

**ADDENDUM NO. 2**

**TO**

**PLANS AND SPECIFICATIONS**

**FOR**

**LONE TREE WAY INTERSECTION IMPROVEMENTS  
DEER VALLEY ROAD TO HILLCREST AVENUE  
(INCLUDES DEER VALLEY ROAD/LONE TREE WAY INTERSECTION)  
(TURN POCKET EXTENSION LONE TREE WAY AT PREWETT PARK)  
ASSESSMENT DISTRICT NO. 27/31R  
LONE TREE CORRIDOR  
in  
ANTIOCH, CALIFORNIA  
P.W. 555-12C**

**ISSUED**

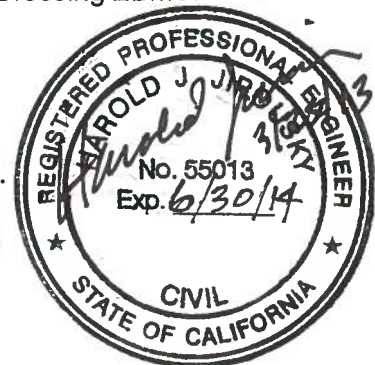
**March 23, 2013**

**This Addendum No. 2 must be signed by the bidder and attached to the CONTRACT PROPOSAL PACKAGE for consideration by the City. The City reserves the right to disregard any proposal which does not include this Addendum. The City may waive this requirement at its sole discretion.**

**SEE ATTACHED ADDENDUM ITEMS**

- 1) Attached for reference only are preliminary utility rearrangement plan sheets entitled "Gas Main Relocation" (Gas Construction Sketch/Composite) and Casing Design (Crossing EBMUD Aqueduct).

Prepared By:  
Harold Jirousky, P.E.



**BIDDER'S CERTIFICATION**

**I acknowledge receipt of this Addendum No. 2 and accept all conditions contained herein.**

\_\_\_\_\_  
Bidder

\_\_\_\_\_  
By:

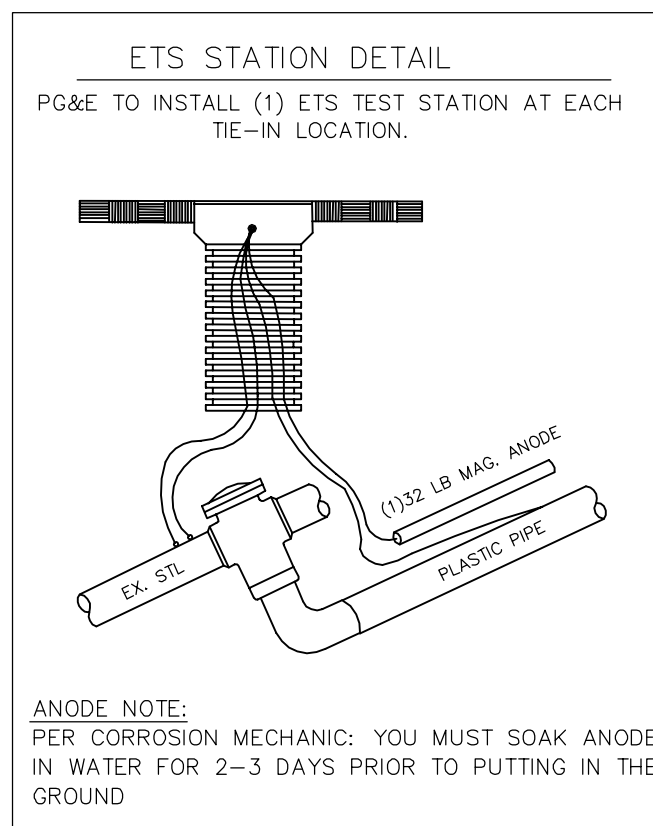
**NOTES:**

- PG&E TO INSTALL 1,275' OF 6" PLASTIC DISTRIBUTION MAIN AS SHOWN.
- PG&E TO RELOCATE EXISTING JOINT TRENCH TO PROPOSED LOCATION.
- PG&E TO TRENCH AND BACKFILL ALL.
- PRIOR TO STARTING WORK, CONTACT T&R DEPT (DALE ROBERTS 925-674-6493) REGARDING CATHODIC PROTECTION REQUIREMENTS AND ANY SHUTDOWN, ABANDONMENT OR TYING IN OF ANY MAINS WHICH MAY AFFECT ANY DISTRICT REGULATOR STATION.
- ALL MAIN TO BE INSTALLED PER JOINT TRENCH CONFIGURATIONS AND OCCUPANCY GUIDE. SPECIAL CONSIDERATION MUST BE TAKEN WITH LOCATION OF WET UTILITIES IN PROXIMITY TO THE JOINT TRENCH.
- LAND DEPARTMENT TO VERIFY, EXPAND AND/OR ACQUIRE R/W FOR EBMUD AND OIL COMPANY EASEMENTS.
- FOR TIE IN UTILIZE (2) 6" TD WILLIAMS M-STOPP PRESSURE CONTROL FITTINGS.
- FOR CUT OFF ON SOUTH END UTILIZE (1) 6" MUELLER LINE STOPPER.
- 1,000' N/O LONE TREE WAY INSTALL (1) 6" NORDSTROM BALL VALVE & USE SAME VALVE # H-54..
- PURGE GAS FACILITIES PER GS&S A-38.
- FOR 10" DIAMETER AND LESS MAINS TO BE DEACTIVATED, PURGE PER GS&S A-38, APPENDIX B, PROCEDURE 1. AFTER PURGING, CLOSE ALL VALVES AND SEAL ANY OPEN ENDS OF DEACTIVATED PIPE.
- PLACE ELECTRONIC MARKING SYSTEMS (EMS) DEVICES (CODE37-4944) ON ALL CUT OFF ENDS AND SECTIONALING POINTS OF DEACTIVATION PIPE PER UTILITY OPERATIONS (UO) STANDARD WP1400-11, ATTACHMENT 1, PROCEDURE 6, AND GAS INFORMATION BULLETIN #141.
- INSTALL (2) 6" NORDSTROM BALL VALVES FOR CASING ALONG EBMUD EASEMENT. SEE SHEET 2 FOR DETAIL SKETCH.

**CONTACT INFO.**

PROJECT MANAGER: BOB KENNEDY (925) 674-6350  
 ESTIMATING SUPERVISOR: RAE DOWELL (925) 270-2289  
 GAS ADE: ANGELO LERMA (925) 270-2269  
 GAS ESTIMATOR: ANGELO LERMA (925) 270-2269

FOR PRELIMINARY STUDY ONLY  
 Date: 3/11/13  
 PACIFIC GAS & ELECTRIC COMPANY



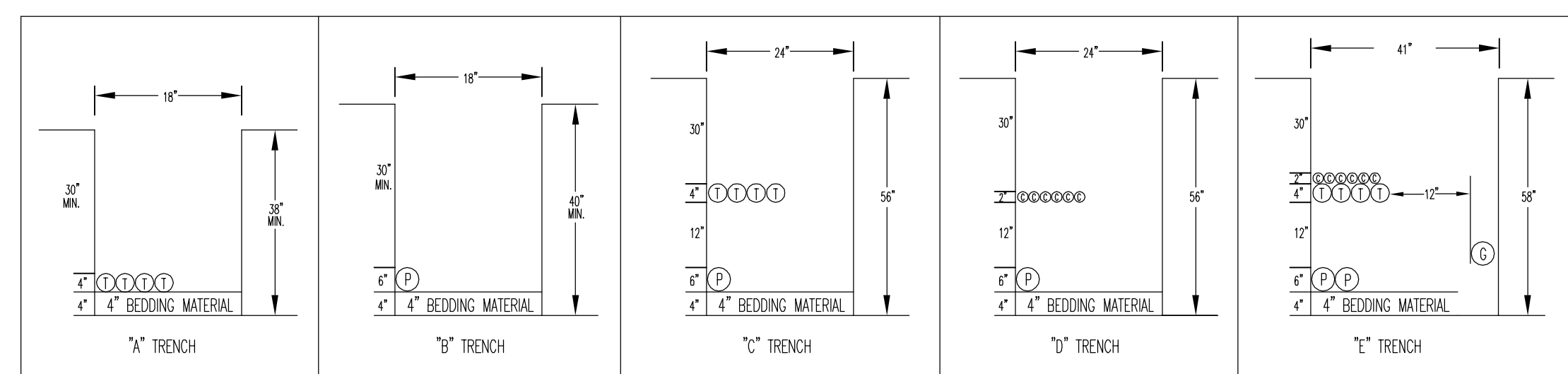
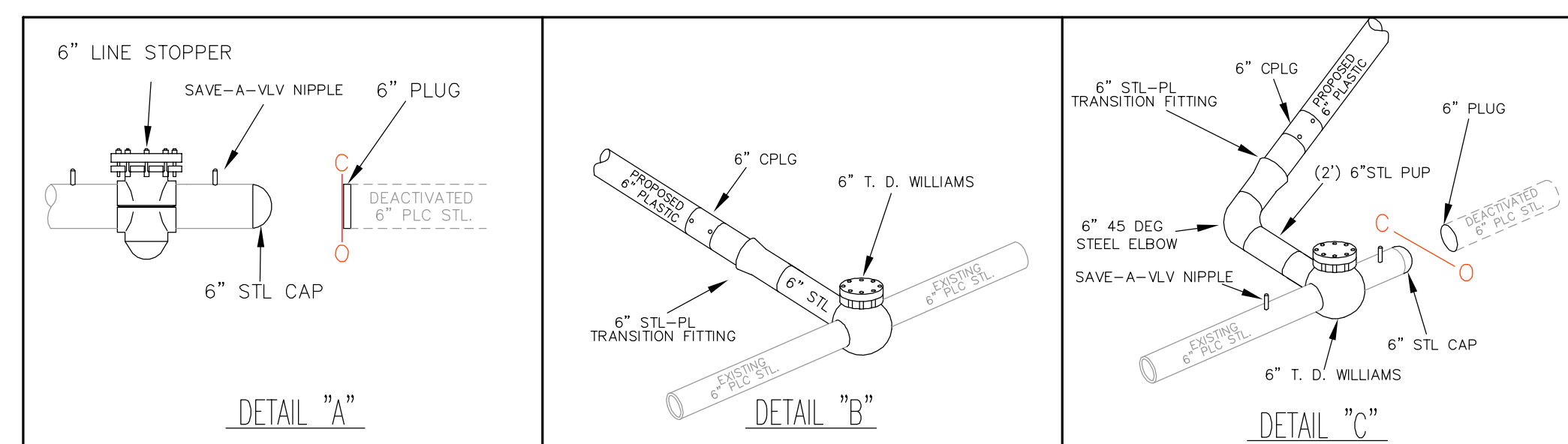
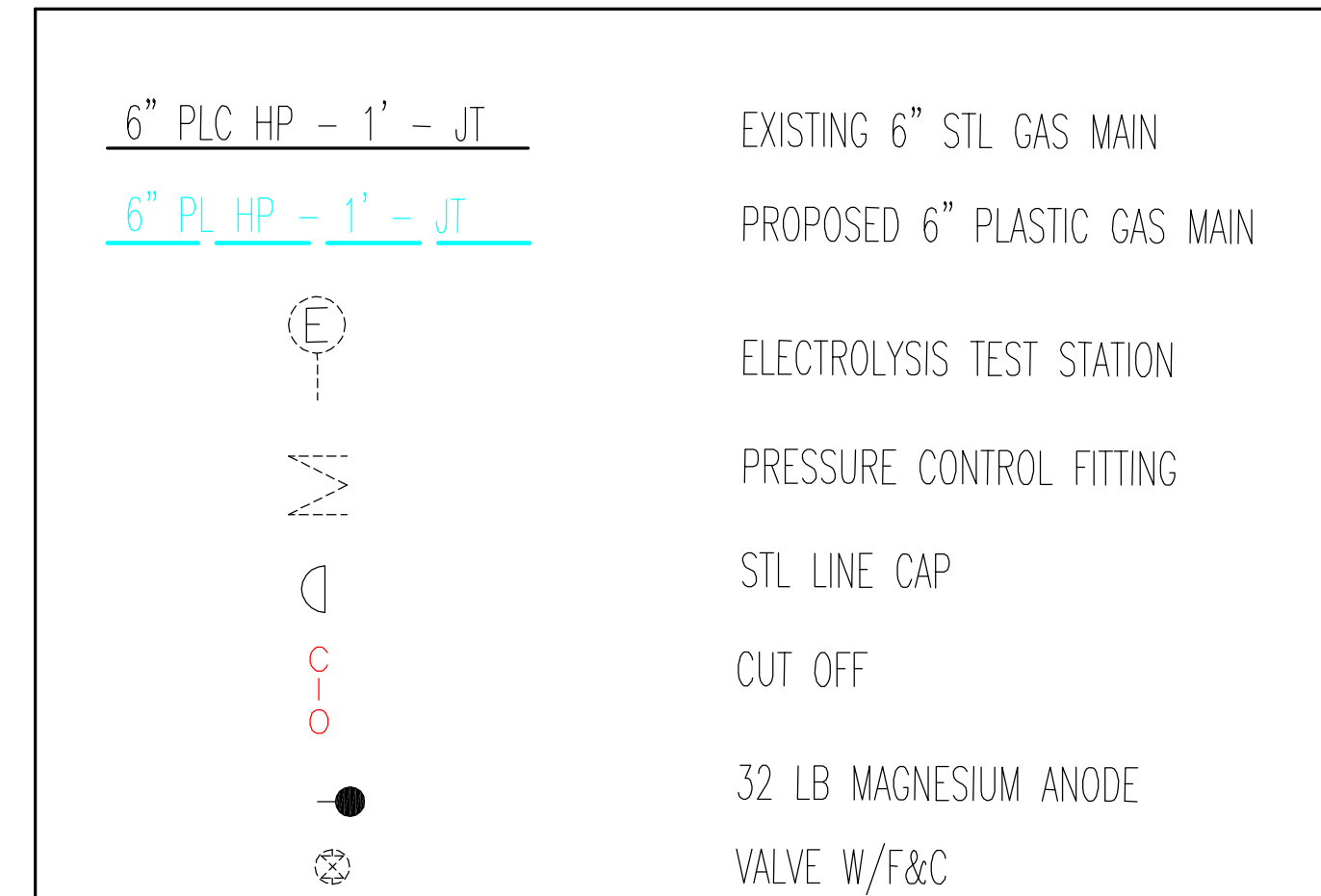
**PLASTIC PIPE INSPECTION/DATA**

FOOTAGE AND SIZE	_____ / _____
PIPE MANUFACTURER	_____
DATE MANUFACTURED	_____
<input type="checkbox"/> PE 2406 (YEL) <input type="checkbox"/> PE 3408 (1/4"CTS)	
FOOTAGE AND SIZE	_____ / _____
PIPE MANUFACTURER	_____
DATE MANUFACTURED	_____
<input type="checkbox"/> PE 2406 (YEL) <input type="checkbox"/> PE 3408 (1/4"CTS)	
FOOTAGE AND SIZE	_____ / _____
PIPE MANUFACTURER	_____
DATE MANUFACTURED	_____
<input type="checkbox"/> PE 2406 (YEL) <input type="checkbox"/> PE 3408 (1/4"CTS)	

LIST ALL PLASTIC PIPE BY FOOTAGE, SIZE, MANUFACTURER AND DATE MANUFACTURED PER STANDARD A93.1

Cathodic Protection Levels Inspected as Noted on Drawing on Existing Protected Steel. All Levels Satisfactory per PG&E GS&S O-16

**LEGEND**



**DISTRIBUTION TRENCH MINIMUM COVER & CLEARANCES**

FACILITY	G	T	T	T	C	S
	DUCT	DB	DB	DB		
G GAS	-	12"	12"	12"	6"	
T TELEPHONE	12"	1'	1'	1'	12"	
C CABLE	12"	1'	1'	1'	12"	
S ELEC SEC	6"	12"	12"	12"	-	
P ELEC PRI	12"	12"	12"	12"	3"	
SL ST. LIGHT	6"	12"	12"	12"	1'	

**JOINT TRENCH RECAP**

TRENCH SECTION	INDICATES SPECIFIC UTILITIES IN TRENCH					FIG.	TRENCH SIZE	BACKFILL	SURFACE	FOOTAGE
	G	T	C	S	P					
A		X					18" X 38"		X X X	182'
B					X		18" X 40"		X X X	35'
C		X			X		24" X 56"		X X X	20'
D			X		X		24" X 56"		X X X	45'
E	X	X	X		X		30" X 58"		X X X X	1,275'

Qualified Employee \_\_\_\_\_ Date \_\_\_\_\_

INSTALL DIRECT BURIAL PLASTIC MAINS & SERVICES PER GAS STANDARDS A90-A91.2, A93-A93.1 & D21. INSTALL PLASTIC MAIN & SERVICE INSERT PER GAS STANDARDS A90.1-A90.3, A91.2-A93.1 & D21

NOTIFIED U.S.A.  
 DATE: \_\_\_\_\_  
 TICKET # \_\_\_\_\_  
 BY: \_\_\_\_\_

CATHODIC PROTECTION IN WORK AREA  
 ATTENTION FOREMAN:  
 NOTIFY THE CORROSION DEPT.  
 AT 925-674-6493, 24 HOURS  
 PRIOR TO START OF WORK.

TEST AT 100-110 PSI FOR MINIMUM OF 5 MIN.

PRESSURE	DURATION	INITIALS	DATE OF TEST

PLASTIC PIPE DATA

SIZE	MANUFACTURED	DATE OF MANUFACTURE

Welding Inspected per PG&E Gas Standard D-40

Visual \_\_\_\_\_  
 Magnetic Particle \_\_\_\_\_  
 Inspector: \_\_\_\_\_  
 Date: \_\_\_\_\_

**PIPE WRAP REMOVAL**

-For work on pre-1972 pipe, assume the wrap contains >1% asbestos until the wrap can be tested.  
 -Obtain samples of the wrap, and have samples tested for asbestos in accordance with RP 4711.  
 -Test results are to be included with as-builts.  
 -Follow procedure in RP 4711 for removal of pipe wrap.

PIPE TYPE: \_\_\_\_\_  
 YEAR INSTALLED: \_\_\_\_\_

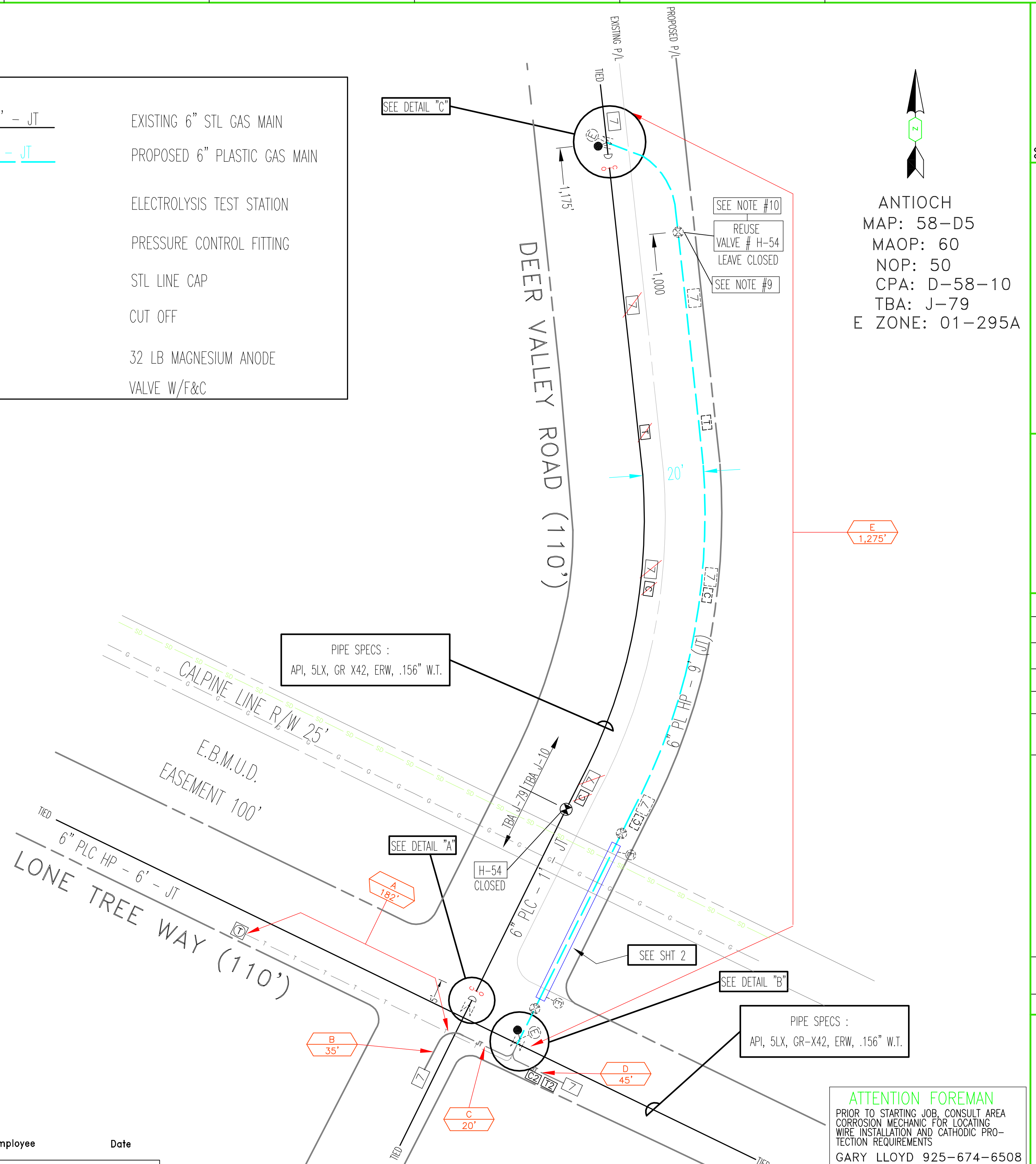
**ATTENTION FOREMAN**  
 PRIOR TO STARTING JOB, CONSULT AREA CORROSION MECHANIC FOR LOCATING WIRE INSTALLATION AND CATHODIC PROTECTION REQUIREMENTS  
 GARY LLOYD 925-674-6508

PROJECT CONDITIONS STAMP

Type(s) of Work:  
 New Business  
 In-Place Maintenance & Construction

Project Conditions:  
 NONE APPARENT (if project design changes, contact ADE)  
 PERMITS  
 TALBOARD  
 OTHER

AML5 3/5/13  
AMERICAN MAPPING & SURVEYING, INC.



ENGINEERING AND PLANNING DEPT.  
 1850 GATEWAY BLVD., # 5062B  
 CONCORD, CA 94520  
 PHONE # 925-270-2269 FAX # 925-270-2397  
 PACIFIC GAS AND ELECTRIC COMPANY

CO: \_\_\_\_\_  
 SD: \_\_\_\_\_  
 OTHER: \_\_\_\_\_  
 SHEETS: 1 OF 2  
 REV: 30677476

EST: JOG9 / AML5  
 ADE: ANGELO LERMA  
 SUPV: RAE DOWELL  
 REP: BOB KENNEDY  
 PLNR: CHRIS WU  
 DATE: 03/11/13  
 SCALE: N.T.S.

DESCRIPTION: GAS MAIN RELOCATION  
 NO. \_\_\_\_\_ DATE \_\_\_\_\_  
 ORDER # \_\_\_\_\_ DIVISION \_\_\_\_\_  
 APPROVED BY \_\_\_\_\_

GAS MAIN RELOCATION  
 GAS CONSTRUCTION SKETCH/COMPOSITE  
 LONE TREE WAY.  
 ANTIOCH, CA

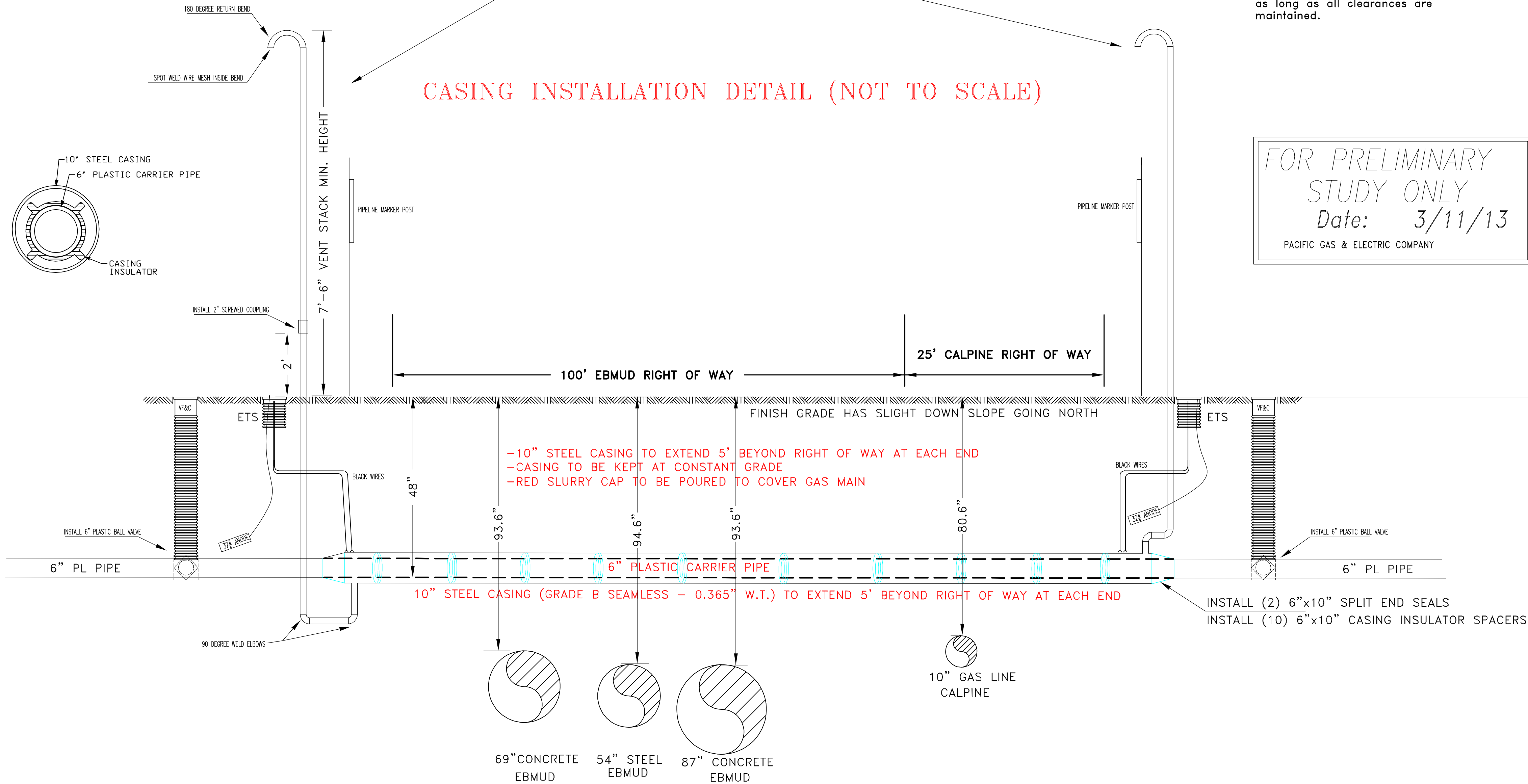


**MATERIAL LIST**

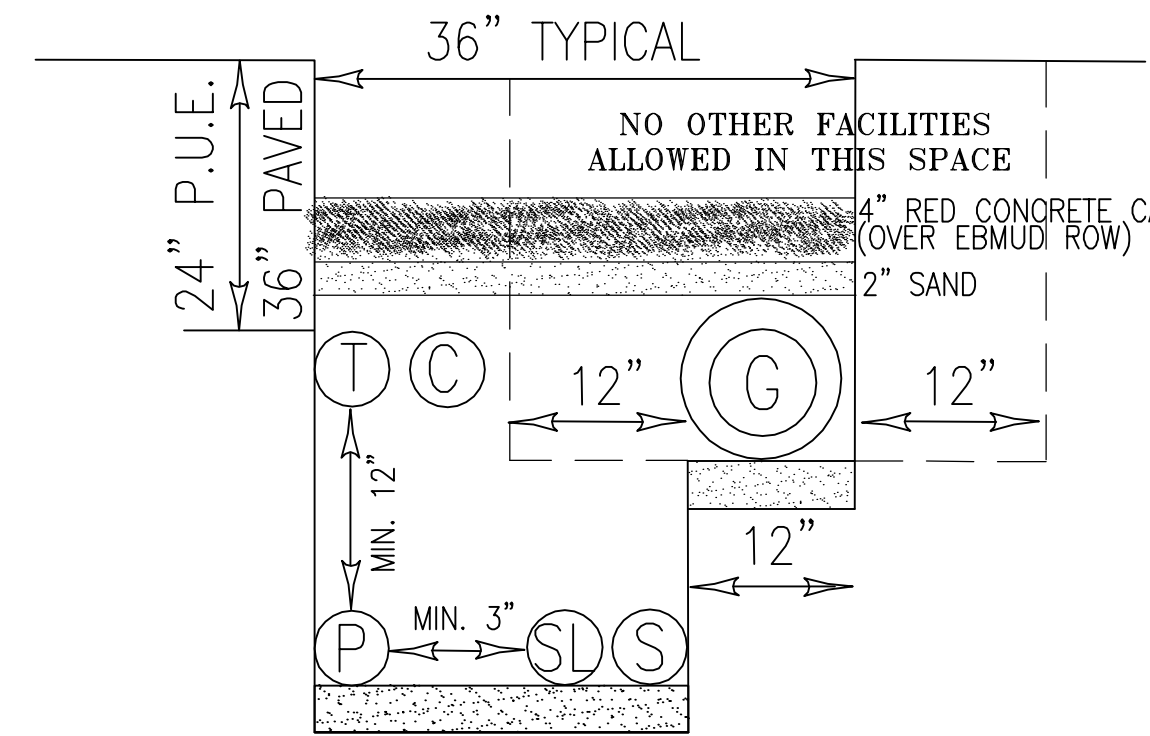
PART	QUANTITY	CODE	STANDARD
6" STEEL LINE CAP	2	02-2038	B-20
6" PLUG	2	02-1127	A-81
6" PLASTIC GAS MAIN	1,275'	01-0003	A-93
LOCATING WIRE	1,375'	29-4414	A-90.2
6" 45 DEG STEEL ELBOW	1	02-2158	B-20
6" T.D. WILLIAMS PRESSURE CONTROL FITTING	2	02-0981	C-63
6" NORDSTROM BALL VALVE	3	01-9971	F-90
6" TRANSITION FITTING	2	02-7993	B-90
ETS WIRE W/ BLACK INSULATING	50'	29-4991	O-10
ETS WIRE W/ WHITE INSULATING	50'	29-4107	O-10
CONCRETE LID W/ MARKING "ETS"	4	04-3497	K-40
PLASTIC VALVE BOX W/ EXT. NON-TRAFFIC	4	04-3498	K-40
VALVE BOX EXTENSION	12'	01-6063	K-41
VALVE BOX LID, CAST IRON, "PG&E GAS"	3	04-3225	K-41
VALVE BOX HEAD, CONCRETE	3	04-3271	K-41
6" MUELLER LINE STOPPER FITTING	1	02-2850	C-15.4
32 LB. MAGNESIUM ANODE	4	56-9087	O-13.1
ELECTRONIC MARKING SYSTEM	2	37-4944	M-62
SAVE-A-VALVE NIPPLES	4	02-2452	C-14
10" STL PIPE, FBE, GRADE B SMLS, 0.365" W.T.	135'	01-0034	A-15
SPLIT END SEALS, 6"x10"	2	02-9454	A-73
INSULATING SPACERS, 6"x10"	10	02-9283	A-73
PIPE, 2" STEEL, BARE, GRADE B SEAMLESS	22'	01-1578	A-15
ELBOW 90 DEGREE, 2" STEEL WELD	4	02-2136	B-20
RETURN BEND, 2" STEEL WELD, 180 DEGREE	2	02-2517	A-70
COUPLING, 2" STEEL, SCREWED	1	02-1274	B-11
WIRE MESH SCREEN, HEAVY GAUGE	8 SQ INCH	NO CODE	
DECAL, "PIPELINE WARNING"	2	37-3844	L-12
PLASTIC POST ROAD MARKER	2	04-0785	L-10
PIPE PRIMER	3	13-0487	E-25
PIPE WRAP 2"	6 RLS	56-2320	E-25
6" PURGE CAP, BUTT FUSION W/1" OUTLET	1	02-0660	B-90.2
6" PL COUPLING, ELECTROFUSION IPEX-FRIATEC	2	02-1638	B-90.3
6" STL, O.D. 6.625, SMLS GR B, .280 W.T.	2'	01-1688	A-15

(2) 2" STEEL VENT STACKS; 90 DEGREE WELD ELBOWS & 180 DEGREE RETURN BENDS.  
ADD 2" SCREWED COUPLING TO ENABLE FLUID REMOVAL FROM CASING.

**CASING INSTALLATION DETAIL (NOT TO SCALE)**



**6" GAS IN A JOINT TRENCH - TYPICAL TRENCH SECTION -**



- No facilities are allowed over the gas main, PG&E must be able to access the gas main with squeezers in case of an emergency.
- Maintain 12" of horizontal clearance from all facilities in the joint trench.
- Contractor should contact PG&E's Trench Inspector with questions.
- This trench layout can be altered as long as all clearances are maintained.

FOR PRELIMINARY STUDY ONLY  
Date: 3/11/13  
PACIFIC GAS & ELECTRIC COMPANY

**EBMUD REQUIREMENTS**

- District land and facilities shall be restored to a condition as good as that which existed before applicant's entry on the right-of-way.
- The type and weight of equipment working over the aqueduct must be approved by the District. The use of vibratory compaction equipment is prohibited on the aqueduct right-of-way.
- A minimum of 48 hours notice must be given to the District before work commences. To contact the District by telephone, call: The Aqueduct Section Stockton Office at (209)946-8000.
- A pre-construction meeting is required prior to start of work.
- Temporary construction fences and barricades shall be installed by contractor as directed by the District.
- Any changes in finished grade must be approved by the Aqueduct section. Earthfills or cuts on any adjacent property shall not encroach onto District property except where authorized for vehicular crossings on grade and except where the District determines that there will be no detrimental effect on the aqueducts or their maintenance.
- Pipeline crossing shall be perpendicular to the aqueducts and on a constant grade across District property. Sanitary sewers, water lines or petroleum product lines crossing above the aqueducts must be encased in a steel or PVC conduit or reinforced concrete with a minimum vertical clearance of one foot between the pipeline and the top of the District aqueducts.
- On pressurized pipe crossings, shutoff valves shall be provided outside and adjacent to both sides of the District property.
- At the point of crossing, steel pipeline crossing and steel casings shall incorporate electrolysis test leads, bond leads and leads necessary for interference testing. Corrosion control devices, when required, must be approved by the District.
- Cathodic protection for steel encasements must be installed as follows:
  - Provide a dielectric coating to the exterior surface of the steel casing within the EBMUD right-of-way, 16 mil epoxy or equivalent.
  - Provide galvanic protection to the portion of the steel casing within EBMUD right-of-way in accordance with the National Association of Corrosion Engineers (NACE) RP-01-69.
  - If the carrier pipe is constructed of DIP or steel, provide electrical isolation between the carrier and the casing using casing insulators; redwood skids are not permitted.
  - Provide test results to EBMUD demonstrating the adequacy of the cathodic protection system and the adequacy of the electrical isolation of the carrier (if metallic) from the casing. EBMUD reserves the right to witness any such tests.
- Buried electrical cables passing over the aqueducts shall be installed in conduit and encased in red concrete across the entire width of the right-of-way. All other buried cables shall be installed in conduit and marked in the appropriate Underground Service Alert (USA) colored marking materials across the entire width of the aqueduct right-of-way.
- Vehicular parking and storage of equipment or materials on aqueduct property are specifically prohibited.
- All EBMUD survey monuments and markers shall be undisturbed. If any EBMUD survey markers or monuments must be disturbed, they will be replaced or relocated by EBMUD at the applicant's expense prior to the start of any ground disturbing work.
- All aqueduct crossings involving mechanical excavation on the right-of-way require potholing of all three aqueducts at the site of the proposed crossing. Visible reference markings showing the aqueduct alignments and depths to the top of the pipe shall be maintained for the duration of any mechanical excavation on EBMUD property. Entry permits are required for pothole work.
- All grading or excavating of the right-of-way requires Underground Service Alert (USA) notification and the maintenance of a current inquiry identification number.
- All work areas shall be inspected by EBMUD for final approval.
- A temporary construction permit must be obtained before the work begins.

CO: ENGINEERING AND PLANNING DEPT.  
 SD: 1850 GATEWAY BLVD., # 5062B  
 OFFER: CONCORD, CA 94520  
 SHEETS: 2 OF 2  
 REV: 30677476

EST: ANGELO LERMA  
 ADE: ANGELO LERMA  
 SUPV: RAE DOWELL  
 REP: BOB KENNEDY  
 PLNR: CHRIS WU  
 SCALE: N.T.S.  
 DATE: 3/11/13

DESCRIPTION: CASING DESIGN CROSSING EBMUD AQUEDUCT DEER VALLEY RD. & LONE TREE WAY. ANTIOCH, CA

NO. DATE

ORDER # DIVISION SUPV APVD BY

REVISIONS