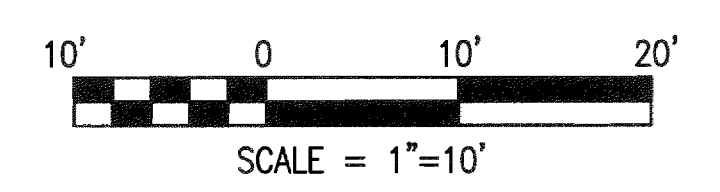
Live PGE electrical leaving the 2975 Vault verified by Tom Reimer

Guide Wall Excavation location

APPROX. LOCATION CALTRANS LIGHT TOWER (PROTECT IN PLACE)

NOTES:

1. DEMOLISH AND REMOVE ALL ABANDONED UTILITY FACILITIES, INCLUDING PREVIOUSLY ABANDONED FACILITIES NOT SHOWN ON PLANS, WITHIN LIMITS OF LAUNCH BOX 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 LAUNCH BOX CONSTRUCTION PHASING.
3. PROTECT (E) SEWER.
4. SEE (WD) DRAWINGS FOR ABANDONMENT AND REMOVAL OF WATER FACILITIES.
5. SEE (AW) DRAWINGS FOR ABANDONMENT AND REMOVAL OF AWSS FACILITIES.
6. PROTECT (E) AT&T FACILITIES.
7. PROTECT (E) JOINT TRENCH.
8. CAP OR PLUG ALL ABANDONED FACILITIES INCLUDING PREVIOUSLY ABANDONED FACILITIES NOT SHOWN ON PLANS AT JET GROUT OR SLURRY WALL LIMIT.
9. (E) STREET LIGHT POLE. TEMPORARILY REMOVE IF NECESSARY POLE FOR LAUNCH BOX STRUCTURE CONSTRUCTION AND REINSTALL AFTER PORTAL CONSTRUCTION.
10. TEMPORARY REMOVE AND REINSTALL CATCH BASIN IN CURRENT LOCATION IF FOUND TO BE IN CONFLICT WITH LAUNCH BOX CONSTRUCTION. NOTIFY ENGINEER.
11. RELOCATE (E) SERVICE TO OUTSIDE OF LAUNCH BOX STRUCTURE. COORDINATE WITH OWNER.

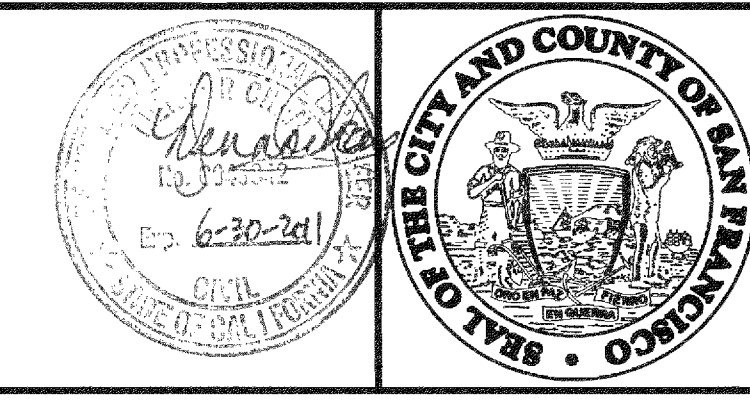


CONFORMED

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

PB TELAMON
TELAMON ENGINEERING CONSULTANTS INC.

DESIGNED: M. DEFORGE
 DRAWN: E. MATIAS
 CHECKED: D. ZUURING
 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
 FOURTH STREET PORTAL
 CTL 165+50 TO 167+75

CONTRACT NO. 1252	
SFMTA CONTROL NO. CL-18033	
DRAWING NO. UD-503	REVISION 0
SHEET NO. 86	

SFMTA Contract No. 1252

Contractor: Barnard Impregilo Healy JV (BIH)

EVALUATION OF MERIT

COR 013

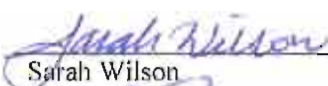
Recommendation: Accept justification of Merit for COR 013, for installing conduit for permanent power to an existing street light on Fourth Street near the north headwall at Moscone Station. The Contractor did not submit a request for time extension for this work.

Facts: When PG&E de-energized Vault #1494 to accommodate 1252 construction, an existing street light located on Fourth Street at the north-west side of the north headwall at Moscone Station (shown on Dwg. No's. UD-402 Rev.0 and UT-402 Rev.0), lost power. PG&E inspected Vault #1622 on Clementina St. and discovered that it is not available as a power source. A connection must be made to Vault #1493 for permanent street light power.


Rationale for COR: SFMTA requested that BIH install conduit to connect the street light to permanent power. The work was not shown in the 1252 contract documents.

Justification: SFMTA requested that BIH install conduit to connect the street light to permanent power through PG&E Vault #1493. Approximately 20' of 1.5" diameter GRS conduit was required to be installed from PG&E Vault #1493 to the street light. Work required to provide permanent power to the existing street light was not shown in the Contract 1252 documents.

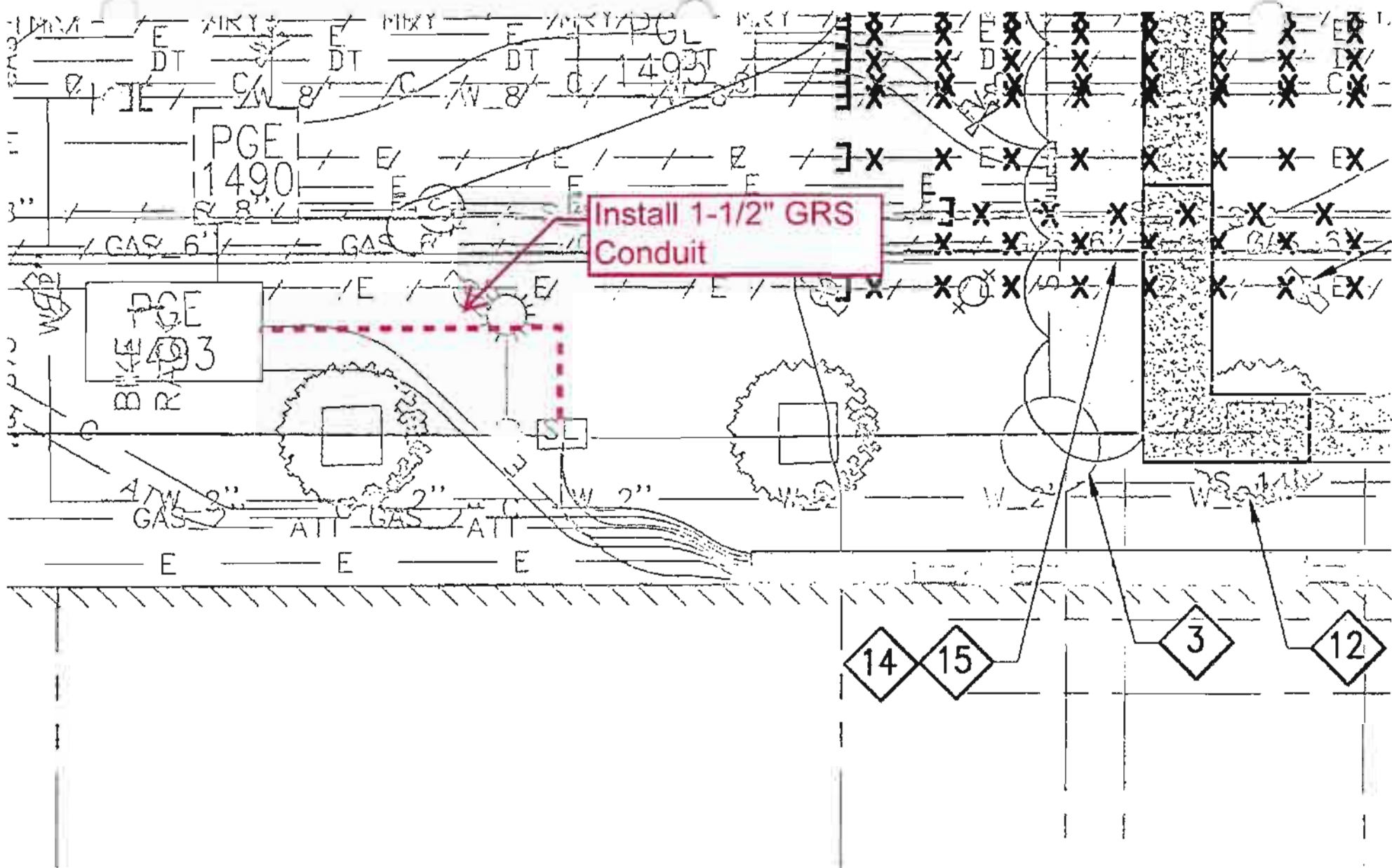
By:


Sarah Wilson
Resident Engineer

11/28/12
Date

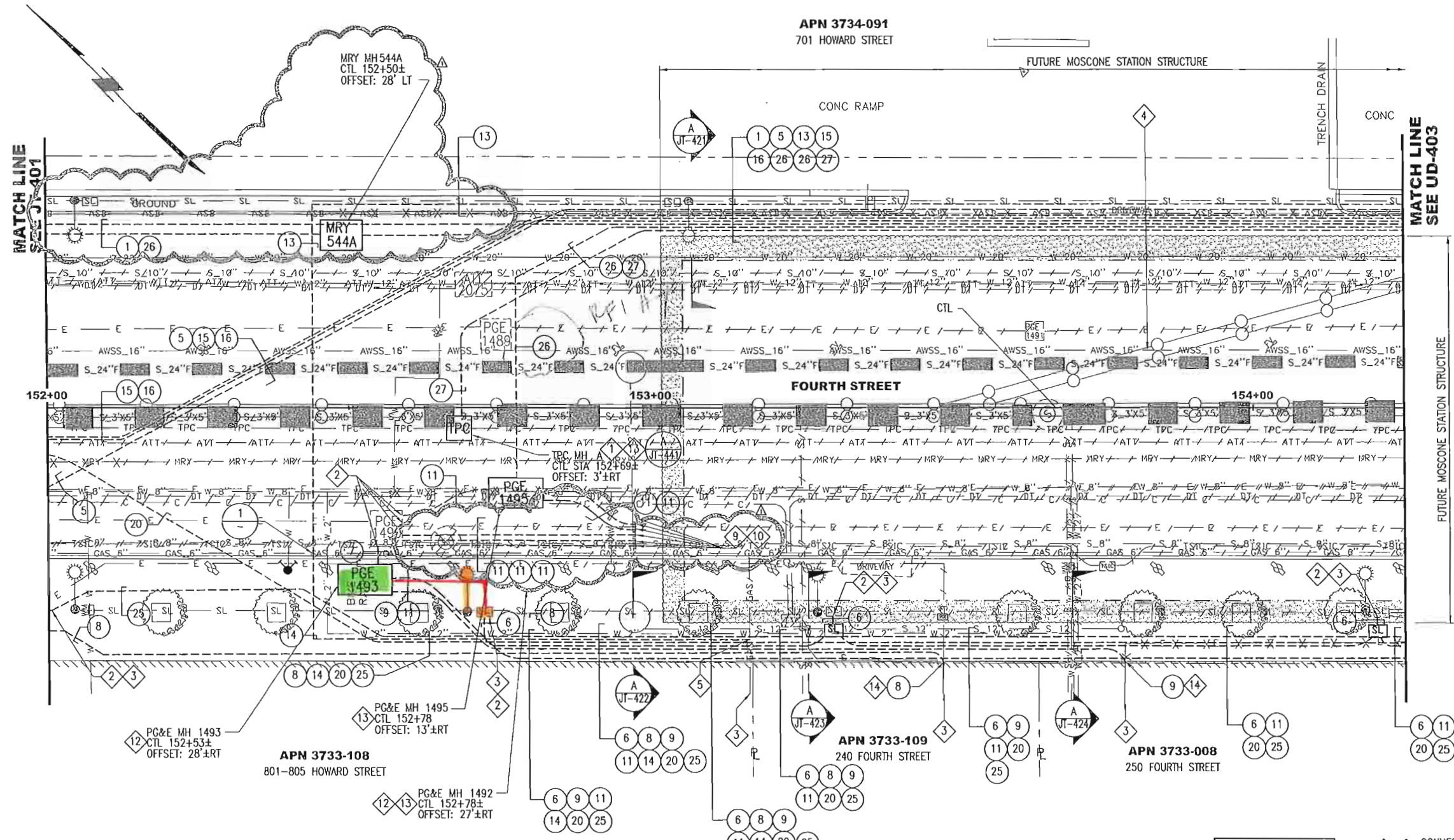

Configuration Management Board
Approval

11-28-12
Date



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APN 3734-091
701 HOWARD STREET

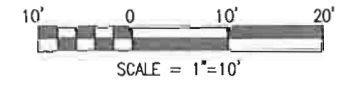
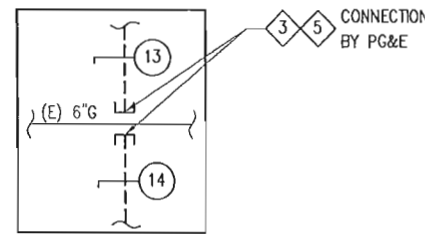


CONDUIT NOTES:

CONDUIT NOTE #	CONDUIT # AND SIZE	MATERIAL	UTILITY AGENCY
1	6-4", 4-2"	HDPE, GRS	MRY
2	4-4", 2-2"	HDPE, GRS	MRY
3	1-2"	GRS	MRY
4	2-2"	GRS	MRY
5	4-2"	HDPE	DPT
6	1-1 1/2"	GRS	SFPUC SL
7	4-6"	PVC	PG&E
8	3-5"	PVC	PG&E
9	2-4"	PVC	PG&E
10	6-6"	PVC	PG&E
11	2-6"	PVC	PG&E
12	2-3"	PVC	PG&E
13	1-6"	PE	PG&E GAS
14	1-2"	PE	PG&E GAS
15	12-4"	PVC	AT&T
16	24-4"	PVC	AT&T
17	1-2"	GRS	SFDT
18	4-4"	PVC	AT&T
19	3-4"	PVC	AT&T
20	2-4"	PVC	AT&T
21	1-4"	PVC	AT&T
22	1-3"	PVC	AT&T
23	2-1 1/2", QUADLOCK	PVC	ASB
24	1-2", 1-4"	PVC	ASB
25	2-2"	PVC	COMCAST
26	1-4"	HDPE	SFDT
27	2-1 1/2", QUADLOCK	PVC	TPC
28	8-4"	PVC	AT&T
29	4-5"	PVC	PG&E
30	8-4"	PVC	PG&E
31	1-3"	PVC	PG&E
32	1-2"	HDPE	DPT

SHEET NOTES:

- CONNECTION TO EXISTING CONDUIT(S) BY UTILITY OWNER. COORDINATE SCHEDULE FOR WORK WITH UTILITY OWNER.
- STUB CONDUITS INTO EXISTING PULLBOX/VAULT. COORDINATE WORK WITH PULLBOX/VAULT OWNER.
- MAINTAIN EXISTING SERVICE OR PROVIDE INTERIM SERVICE UNTIL NEW SERVICE IS CUT-OVER.
- ADJUST OCS CATENARY SYSTEM AS NECESSARY TO FACILITATE UTILITY WORK. COORDINATE WORK WITH ENGINEER.
- STUB NEW GAS LINE TO WITHIN 2 FEET OF EXISTING GAS LINE. CONNECTION TO EXISTING GAS LINES BY PG&E. COORDINATE SCHEDULE FOR WORK WITH PG&E.
- CAP EXISTING GAS LINE (BY PG&E).
- COORDINATE INSTALLATION OF MUNI VAULT AND CONNECTION TO EXISTING DUCTBANK WITH MUNI. SEE TP DRAWINGS FOR MUNI CABLE INSTALLATION.
- INTERCEPT AND COUPLE NEW CONDUIT TO EXISTING RISER CONDUIT. COORDINATE SCHEDULE FOR WORK WITH MUNI.
- STUB AND CAP CONDUITS FOR FUTURE EXTENSION.
- STUB END OF CONDUITS SHALL BE PLACED TO MAXIMUM DEPTH OF 60 INCHES BELOW FINISH GRADE.
- EXCAVATE AND EXPOSE ASB DUCT BANK TO TRAIN CONDUIT TO RUN THROUGH CENTER OF ASB MH "A".
- REFER TO SHEET NOTE 2 ON JTD-403.
- CONNECT EXISTING DUCTBANK TO NEW MANHOLE.
- CONNECT NEW CONDUIT(S) TO EXISTING SERVICE CONDUITS. COORDINATE WITH PG&E FOR THIS WORK.

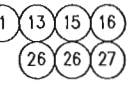
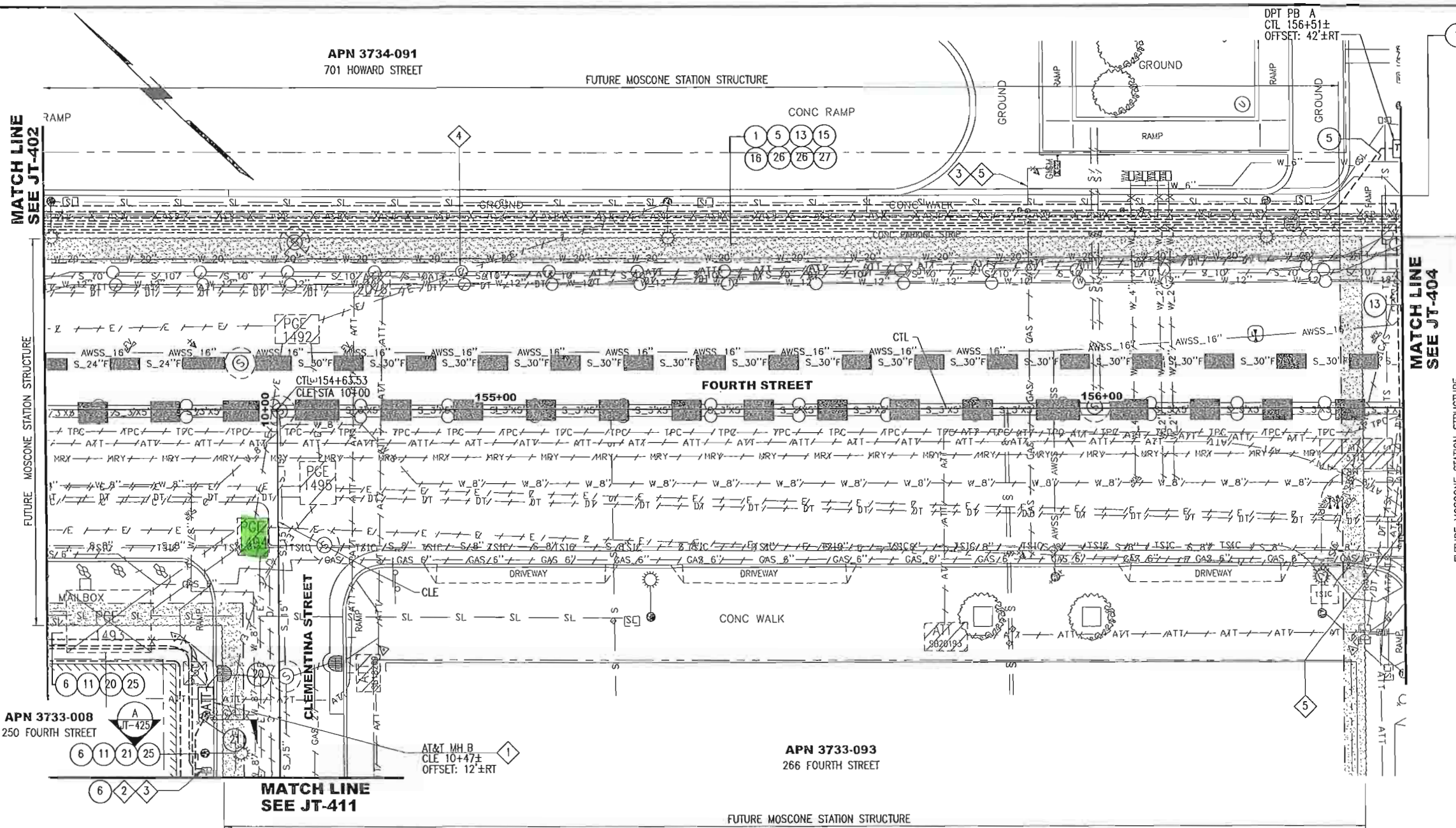


FOR ORIGINAL SIGNATURES, SEE CL-17498, REV. 0.

		DESIGNED: P. WILSON DRAWN: F. BAYANI CHECKED: F. REYNOLDS REVIEWED: M. CHAN RECOMMENDED: A. HOE APPROVED: J. FUNGHI DATE: 08/04/2009	 CITY AND COUNTY OF SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY APPROVED CARTER R. ROHAN EXECUTIVE DIRECTOR/CEO	THIRD STREET LIGHT RAIL PROGRAM PHASE 2 - CENTRAL SUBWAY MOSCONE STATION AND PORTAL UTILITIES RELOCATION JOINT TRENCH MOSCONE STATION CTL 152+00 TO 154+25	CONTRACT NO. 1250 SFMTA CONTROL NO. CL-17498 DRAWING NO. JT-402 SHEET NO. 1
8/7/2009 05/22/2009	REMISED PG&E, MRY, AND DT & CHANGED NOTES	DATE DESCRIPTION BY CHECKED APPROVED			

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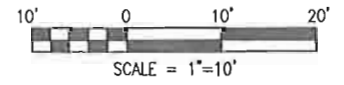
CONDUIT NOTES:

CONDUIT NOTE #	CONDUIT # AND SIZE	MATERIAL	UTILITY AGENCY
1	6-4", 4-2"	HDPE, GRS	MRY
2	4-4", 2-2"	HDPE, GRS	MRY
3	1-2"	GRS	MRY
4	2-2"	GRS	MRY
5	4-2"	HDPE	DPT
6	1-1 1/2"	GRS	SFPUC SL
7	4-6"	PVC	PG&E
8	3-5"	PVC	PG&E
9	2-4"	PVC	PG&E
10	6-6"	PVC	PG&E
11	2-6"	PVC	PG&E
12	2-3"	PVC	PG&E
13	1-6"	PE	PG&E GAS
14	1-2"	PE	PG&E GAS
15	12-4"	PVC	AT&T
16	24-4"	PVC	AT&T
17	1-2"	GRS	SFDT
18	4-4"	PVC	AT&T
19	3-4"	PVC	AT&T
20	2-4"	PVC	AT&T
21	1-4"	PVC	AT&T
22	1-3"	PVC	AT&T
23	2-1 1/2", QUADLOCK	PVC	ASB
24	1-2", 1-4"	PVC	ASB
25	2-2"	PVC	COMCAST
26	1-4"	HDPE	SFDT
27	2-1 1/2", QUADLOCK	PVC	TPC
28	8-4"	PVC	AT&T
29	4-5"	PVC	PG&E
30	8-4"	PVC	PG&E
31	1-3"	PVC	PG&E
32	1-2"	HDPE	DPT

SHEET NOTES:

- CONNECTION TO EXISTING CONDUIT(S) BY UTILITY OWNER. COORDINATE SCHEDULE FOR WORK WITH UTILITY OWNER.
- STUB CONDUITS INTO EXISTING PULLBOX/VAULT. COORDINATE WORK WITH PULLBOX/VAULT OWNER.
- MAINTAIN EXISTING SERVICE OR PROVIDE INTERIM SERVICE UNTIL NEW SERVICE IS CUT-OVER.
- ADJUST OCS CATENARY SYSTEM AS NECESSARY TO FACILITATE UTILITY WORK. COORDINATE WORK WITH ENGINEER.
- STUB NEW GAS LINE TO WITHIN 2 FEET OF EXISTING GAS LINE. CONNECTION TO EXISTING GAS LINES BY PG&E. COORDINATE SCHEDULE FOR WORK WITH PG&E.
- CAP EXISTING GAS LINE (BY PG&E).
- COORDINATE INSTALLATION OF MUNI VAULT AND CONNECTION TO EXISTING DUCTBANK WITH MUNI. SEE TP DRAWINGS FOR MUNI CABLE INSTALLATION.
- INTERCEPT AND COUPLE NEW CONDUIT TO EXISTING RISER CONDUIT. COORDINATE SCHEDULE FOR WORK WITH MUNI.
- STUB AND CAP CONDUITS FOR FUTURE EXTENSION.

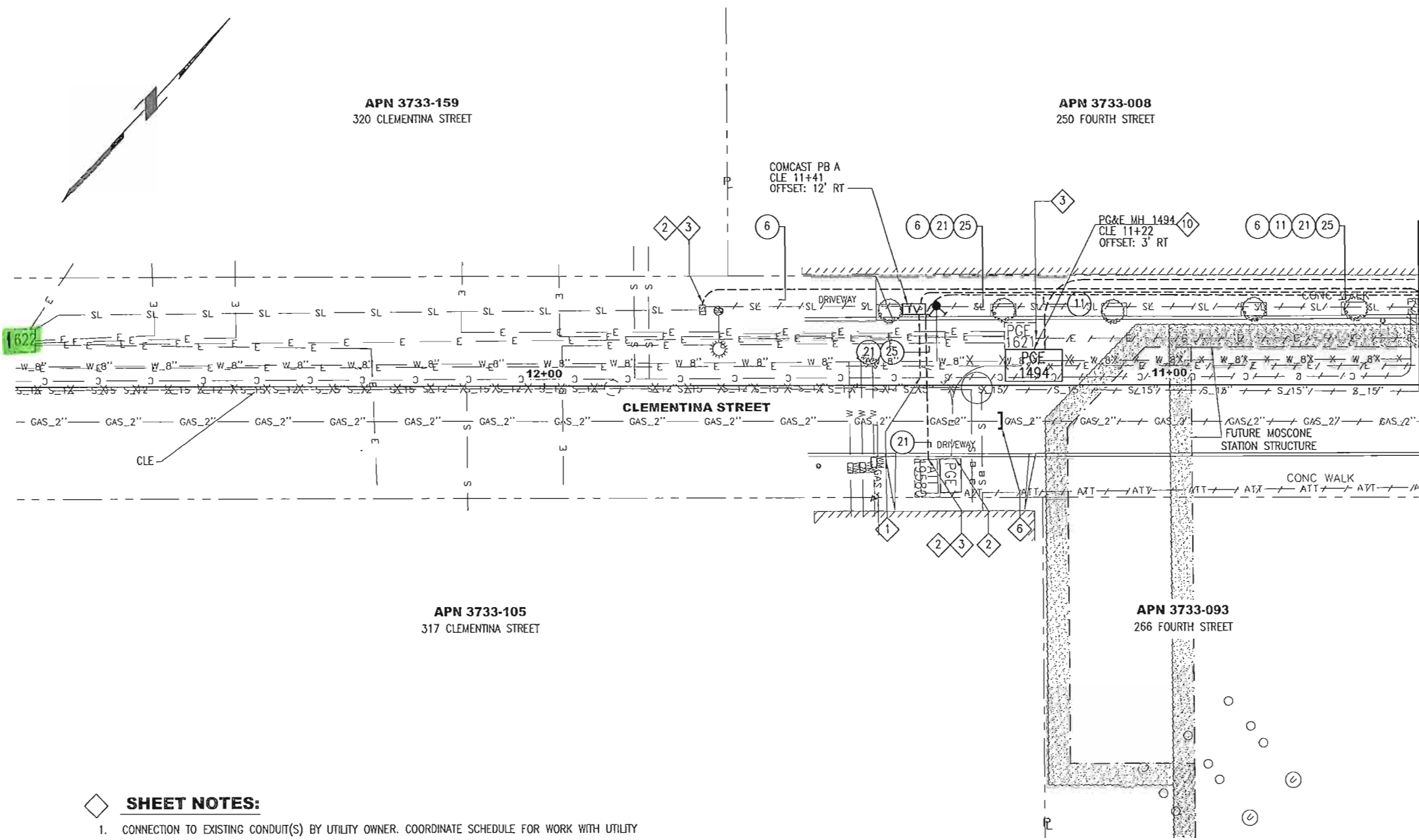
FOR ORIGINAL SIGNATURES, SEE CL-17499, REV. 0.



	DESIGNED: P. WILSON DRAWN: F. BAYANI CHECKED: F. REYNOLDS REVIEWED: M. CHAN RECOMMENDED: A. HOE APPROVED: J. FUNGHI DATE: 08/04/2009	<p>CITY AND COUNTY OF SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY</p> <p>APPROVED CARTER R. ROHAN FOR EXECUTIVE DIRECTOR/CEO</p>	THIRD STREET LIGHT RAIL PROGRAM PHASE 2 - CENTRAL SUBWAY MOSCONE STATION AND PORTAL UTILITIES RELOCATION JOINT TRENCH MOSCONE STATION CTL 154+25 TO 156+50
8/7/2009 DELETED CONDUIT NOTES #1 & 23 05/22/2009		CONTRACT NO. 1250 SFMTA CONTROL NO. CL-17499 DRAWING NO. JT-403 SHEET NO. 1	

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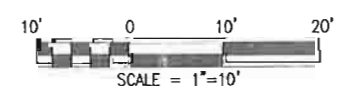
MATCH LINE SEE JT-403
FUTURE WALLS OF MOSCONE STATION STRUCTURE

CONDUIT NOTES:


CONDUIT NOTE #	CONDUIT # AND SIZE	MATERIAL	UTILITY AGENCY
1	6-4", 4-2"	HDPE, GRS	MRY
2	4-4", 2-2"	HDPE, GRS	MRY
3	1-2"	GRS	MRY
4	2-2"	GRS	MRY
5	4-2"	HDPE	DPT
6	1-1 1/2"	GRS	SFPUC SL
7	4-6"	PVC	PG&E
8	3-5"	PVC	PG&E
9	2-4"	PVC	PG&E
10	6-6"	PVC	PG&E
11	2-6"	PVC	PG&E
12	2-3"	PVC	PG&E
13	1-6"	PE	PG&E GAS
14	1-2"	PE	PG&E GAS
15	12-4"	PVC	AT&T
16	24-4"	PVC	AT&T
17	1-2"	GRS	SFDT
18	4-4"	PVC	AT&T
19	3-4"	PVC	AT&T
20	2-4"	PVC	AT&T
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23	2-1 1/2", QUADLOCK	PVC	ASB
24	1-2", 1-4"	PVC	ASB
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27	2-1 1/2", QUADLOCK	PVC	TPC
28	8-4"	PVC	AT&T
29	4-5"	PVC	PG&E
30	8-4"	PVC	PG&E
31	1-3"	PVC	PG&E
32	1-2"	HDPE	DPT

SHEET NOTES:

1. CONNECTION TO EXISTING CONDUIT(S) 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. ADJUST OCS CATENARY SYSTEM AS NECESSARY TO FACILITATE UTILITY WORK. COORDINATE WORK WITH ENGINEER.
5. STUB NEW GAS LINE TO WITHIN 2 FEET OF EXISTING GAS LINE. CONNECTION TO EXISTING GAS LINES BY PG&E. COORDINATE SCHEDULE FOR WORK WITH PG&E.
6. CAP EXISTING GAS LINE (BY PG&E).
7. COORDINATE INSTALLATION OF MUNI VAULT AND CONNECTION TO EXISTING DUCTBANK WITH MUNI. SEE TP DRAWINGS FOR MUNI CABLE INSTALLATION.
8. INTERCEPT AND COUPLE NEW CONDUIT TO EXISTING RISER CONDUIT. COORDINATE SCHEDULE FOR WORK WITH MUNI.
9. STUB AND CAP CONDUITS FOR FUTURE EXTENSION.
10. CONNECT EXISTING CONDUIT INTO NEW MANHOLE.



FOR ORIGINAL SIGNATURES, SEE CL-17502, REV. 0.

<p>SFMITA</p> <p>DESIGNED: P. WILSON DRAWN: F. BAYANI CHECKED: F. REYNOLDS REVIEWED: M. CHAN RECOMMENDED: A. HOE APPROVED: J. FUNGHI DATE: 08/12/2009</p>	 <p>CITY AND COUNTY OF SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY</p> <p>APPROVED CARTER R. ROHAN <small>FOR</small> EXECUTIVE DIRECTOR/CEO</p>	<p>THIRD STREET LIGHT RAIL PROGRAM PHASE 2 - CENTRAL SUBWAY MOSCONE STATION AND PORTAL UTILITIES RELOCATION</p> <p>JOINT TRENCH MOSCONE STATION CLE 10+60 TO 13+00</p>	<p>CONTRACT NO. 1250</p> <p>STATION CONTROL NO. CL-17502</p> <p>DRAWING NO. JT-411</p> <p>SHEET NO. 1</p>
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SFMTA Contract No. 1252

Contractor: Barnard Impregilo Healy JV (BIH)

EVALUATION OF MERIT

COR 015

Recommendation: Accept justification of Merit for COR 015, for pre-excavation to remove concrete encased sewer line at the west slurry wall of the tunnel launch box. Time impact associated with this COR has not yet been determined.

Facts: During construction of the slurry wall for the west wall of the tunnel launch box, BIH subcontractor, Condon Johnson – Nicholson Construction Company Joint Venture (CJA-NCC), uncovered an existing 8" vitrified clay pipe (VCP) sewer main encased in concrete. 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.

BIH notified SFMTA of the impacts to the slurry wall production due to obstructions in Letter Nos. 024, 025, 026, 027, 028, 029 and 30 beginning on June 26th, 2012 through July 20th, 2012. SFMTA met with the Contractor on July 12th, 2012 to investigate the issue. SFMTA, BIH and CJA-NCC then met on August 6th, 2012 and agreed to a plan to pre-excavate in order to remove the concrete encased sewer line, in advance of the slurry wall construction. Due to the depth of the concrete encasement the excavation could not take place during guide wall construction.

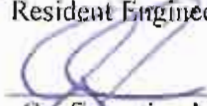
Rationale for COR: The sewer line encased in concrete was a differing site condition. Additional costs were incurred to remove the concrete and place additional slurry (bentonite and water) to fill the resulting over-excavated wall width due to the concrete encasement removal.

Justification: The contract documents show that the concrete encased sewer pipe was at a depth shallower than was found at the Site. For the condition shown in the contract documents, the VCP sewer line could have been broken and removed along with the soil excavation during the Contractor's guide wall construction. Additional equipment and labor were required to remove the concrete and to fill the resulting over-excavated wall width with additional slurry. The work was required to be completed before the Contractor's slurry wall production could continue.

By:

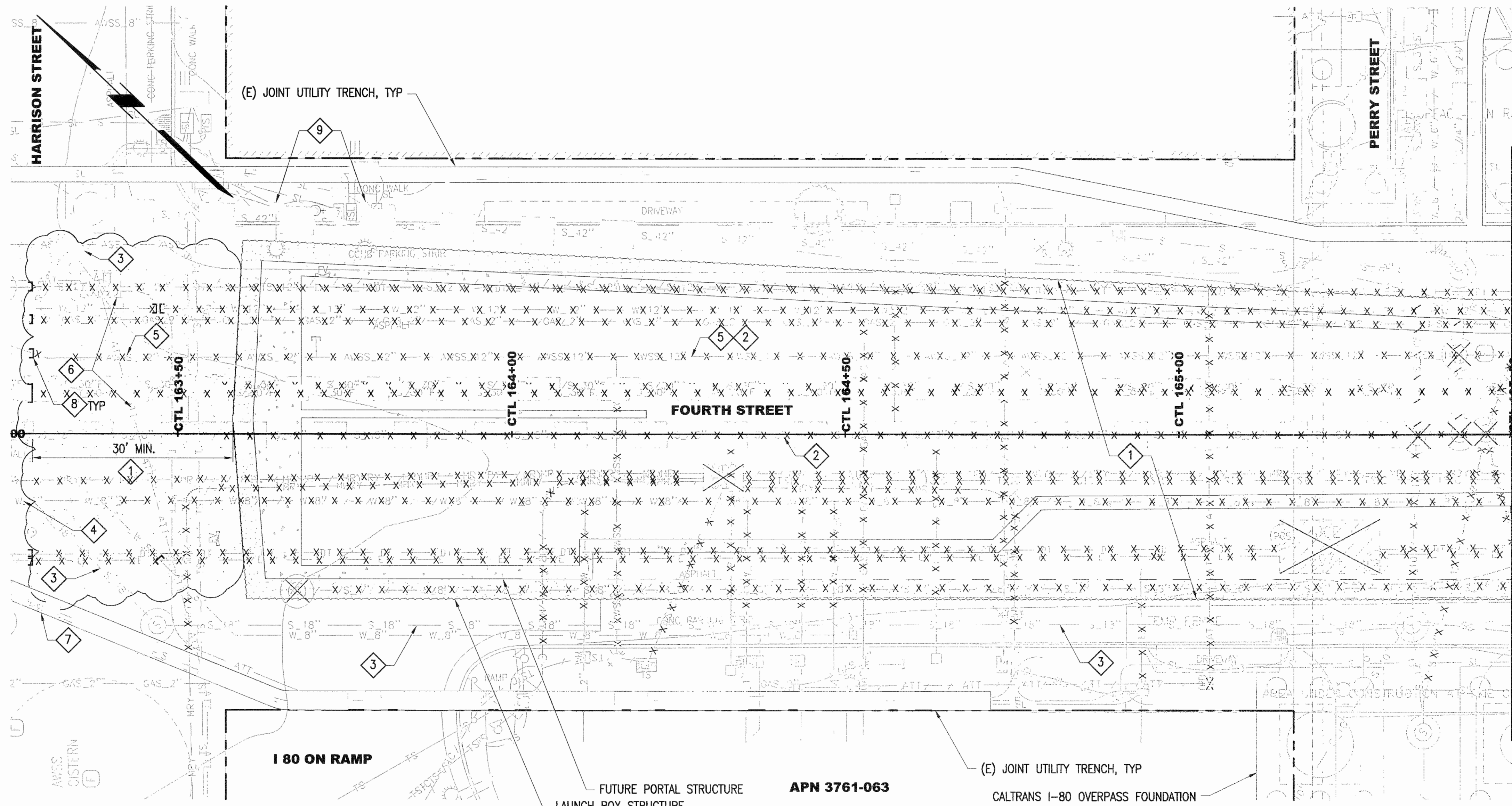

Sarah Wilson
Resident Engineer

11/28/12
Date


Configuration Management Board
Approval

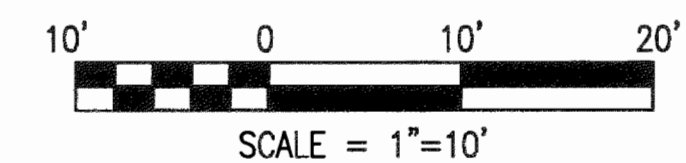
11-28-12
Date

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NOTES:

1. DEMOLISH AND REMOVE ALL ABANDONED UTILITY FACILITIES, INCLUDING PREVIOUSLY ABANDONED FACILITIES NOT SHOWN ON PLANS, WITHIN LIMITS OF LAUNCH BOX 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 LAUNCH BOX CONSTRUCTION PHASING.
3. PROTECT (E) SEWER.
4. SEE (WD) DRAWINGS FOR ABANDONEMENT AND REMOVAL OF WATER FACILITIES.
5. SEE (AW) DRAWINGS FOR ABANDONMENT AND REMOVAL OF AWSS FACILITIES.
6. PROTECT (E) AT&T FACILITIES.
7. PROTECT (E) JOINT TRENCH.
8. CAP OR PLUG ALL ABANDONED FACILITIES, INCLUDING PREVIOUSLY ABANDONED FACILITIES NOT SHOWN ON PLANS, AT JET GROUT OR SLURRY WALL LIMIT.
9. (E) STREET LIGHT POLE. TEMPORARILY REMOVE POLE IF NECESSARY FOR LAUNCH BOX STRUCTURE CONSTRUCTION AND REINSTALL AFTER PORTAL CONSTRUCTION.

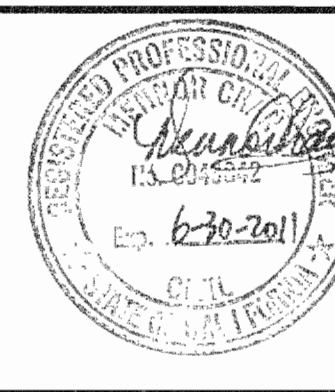


CONFORMED

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

PB TELAMON
TELAMON ENGINEERING CONSULTANTS INC.

DESIGNED: M. DEFORGE
 DRAWN: E. MATIAS
 CHECKED: D. ZUURING
 REVIEWED: M. CHAN
 RECOMMENDED: M. FOWLER
 APPROVED: R. EDWARDS
 DATE: JAN 21 2011

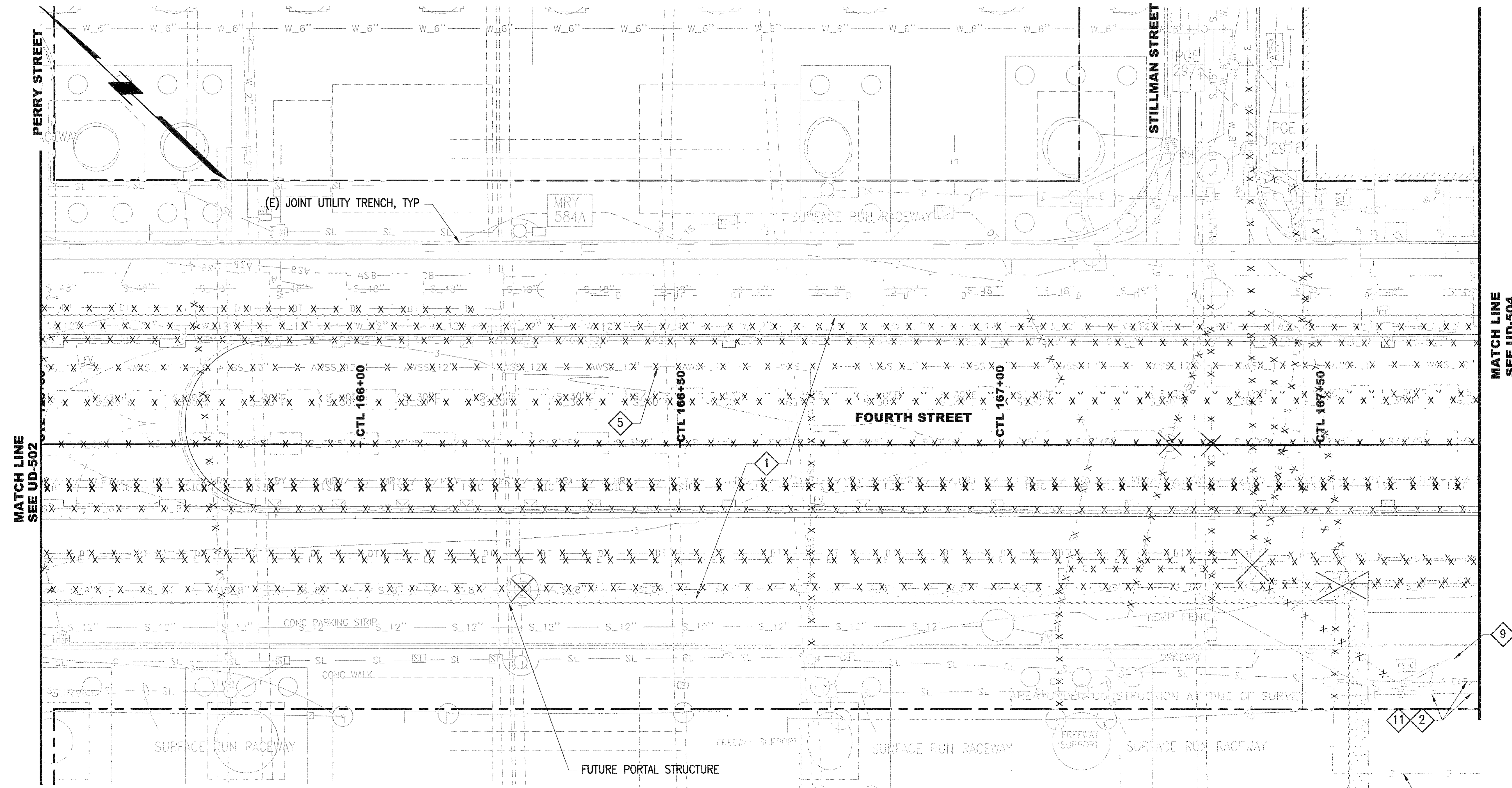


CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED
 CARTER R. ROHAN
 EXECUTIVE DIRECTOR/CEO

THIRD STREET LIGHT RAIL PROGRAM PHASE 2 - CENTRAL SUBWAY TUNNELS		CONTRACT NO. 1252
UTILITY DEMOLITION FOURTH STREET PORTAL CTL 163+25 TO 165+50		SFMTA CONTROL NO. CL-18032
DRAWING NO. UD-502	REVISION 0	SHEET NO. 85

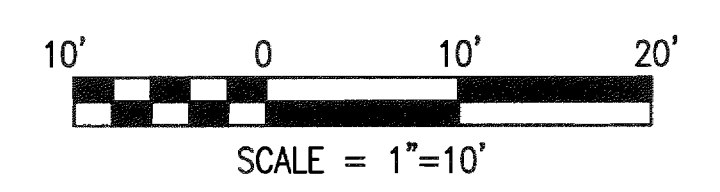
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NOTES:

1. DEMOLISH AND REMOVE ALL ABANDONED UTILITY FACILITIES, INCLUDING PREVIOUSLY ABANDONED FACILITIES NOT SHOWN ON PLANS, WITHIN LIMITS OF LAUNCH BOX 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 LAUNCH BOX CONSTRUCTION PHASING.
3. PROTECT (E) SEWER.
4. SEE (WD) DRAWINGS FOR ABANDONMENT AND REMOVAL OF WATER FACILITIES.
5. SEE (AW) DRAWINGS FOR ABANDONMENT AND REMOVAL OF AWSS FACILITIES.
6. PROTECT (E) AT&T FACILITIES.
7. PROTECT (E) JOINT TRENCH.
8. CAP OR PLUG ALL ABANDONED FACILITIES INCLUDING PREVIOUSLY ABANDONED FACILITIES NOT SHOWN ON PLANS AT JET GROUT OR SLURRY WALL LIMIT.
9. (E) STREET LIGHT POLE. TEMPORARILY REMOVE IF NECESSARY POLE FOR LAUNCH BOX STRUCTURE CONSTRUCTION AND REINSTALL AFTER PORTAL CONSTRUCTION.
10. TEMPORARY REMOVE AND REINSTALL CATCH BASIN IN CURRENT LOCATION IF FOUND TO BE IN CONFLICT WITH LAUNCH BOX CONSTRUCTION. NOTIFY ENGINEER.
11. RELOCATE (E) SERVICE TO OUTSIDE OF LAUNCH BOX STRUCTURE. COORDINATE WITH OWNER.

APPROX. LOCATION CALTRANS LIGHT TOWER (PROTECT IN PLACE)

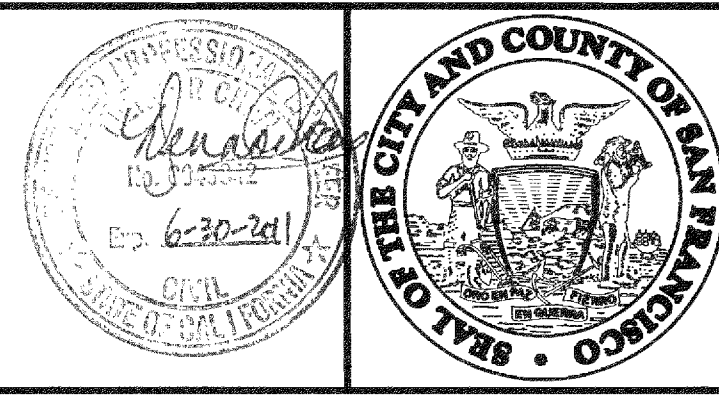


CONFORMED

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

PB TELAMON
TELAMON ENGINEERING CONSULTANTS INC.

DESIGNED: M. DEFORGE
 DRAWN: E. MATIAS
 CHECKED: D. ZUURING
 REVIEWED: M. CHAN
 RECOMMENDED: M. FOWLER
 APPROVED: R. EDWARDS
 DATE: JAN 21 2011

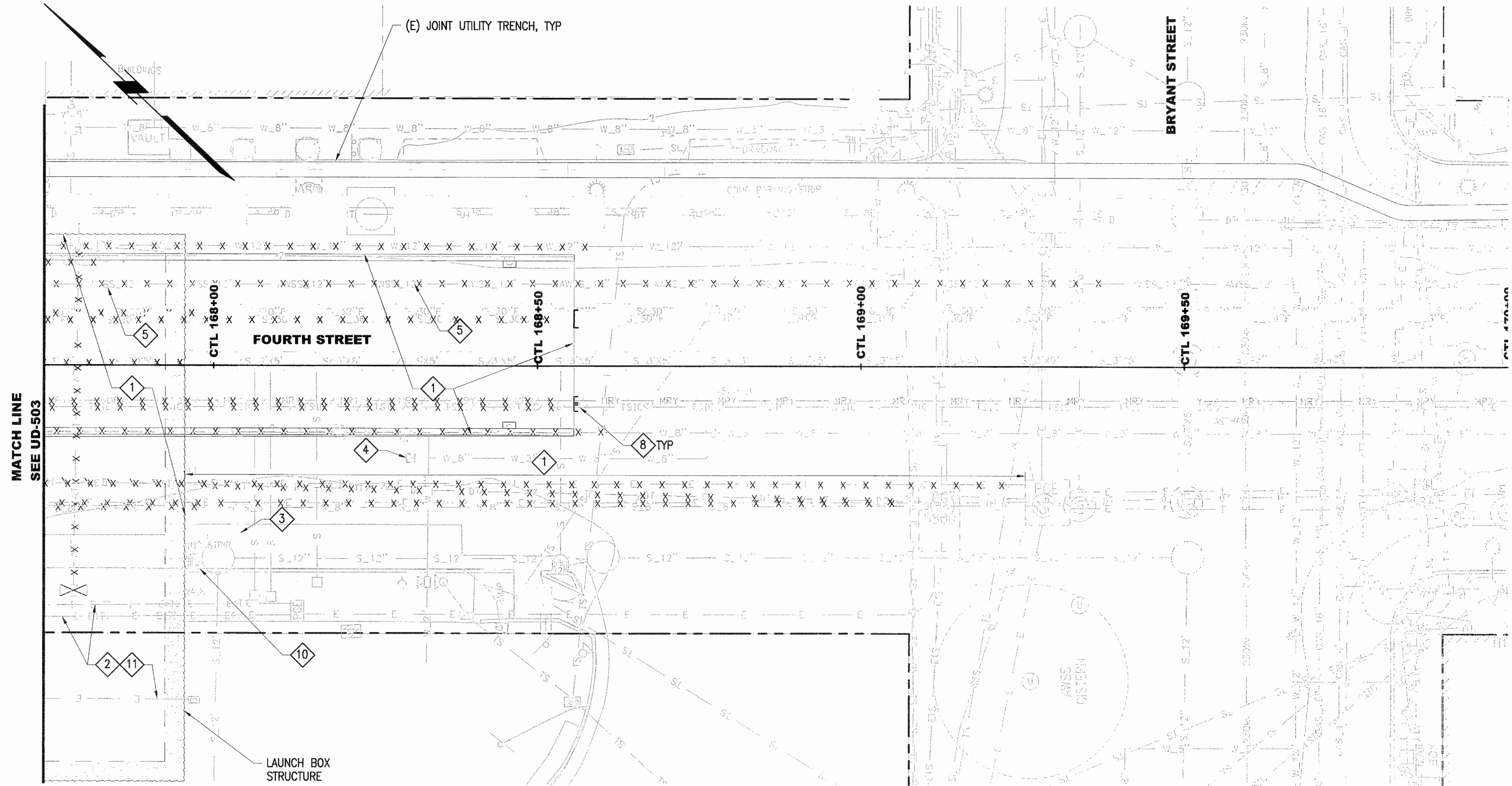


CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
 APPROVED: [Signature]
 EXECUTIVE DIRECTOR/CEO

THIRD STREET LIGHT RAIL PROGRAM
 PHASE 2 - CENTRAL SUBWAY TUNNELS
 UTILITY DEMOLITION
 FOURTH STREET PORTAL
 CTL 165+50 TO 167+75

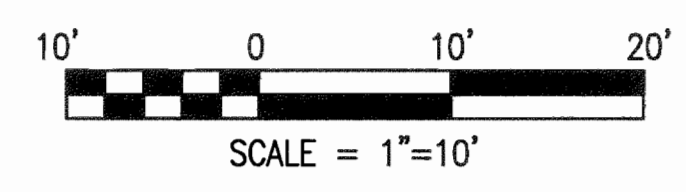
CONTRACT NO. 1252	
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SHEET NO. 86	

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NOTES:

1. DEMOLISH AND REMOVE ALL ABANDONED UTILITY FACILITIES, INCLUDING PREVIOUSLY ABANDONED FACILITIES NOT SHOWN ON PLANS, WITHIN LIMITS OF LAUNCH BOX 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 LAUNCH BOX CONSTRUCTION PHASING.
3. PROTECT (E) SEWER.
4. SEE (WD) DRAWINGS FOR ABANDONMENT AND REMOVAL OF WATER FACILITIES.
5. SEE (AW) DRAWINGS FOR ABANDONMENT AND REMOVAL OF AWSS FACILITIES.
6. PROTECT (E) AT&T FACILITIES.
7. PROTECT (E) JOINT TRENCH.
8. CAP OR PLUG ALL ABANDONED FACILITIES INCLUDING PREVIOUSLY ABANDONED FACILITIES NOT SHOWN ON PLANS AT JET GROUT OR SLURRY WALL LIMIT.
9. (E) STREET LIGHT POLE. TEMPORARILY REMOVE POLE IF NECESSARY FOR LAUNCH BOX STRUCTURE CONSTRUCTION AND REINSTALL AFTER PORTAL CONSTRUCTION.
10. TEMPORARILY REMOVE AND REINSTALL CATCH BASIN IN CURRENT LOCATION IF FOUND TO BE IN CONFLICT WITH LAUNCH BOX CONSTRUCTION. NOTIFY ENGINEER.
11. RELOCATE (E) SERVICE TO OUTSIDE OF LAUNCH BOX STRUCTURE. COORDINATE WITH OWNER.



CONFORMED

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

PB TELAMON
TELAMON ENGINEERING CONSULTANTS INC.

DESIGNED: M. DEFORGE
 DRAWN: E. MATIAS
 CHECKED: D. ZUURING
 REVIEWED: M. CHAN
 RECOMMENDED: M. FOWLER
 APPROVED: R. EDWARDS
 DATE: JAN 21 2011



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

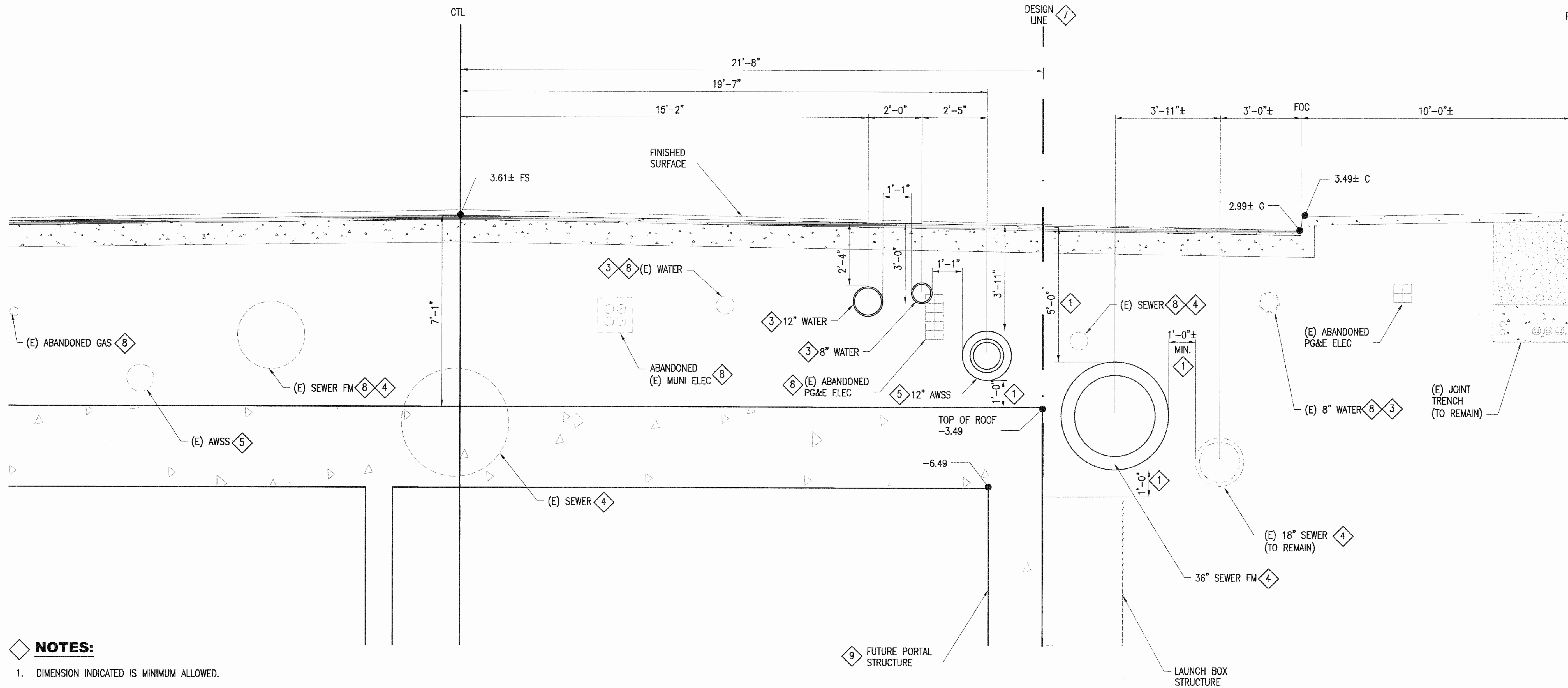
APPROVED: [Signature]
 EXECUTIVE DIRECTOR/CEO

THIRD STREET LIGHT RAIL PROGRAM
 PHASE 2 - CENTRAL SUBWAY TUNNELS

UTILITY DEMOLITION
 FOURTH STREET PORTAL
 CTL 167+75 TO 170+00

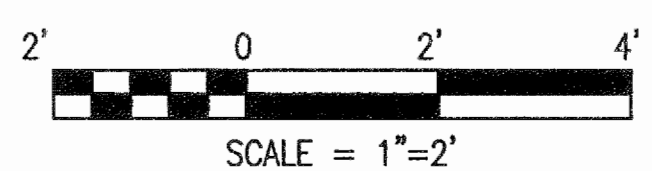
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DRAWING NO.	UD-504
SHEET NO.	87
REVISION	0

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- NOTES:**
1. DIMENSION INDICATED IS MINIMUM ALLOWED.
 2. DIMENSION APPROXIMATE, SUBJECT TO CONTRACTOR'S LAYOUT. SUBMIT FOR APPROVAL PRIOR TO INSTALLATION.
 3. WATER PIPE - SEE WD DRAWINGS.
 4. SEWER PIPE - SEE SW DRAWINGS.
 5. AWSS PIPE - SEE AW DRAWINGS.
 6. CONDUIT BANK - SEE JT DRAWINGS.
 7. SEE REFERENCE DRAWINGS FOR LOCATION OF DESIGN LINE.
 8. SEE DEMOLITION (UD) DRAWINGS.
 9. SEE STRUCTURAL (ST) DRAWINGS.

A
A
A
SECTION @ CTL 164+12 (RIGHT)



CONFORMED

		DESIGNED: M. DEFORGE DRAWN: F. BAYANI CHECKED: P. WILSON REVIEWED: M. CHAN RECOMMENDED: M. FOWLER APPROVED: R. EDWARDS DATE: JAN 21 2011		CITY AND COUNTY OF SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY APPROVED: EXECUTIVE DIRECTOR/CEO	THIRD STREET LIGHT RAIL PROGRAM PHASE 2 - CENTRAL SUBWAY TUNNELS UTILITY COMPOSITE FOURTH STREET PORTAL CROSS SECTION AT CTL 164+05 (LEFT)	CONTRACT NO. 1252 SFMTA CONTROL NO. CL-17996 DRAWING NO. UT-521 SHEET NO. 72	REVISION 0
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SFMTA Contract No. 1252

Contractor: Barnard Impregilo Healy JV (BIH)

EVALUATION OF MERIT

COR 032

Recommendation: Accept justification of Merit for COR 032. Occurrence of a wood pile within slurry diaphragm wall (SW) panel W29 constitutes a differing site condition. The time impact associated with this COR has not yet been determined.

Facts: On August 30th 2012, BIH's subcontractor, Condon Johnson/Nicholson JV (CJA-NCC), encountered a wood pile within panel W29 at the TBM Launch Box. The wood pile caused the SW to deviate from the designed excavation limits. In order to correct the verticality of the panel excavation, the panel was backfilled with lean concrete and re-excavated. BIH/CJA-NCC is claiming the presence of the wood pile caused 4 working days delay to the SW work.

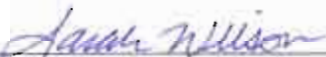
Rationale for COR: The contract does not indicate the presence of wood piles within the footprint of slurry wall diaphragm wall panel W29. The wood pile has prevented slurry diaphragm wall construction from occurring as originally planned.

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


RE notes that the Differing Site Condition does not include:

1. All that is indicated in or may reasonably be 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

By:


Sarah Wilson
Resident Engineer

11/28/12
Date


Configuration Management Board
Approval

11-28-12
Date

SFMTA Contract No. 1252

Contractor:

Barnard Impregilo Healy JV (BIH)

EVALUATION OF MERIT

COR 034

Recommendation: Accept justification of Merit for COR 034. Occurrence of a wood pile within slurry diaphragm wall (SW) panel W28 constitutes a differing site condition. The time impact associated with this COR has not yet been determined.

Facts: On September 10th 2012, BIH's subcontractor, Condon Johnson/Nicholson JV (CJA-NCC), encountered a wood pile within panel W28 at the TBM Launch Box. The wood pile caused the SW to deviate from the designed excavation limits. In order to correct the verticality of the panel excavation, the panel was backfilled with lean concrete and re-excavated. BIH/CJA-NCC is claiming the presence of the wood pile caused 4 working days delay to the SW work.


Rationale for COR: The contract does not indicate the presence of wood piles within the footprint of slurry wall diaphragm wall panel W28. The wood pile has prevented slurry diaphragm wall construction from occurring as originally planned.

Justification: RE has evaluated the conditions outlined in Article 3.04 and found that conditions differ materially and conditions will cause 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

By:



Sarah Wilson
Resident Engineer

11/28/12
Date



Configuration Management Board
Approval

11-28-12
Date

SFMTA Contract No. 1252

Contractor:

Barnard Impregllo Healy JV (BIH)

EVALUATION OF MERIT

COR 042

Recommendation: Accept justification of Merit for COR 042. Occurrence of a wood pile within slurry diaphragm wall (SW) panel W25 constitutes a differing site condition. The time impact associated with this COR has not yet been determined.

Facts: On August 15th 2012, BIH's subcontractor, Condon Johnson/Nicholson JV (CJA-NCC), encountered a wood pile within panel W25 at the TBM Launch Box. The wood pile caused the SW to deviate from the designed excavation limits. In order to correct the verticality of the panel excavation, the panel was backfilled with lean concrete and re-excavated. BIH/CJA-NCC is claiming the presence of the wood pile caused 4 working days delay to the SW work.

Rationale for COR: The contract does not indicate the presence of wood piles within the footprint of slurry wall diaphragm wall panel W25. The wood pile has prevented slurry diaphragm wall construction from occurring as originally planned.

Justification: RE has evaluated the conditions outlined in Article 3.04 and found that: conditions differ materially and conditions will cause 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

By:  _____ 11/28/12
 Sarah Wilson Date
 Resident Engineer

 _____ 11-28-12
 Configuration Management Board Date
 Approval

SFMTA Contract No. 1252

Contractor:

Barnard Impregilo Healy JV (BIH)

EVALUATION OF MERIT

COR 043

Recommendation: Accept justification of Merit for COR 043. Occurrence of a wood pile within slurry diaphragm wall (SW) panel W30 constitutes a differing site condition. The time impact associated with this COR has not yet been determined.

Facts: On August 21st 2012, BIH's subcontractor, Condon Johnson/Nicholson JV (CJA-NCC), encountered a wood pile within panel W30 at the TBM Launch Box. The wood pile caused the SW to deviate from the designed excavation limits. It was determined the most efficient course of action was to proceed with excavating rather than backfilling the panel with lean concrete and re-excavating. BIH/CJA-NCC is claiming the presence of the wood pile caused 4 working days delay to the SW work.

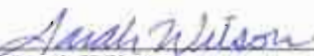
Rationale for COR: The contract does not indicate the presence of wood piles within the footprint of slurry wall diaphragm wall panel W28. The wood pile has prevented slurry diaphragm wall construction from occurring as originally planned.

Justification: RE has evaluated the conditions outlined in Article 3.04 and found that conditions differ materially and conditions will cause 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

By:



Sarah Wilson
Resident Engineer

11/28/12

Date



Configuration Management Board
Approval

11-28-12

Date

SFMTA Contract No. 1252

Contractor: Barnard Impregilo Healy JV

EVALUATION of MERIT

COR 063

Recommendation: Occurrence of 48 Inch pipe at the UMS head wall constitutes a differing site condition. Issue Change Order directing Contractor to investigate 48 inch pipe and provide recommendation for removal or partial removal to allow contract work to be constructed in conformance with contract documents.


Facts: During excavation UMS headwall south, the Contractor encounter a 48 inch pipe not shown on the contract drawing. The location of the unforeseen pipe impacts the construction of the headwall in conformance with the Contract Drawing. Indications are that the same pipe was also encountered at the UMS headwall north while attempting to install instrumentation.

Justification: RE has evaluated the conditions outlined in Article 3.04 and found that: the Material could be hazardous waste; conditions differ materially; and conditions will cause scope of work to increase or decrease.

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.

By:


Sarah Wilson
Resident Engineer

11/28/12
Date


Configuration Management Board
Approval

11-28-12
Date



11.08.2012 10:57