

## **COUNTY OF SAN JOAQUIN**

### DEPARTMENT OF PUBLIC WORKS

P.O. BOX 1810-1810 E. HAZELTON AVENUE STOCKTON, CALIFORNIA 95201 (209) 468-3000 FAX # (209) 468-9324

Permit No: PS-1503687 Date Issued: 12/31/2015 Start Date: 01/04/2016 Exp. Date: 05/15/2016 Project No: PWP730052

Quad: ES

UE/CR/PM NO:PM:31023992

## **ENCROACHMENT PERMIT**

To: PACIFIC GAS & ELECTRIC - STOCKTON **PO BOX 930** STOCKTON, CA 95201

-					_
Enc	ากล	chr	nen	t 'I	vne:

Bell Hole Trench

## Location:

BOTH/S OF COOLIDGE AVE.: LIMITS FROM HORNER AVE. TO MAIN ST.

In compliance with your request of 12/31/2015, permission is hereby granted to do work in County right-of-way as shown on attached application and subject to all the terms, conditions and restrictions written below or printed as general or special provisions on any part of this form. See reverse side and attached sheet, if any.

Trench excavations for service connections will not be permitted within ten feet (10') of pavement centerline unless otherwise approved by the Director. Surface of trench patches shall match in kind and be smooth and even with that of abutting surface. Special attention shall be given to depth of utilities through roadside area in anticipation of future drainage facilities, road profile and/or frontage development. All underground utility facilities are to be established and accurately dimensioned on sketches from surveyed centerline of road right of way, or from right of way (border) lines.

Permittee shall call the Department of Public Works, Field Engineering Division (Permit Inspections) at (209)953-7421 at least forty-eight hours prior to beginning any work within the County right of way. All work performed under this permit shall conform to the rules and regulations pertaining to safety established by the California Division of Industrial Safety and Cal-OSHA.

The jobsite shall be kept in a safe condition at all times by the daily removal of any excess dirt or debris which might be a hazard to either pedestrian or automobile traffic. All necessary traffic convenience and warning devices and personnel shall be provided, placed and maintained by and at the sole expense of the Permittee in accordance with the latest edition of the CALTRANS Manual of Traffic Control.

After completion of the work permitted herein, all debris, lumber, barricades, or any excess material shall be removed and the jobsite left in a neat workmanlike manner. Immediately following completion of construction permitted herein, Permittee shall fill out and mail notice of completion (see attached post card) provided by Grantor.

**Special Comments:** 

Traffic Control Per MUTCD SEE ATTACHED SPECIAL CONDITIONS

**FORMS:** SS/WW, R-29 TRENCH CUT POLICY

Est. Permit Fee: \$2,815.00

KRIS BALAJI, Director Department of Public Works

**GOLDENROD** 

-Permittee

-PWD Central File

YELLOW PINK

WHITE

-Field Inspection -Permit Section

## **ENCROACHMENT PERMIT GENERAL PROVISIONS**

13-1

 This permit is issued under and subject to all laws and ordinances of agencies governing the encroachment herein permitted. See the following references:

STREETS AND HIGHWAYS CODE-

- 1. Division 1, Chapter 3
- 2, Division 2, Chapter 2, Section 942
- 3. Division 2, Chapter 4, Section 1126
- 4. Division 2, Chapter 5.5 and Chapter 6

SAN JOAQUIN COUNTY ORDINANCES NUMBERED: 324, 441, 648, 662, 672, 695, 700, 860, 892, 3359, and 3675.

- 2. It is understood and agreed by the Permittee that the performance of any work under this permit shall constitute an acceptance of all the provisions contained herein and failure on the Permittee's part to comply with any provision will be cause for revocation of this permit. Except as otherwise provided for public agencies and franchise holders, this permit is revocable on five days notice.
- 3. All work shall be done subject to the supervision of and the satisfaction of the grantor. The Permittee shall at all times during the progress of the work keep the County Highway in as neat and clean condition as is possible and upon completion of the work authorized herein, shall leave the County Highway in a thoroughly neat, clean and usable condition.
- 4. The Permittee also agrees by the acceptance of this permit to properly maintain any encroachment structure placed by the Permittee on any part of the County Highway and to immediately repair any damage to any portion of the highway, which occurs as a result of the maintenance of the said encroachment structure, until such time as the Permittee may be relieved of the responsibility for such maintenance by the County of San Joaquin.
- 5. The Permittee also agrees by the acceptance of this permit to make, at its own expense, such repairs as may be deemed necessary by the County Department of Public Works.
- 6. It is further agreed by the Permittee that whenever construction, reconstruction or maintenance work upon the highway is necessary, the installation provided for herein shall, upon request of the County Department of Public Works, be immediately moved or removed by and at the sole expense of the Permittee.
- No material used for fill or backfill in the construction of the encroachment shall be borrowed or taken from within the County right of way.
- 8. All work shall be planned and carried out with as little inconvenience as possible to the traveling public. No material shall be stacked within eight feet (8') of the edge of the pavement or traveled way unless otherwise provided herein. Adequate provision shall be made for the protection of the traveling public. Traffic control standards shall be utilized including barricades; approved signs and lights; and flagmen, as required by the particular work in progress.
- 9. The Permittee, by the acceptance of this permit, shall assume full responsibility for all liability for personal injury or damage to property which may arise out of the work herein permitted or which may arise out of the failure of the part of the Permittee to properly perform the work provided under this permit. In the event any claim of such liability is made against the County of San Joaquin or any department, official or employee thereof, the Permittee shall defend, indemnify, and hold each of them harmless for such claim.
- 10. All backfill material is to be moistened as necessary and thoroughly compacted with mechanical means. If required by the County Director of Public Works, such backfill shall consist of gravel or crushed rock. The Permittee shall maintain the surface over structures placed hereunder as may be necessary to insure the return of the roadway to a completely stable condition and until relieved of such responsibility by the County Department of Public Works. Wherever a gravel, crushed rock or asphalt surface is removed or damaged in the course of work related to the permitted encroachment, such material shall either be separately stored and replaced in the roadway as nearly as possible in its original state or shall be replaced in kind, and the roadway shall be left in at least as good a condition as it was before the commencement of operations of placing the encroachment structure.
- 11. Whenever it becomes necessary to secure permission from abutting property owners for the proposed work, such authority must be secured by the Permittee prior to starting work.
- 12. The current and future safety and convenience of the traveling public shall be given every consideration in the location and methods of construction utilized.
- 13. The Permittee is responsible for the preservation of survey monuments located within the area of work herein permitted. Prior to the start of construction, survey monuments that potentially may be disturbed shall be located and referenced by a Licensed Land Surveyor, and a Corner Record filed with the County Surveyor. Any Survey Monuments disturbed during the course of construction shall be reestablished by a Licensed Land Surveyor and another Corner Record filed with the County Surveyor. (Land Surveyors' Act Section 8771)
- 14. Prior to any excavation, the Permittee shall notify USA North (Underground Service Alert of Northern California and Nevada) at 811 or 800-227-2600 forty-eight (48) hours in advance.

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APPLICATION FOR	R ENCROACHMENT PERMIT
PLEASE PRINT:	255 10 1 23 - Am 27 - 7 
Date 11/20/15	OFFICE USE ONLY
To: San Joaquin County Department of Public Works  Pacific Gas Flectvic (Applicant Name)  Your West Lw (Mailing Address)  Stockton, Cla 95204 (City, State, Zip Code)	JOB# Puf 1300\$27 REF#  APN CR#  EXP. DATE 5-15-2016  VALID 1-4-2016 TO 5-15-2016 DRIVEWAYS:  STREET Caolingo AUE.  AREA STOCK-TOX QUAD ES  TYPE Translu  FORMS Solw (129, Trench cut folicy)  NOTES Special Condition
<u>408 - 3/6 - 1767</u> (Área Code - Telephone Number)	
SEE ATTACHE	D DETHIL
the RCW side of S. Coolidge MV. of E. Horner Ave , Stack	approximately 5 (description of work):  South  A wew 2 PL
Work will commence on or about 1-4-16  I, the undersigned, certify that I am the owner of the respective	for approximately 90 days.  property, or am qualified to represent the owner and agree to do the
Signature of Applicant - Title	ions of San Joaquin County and subject to inspection and approval.  11   20   15   Date

E:\PUB-SV.WK\MASTER.PS\ENCROACHMENT PERMIT APPLICATION.DOC (01/08)



Stockton Division P.O. Box 930 Stockton, CA 95201

11/24/2015

San Joaquin County» Public Works Department 1810 E. HAZELTON AVE. STOCKTON, CA 95205

## PM 31023992

Re: Encroachment Permit Application

Pacific Gas and Electric Company (PG&E) respectfully request to perform excavation work as stated in the encroachment permit application.

It is our mutual understanding that the County moratorium was established in order to prevent asphalt concrete restoration from occurring during inclement temperatures and to make sure that County roads are not left unrestored for long durations.

The primary purpose for constructing this project during the moratorium is the existing steel main is currently isolated from the overall CPA and maintained as an independent Galvanic CP system. The corrosion mechanic has indicated that it is becoming increasingly difficult to maintain adequate CP levels on this segment. (bi-monthly pipe-to-soil readings during summer season indicate as much: -861mV (Aug 2011), -757mV (Aug 2012), -831mV (Oct 2012)). Currently there was (1) open Gr 3 leak on this segment of main.

The proposed construction end date for this project is 02/26/2016. We will monitor the ambient temperatures while communicating with the County inspector to determine the appropriate time to perform the restoration.

During the construction operation, PG&E crews will be onsite maintaining the temporary asphalt from our excavation assuring that all excavations and backfill meet County Standards.

If you have any additional questions or concerns please contact me.

Sincerely,

Chris Gras

**Project Manager** 

Pacific Gas and Electric Company

209-450-5235

crgn@pge.com

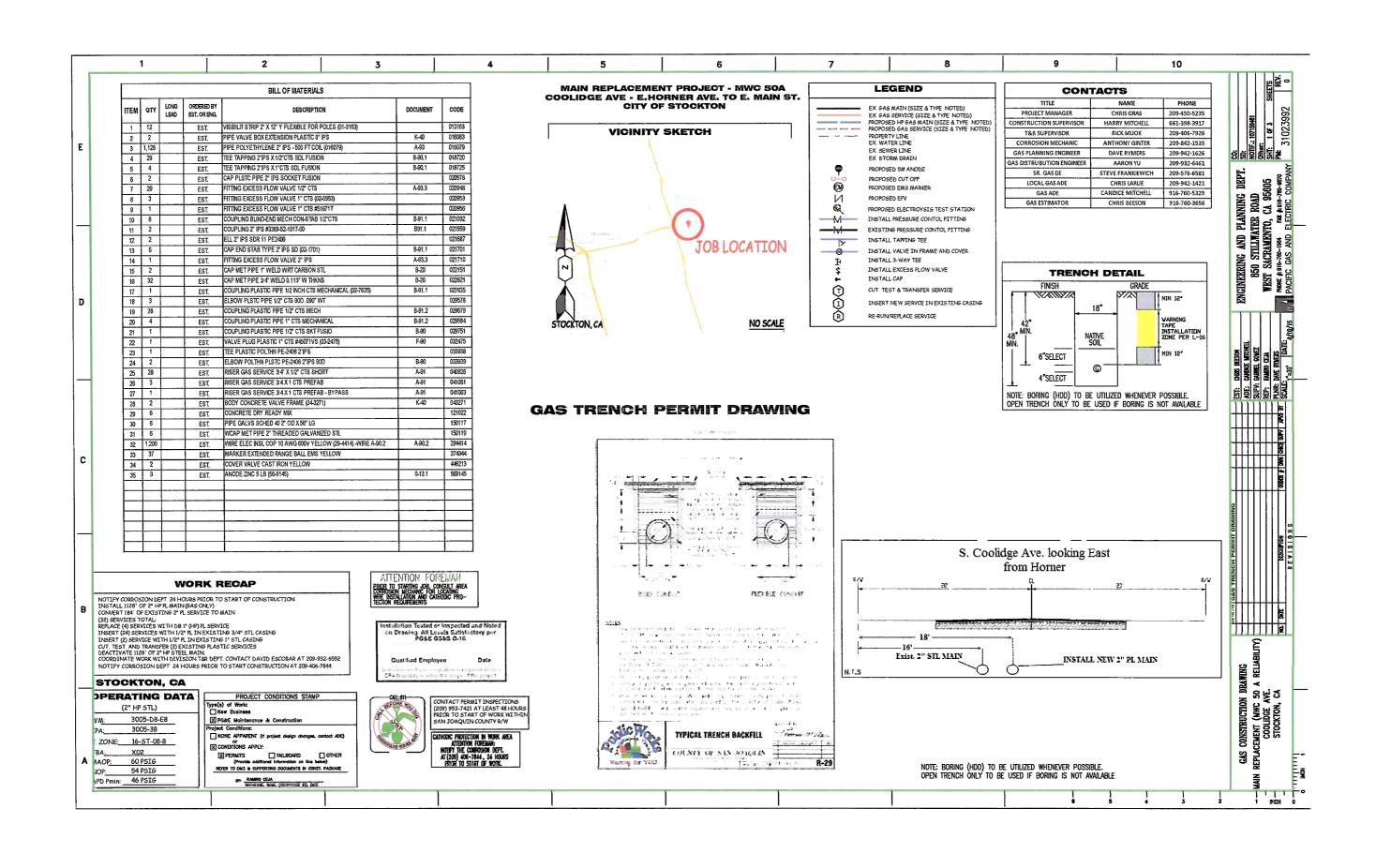
**811:** call before you dig Be safe. Dig safe. At home, or on the job. For more safety tips, visit pge.com/safety.

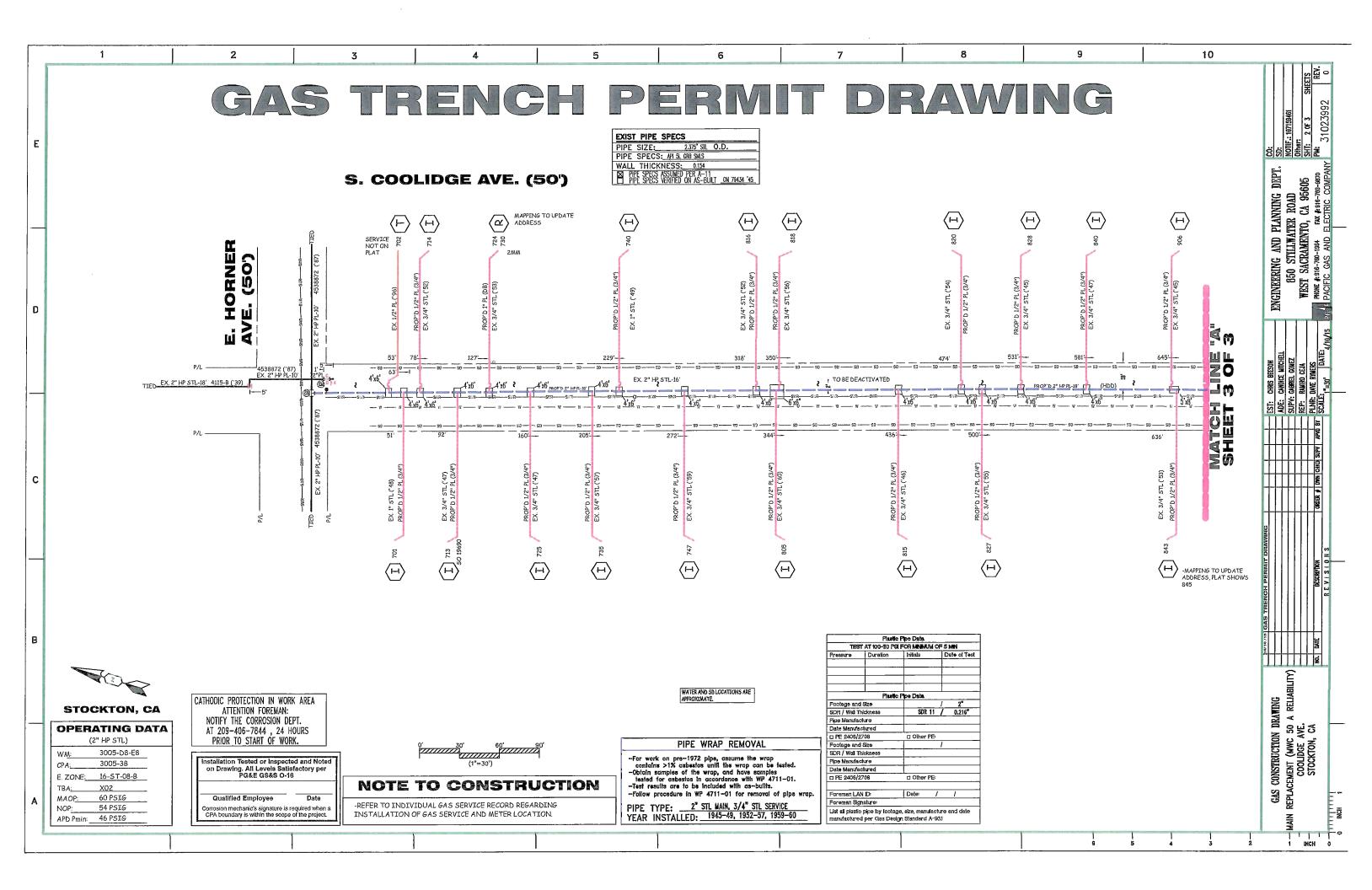
## SPECIAL CONDITIONS FOR PG&E COOLIDGE AVENUE PIPELINE REPLACEMENT ENCROACHMENT PERMIT

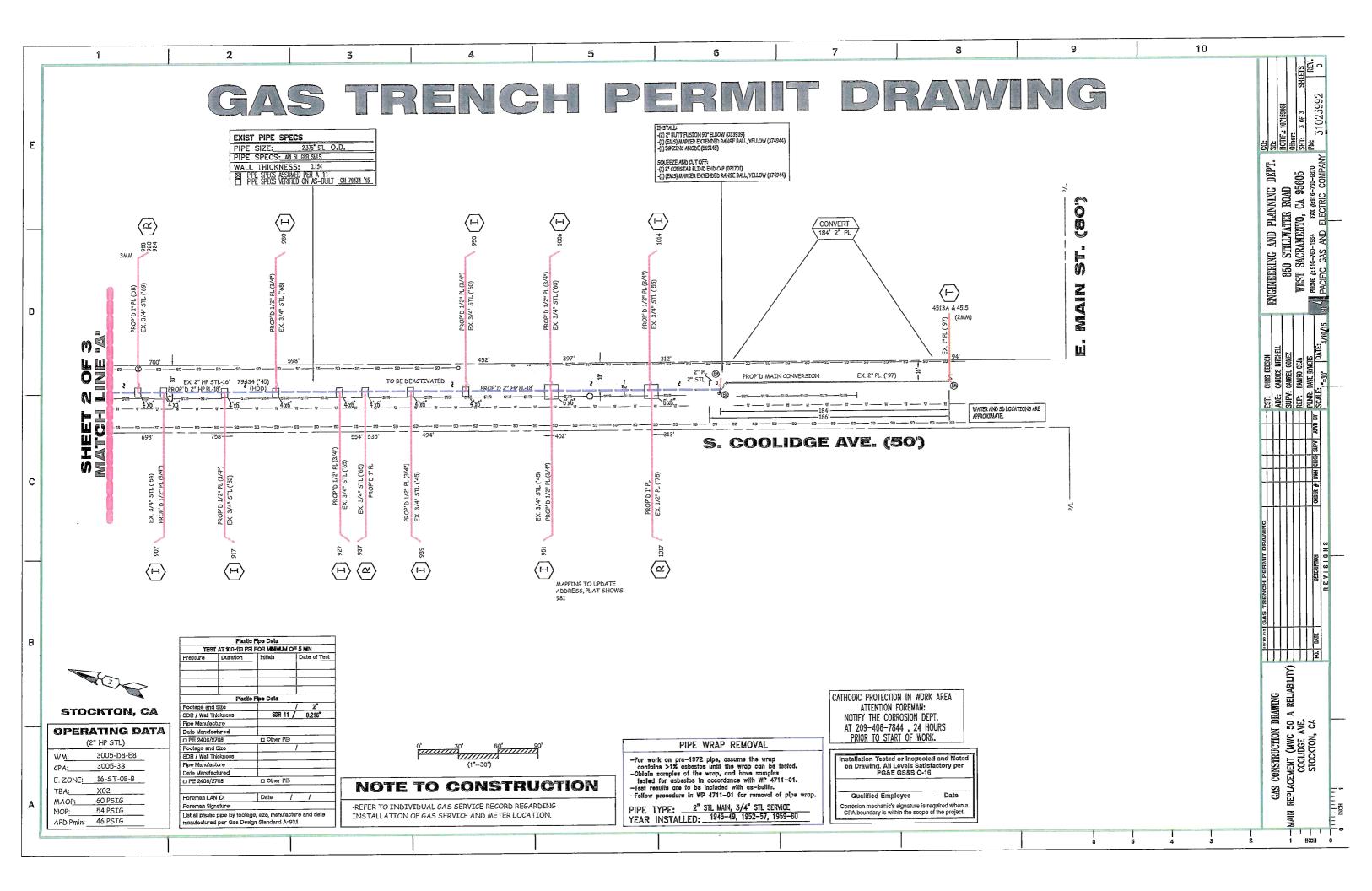
- Maintain traffic controls for all roads. Traffic control delays shall not exceed 15 minutes.
   Two-way traffic shall be maintained during non-working hours with excavated areas backfilled or plated. During working hours, two-way traffic control shall be maintained with one lane open and appropriate flaggers.
- Access to all properties shall be maintained at all times except when work is occurring at the
  access point. Minimal delays will be allowed to provide access within the work zone area.
  Driveway access shall be fully restored at the end of each workday. Driveways disturbed by the
  contractor shall be replaced with in-kind or better materials.
- 3. Residents and businesses shall be notified in writing, as approved by the County, 48 hours in advance of any impacts to their access.
- 4. Any areas where parking is to be restricted shall have signs noting the restrictions in place at least 48 hours in advance.
- 5. Existing fences shall not be removed without written consent of the property owner such consent shall be submitted to the County prior to the removal. Fences removed shall be restored with inkind or better materials at the edge of the right-of-way.
- 6. Work shall not be permitted within the San Joaquin County right-of-way between November 1 and March 31 without prior authorization from the San Joaquin County Field Engineering Division, contact them at 209-953-7421.
- 7. Final paving for trench repair or road resurfacing shall be per Caltrans' specifications and shall not occur between November 1 and March 31, without prior authorization from the San Joaquin County Field Engineering Division, contact them at 209-953-7421.
- 8. All pavement markings destroyed or obliterated must be replaced in kind by the permittee. Typical pavement markings include, but not limited to, lane lines, centerlines, stop and stop ahead legends, limit lines, raised pavement markers and miscellaneous delineators.
- 9. The Permittee is responsible for the preservation of survey monuments located within the area of work herein permitted. Prior to the start of construction, survey monuments that potentially may be disturbed shall be located and referenced by a Licensed Land Surveyor, and a Corner Record filed with the County Surveyor. Any Survey Monuments disturbed during the course of construction shall be reestablished by a Licensed Land Surveyor and another Corner Record filed with the County Surveyor. (Land Surveyors' Act Section 8771)
- All pipe and pipeline related facilities including, but not limited to, valves, utility boxes and vaults, and frames and covers shall be maintained by PG&E, including any facilities that are abandoned in place. PG&E shall be responsible for any and all costs associated with the removal, relocation and/or adjustment of these facilities as determined by the County at PG&E's expense. (Streets and Highways Code Section 1463)

- 11. All future maintenance of the pipeline and related facilities within the County right-of-way will require a San Joaquin County Encroachment Permit.
- 12. Length of open, unbackfilled trench shall be limited to a total maximum length of 250 linear feet during working hours.
- 13. Trenches shall be maintained in a smooth and even condition to the satisfaction of the County throughout the project limits at all times.
- 14. All trenches shall be completely backfilled or shored and plated at the end of each workday, and the roadway restored to two-way traffic. If plating is to be used, a trench shoring and plating plan suitable for traffic loadings shall be prepared by a registered civil engineer and submitted for prior approval by the County.
- 15. The contractor shall use San Joaquin County Standard R-29 when backfilling trenches within the County right-of-way. Where the existing road structural section is below standard, a minimum section of 3 inches of asphalt concrete over 8 inches of aggregate base shall be required.
- 16. Temporary pavement shall be provided for all trench areas within three days of pavement removal or by Friday of each week, whichever is more restrictive.
- 17. Final trench paving shall be placed when the length of temporarily surfaced trench exceeds 1,500 linear feet or by segment of road as determined by the County. Final trench paving will also be required to be placed when interruptions or delays of the work exceed two (2) weeks.
- 18. Roadway areas subject to pavement cuts shall receive a one (1) inch asphalt concrete overlay from the centerline (or lane line) to the edge of the travelled way. If the pavement is disturbed on both sides of the centerline (or adjacent lane), then the entire roadway (or affected lanes) shall be resurfaced. All pavement conforms shall be ground to provide a flush surface. Contractor shall grind and overlay within 10-working days of permanent trench paving. Shoulder areas shall be brought up to the finish grade as directed by the County.
- 19. No paving joints allowed within paved shoulder, contractor shall pave all the way to outer edge of paved shoulder.
- 20. Contractor shall establish existing roadway and drainage grades within the construction area. Any repair to roadways and adjacent areas shall match existing grades. Any proposed grade changes shall receive prior approval from County.
- 21. Class II Aggregate Base shoulder backing is required from the edge of pavement, a minimum of 4-inches thick by 4-feet wide.
- 22. School buses shall be passed through the work zone with minimal delays.

- Above ground vaults, panels and/or other similar facilities will be allowed within the right-of-way if located as far to the outside edge as possible and if the location either meets AASHTO Clear Zone guidelines or is protected by an existing obstruction such as a tree or utility pole. Utility vaults shall be located a minimum of 4'-0" from edge of pavement.
- 24. County roads shall be kept clean from mud and debris at all times along the access points and work zone areas during entire project. All standard roadway striping and signage shall be clearly visible, maintained and restored throughout the construction zone during and after the project.
- 25. In addition to standard dust control measures, streets shall be maintained in a clean condition, free of dirt, mud and debris during construction activities. The contractor shall provide daily, or as needed, street sweeping using a modern mechanical or vacuum-assisted street sweeper.
- 26. The contractor shall not conduct construction operations in rain or heavy fog conditions.





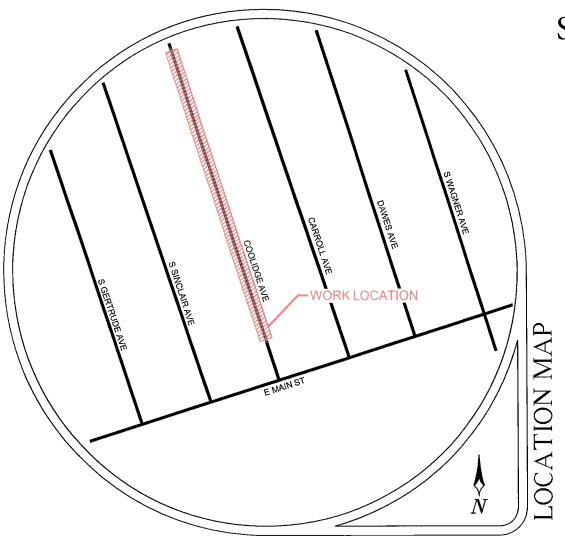


# TRAFFIC CONTROL PLANS

## GAS MAIN REPLACEMENT COOLIDGE AVE STOCKTON, CALIFORNIA

SAN JOAQUIN COUNTY

PM31023992



CONTRACTOR



CONTACT CHRIS BEESON PHONE# (916) 760-3656

CONSULTANT



SHEET NO. 1 OF 5

ALMENDARIZ CONSULTING, INC. 1136 SUNCAST LN STE 9 EL DORADO HILLS, CA 95762 (888) 306-1211 OFFICE (888) 768-7022 FAX CA C31 LIC #979806

	REVISIONS	PROJECT NO.	150423				
REV.	DESCRIPTION	REV DONE BY	DATE	DRAWN	JEL.		
				DESIGNED	BME		
				CHECKED	CAA		
				DATE MAY 6, 2015			
1				MATC	, 2010		

## **GENERAL NOTES**

- NOTHING ALLOWED IN THE BUFFER AND TRANSITION AREAS AT ALL TIMES.
- SIGNS ARE ONLY SHOWING TO THE PUBLIC WHEN IN USE.
- SIGNS AND CHANNELIZING DEVICES MUST BE RETROREFLECTIVE OR ILLUMINATED DURING NIGHT OPERATIONS.
- SIGN PANEL SIZES: 36"X36" MIN. ON ROADS <50mph, 48"x48" ON ROADS ≥ 50mph.
- SIGNS ARE SPACED PER THE CA 2014 MUTCD MANUAL.
- CHANNELIZING DEVICES SPACING AND TAPER LENGTHS ARE BASED ON THEIR RESPECTIVE CHARTS. (SEE CHARTS THIS PAGE)
- 7. NOTIFY THE LOCAL LAW ENFORCEMENT, FIRE, AND AMBULANCE COMPANIES WITHIN 72 HOURS BEFORE CONSTRUCTION BEGINS.
- CONTRACTOR TO MAKE SURE ALL TRAFFIC CONTROL EQUIPMENT MEETS ALL AGENCY REQUIREMENTS.
- REMOVE ALL CONFLICTING MARKINGS FOR LONG TERM OPERATIONS (3 DAYS OR LONGER).
- 10. THE LOCATION OF THE SIGNS AS SHOWN ON THE ILLUSTRATIONS ARE GUIDELINES AND ACTUAL LOCATIONS WILL DEPEND UPON ALIGNMENT, GRADE, LOCATION OF STREET INTERSECTIONS AND 85% TILE POSTED SPEED LIMITS.
- 11. WHILE CROSSING INTERSECTIONS DURING MOBILE WORK, WORK MUST FOLLOW THE FLOW OF TRAFFIC AND PROCEED ON A GREEN LIGHT.
- 12. FULL COMPLIANCE IS REQUIRED WITH THE CITY AGENCY.
- PEDESTRIAN ACCESS MUST BE MAINTAINED AS PER THE CA 2014 MUTCD STANDARDS AND ADA REQUIREMENTS.
- 14. C30 SIGNS ARE PERMITTED IN BUFFER AREAS.
- 15. SIGN SPACING IS PROVIDED IN THE CA MUTCD 2014 EDITION, PART 6. TRAFFIC SPEEDS ARE BASED UPON RADAR MEASUREMENTS OF MOTORISTS. THE MUTCD ALLOWS FOR A "RANGE" IN SIGN PLACEMENT AND WILL BE PROVIDED BY DOT. THE 85% TILE IS USED WHEN AVAILABLE TO PROVIDE A MORE ACCURATE REPRESENTATION OF MOTORISTS SPEEDS.
- 16. ANY WORK WITHIN 200 FT OF A SIGNALIZED INTERSECTION WILL REQUIRE CONTACT AND COORDINATION WITH COUNTY AGENCY PRIOR TO ANY WORK.
- 17. QUALITY STANDARD TO MEET REQUIREMENTS OF SECTION 1A-2 OF THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- 18. ALL TRAFFIC CONTROL DEVICES INCLUDING: SIGNS, BARRICADES, VERTICAL PANELS, DRUMS, WARNING LIGHTS, ARROWBOARDS, CHANGEABLE MESSAGE SIGNS, CONES AND TUBULAR MARKERS THAT MEET THE REQUIREMENTS OF AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA). "CA MUTCD 2014" SHALL BE USED ON THIS PROJECT/THIS WORK.
- 19. THE NCHRP REPORT 476 PROVIDES GUIDELINES FOR DESIGN AND OPERATION OF NIGHTTIME TRAFFIC CONTROL FOR HIGHWAY MAINTENANCE AND CONSTRUCTION, SEE TYPICAL APPLICATIONS NWTA-1 THROUGH NWTA-7. COMPLY WITH ANSI 107-2004 FOR APPAREL, HIGHWAY CONSTRUCTION WORK LIGHTING SHALL BE PER CONSTRUCTION SAFETY ORDER 1523 (CALIFORNIA CODE OF REGULATIONS TITLE 8, DIVISION1, CHAPTER 4, SUBCHAPTER 4, ARTICLE 3, SECTION 1523 - ILLUMINATIONS).
- 20. SIDEWALKS AT THE CONSTRUCTION LOCATION MAY BE CLOSED WITH ADEQUATE DETOURS, SIDEWALKS MAY ONLY BE CLOSED TO THROUGH TRAFFIC AND SHALL NOT PREVENT LOCAL PEDESTRIANS ACCESS. DETOURS SHALL NOT INCREASE THE PATH OF TRAVEL BY MORE THAN 500 FT. DETOUR ROUTES SHALL BE LIMITED TO EXISTING SIDEWALKS. PRIVATE PROPERTIES (SEE BELOW REQUIREMENTS) AND CROSSINGS AT ROADWAY INTERSECTIONS. TO THE MAXIMUM EXTENT FEASIBLE, THE ALTERNATE CIRCULATION PATH SHALL BE PROVIDED ON THE SAME SIDE OF THE STREET AS THE DISRUPTED ROUTE. WHERE IT IS FEASIBLE TO PROVIDE A SAME-SIDE ALTERNATE CIRCULATION PATH AND PEDESTRIANS WILL BE DETOURED, SECTION 6D.02 OF THE CA 2014 MUTCD SPECIFIES THAT THE ALTERNATE PATH PROVIDE A SIMILAR LEVEL OF ACCESSIBILITY TO THAT OF THE EXISTING DISRUPTED ROUTE . THIS MAY INCLUDE THE INCORPORATION OF ACCESSIBLE PEDESTRIAN SIGNALS (APS), CURB RAMPS, OR OTHER ACCESSIBILITY FEATURES.
- 21. PEDESTRIANS MAY BE DETOURED ONTO PRIVATE PROPERTY ONLY IF WRITTEN PERMISSION FROM THE PROPERTY OWNER IS OBTAINED ALONG WITH DOCUMENTATION INDICATING THAT THE COUNTY WOULD NOT BE LIABLE (HOLD HARMLESS) IN THE EVENT OF AN ACCIDENT.
- 22. DURING WORK HOURS, AT LEAST ONE WORKER SHALL BE ASSIGNED WITH THE RESPONSIBILITY TO ESCORT ELDERLY, DISABLED OR ANY OTHER PEDESTRIANS IN NEED OF ASSISTANCE THROUGH THE CONSTRUCTION SITE. A WORKER ASSIGNED WITH THIS RESPONSIBILITY MAY ALSO PARTICIPATE IN OTHER CONSTRUCTION ACTIVITIES; HOWEVER, THE ASSIGNED WORKER SHALL BE AWARE OF HIS OR HER RESPONSIBILITIES FOR PROVIDING THIS ASSISTANCE. MEASURES THAT SIMPLY CLOSE THE SIDEWALK. WITH THE EXCEPTION THAT PEDESTRIANS WILL CROSS SOMEWHERE ELSE DOES NOT ADEQUATELY SATISFY PEDESTRIAN ACCESS. PEDESTRIANS SHOULD NEVER BE DIRECTED/ EXPECTED TO CROSS A MULTI-LANE ROADWAY AT ANY LOCATION OTHER THAN AT A SIGNAL (OR ALL-WAY STOP). ACCOMMODATIONS SHOULD BE MADE ON THE SAME SIDE OF ROADWAY AS WORK.

## TABLES CHART - 2014 MUTCD

			Minimum Taper Lengths							Maximum					
Posted Speed	Taper (L) Formula	Buffer Space	10' Offset		11' Offset		12' Offset			*Cone Spacing			Sign Spacing		
-			L	1/2 L	1/3 L	L	1/2 L	1/3 L	L	1/2 L	1/3 L	@	@	@	
	i		Merge	Shift	Shoulder	Merge	Shift	Shoulder	Merge	Shift	Shoulder	Taper	Tangent	Conflict	
25		155'	104'	52'	35'	115	57'	38'	125'	63'	42'	25'	50'	12'	100' - 200'
30	$L = \frac{WS^2}{60}$	200'	150'	75'	50'	165'	83'	55'	180'	90'	60'	30'	60'	15'	120' - 240'
35	60	250'	204'	102'	68'	225'	112'	75'	245'	123'	82'	35'	70'	17'	140' - 280'
40	1	305'	267'	133'	89'	293'	147'	98'	320'	160'	107'	40'	80'	20'	160' - 320'
45	T	360'	450'	225'	150'	495'	248'	165'	540'	270'	180'	45'	90'	22'	360' - 540'
50	]	425'	500'	250'	167'	550'	275'	183'	600'	300'	200'	50'	100'	25'	400' - 600'
55	L=WS	495'	550'	275'	183'	605'	303'	202'	660'	330'	220'	55'	110'	27'	440' - 660'
60		570'	600'	300'	200'	660'	330'	220'	720'	360'	240'	60'	120'	30'	480' - 720'
65		645'	650'	325'	217'	715'	358'	238'	780'	390'	260'	65'	130'	32'	520' - 780'
70	]	730'	700'	350	233'	770'	385'	257'	840'	420'	280'	70'	140'	35'	560' - 840'

Both are based on.
1.) 85th % Tile or if not available, then use Posted Speed Limit (PSL)

L = Taper Length S = Speed

W = Width (Offset from path of travel

\*Cones shown on the templates are illustration purposes only. Exact number of cones required shall be based on cone spacing, taper lengths, actual field conditions, etc.

## CA MUTCD 2014 TABLE 6C-1

## MEANING OF LETTER CODES ON TYPICAL APPLICATION DIAGRAMS

	DISTANCE BETWEEN SIGNS				
ROAD TYPE	А	В	С		
URBAN (LOW SPEED) - 25 MPH OR LESS	100 FEET	100 FEET	100 FEET		
URBAN (LOW SPEED) - MORE THAN 25 MPH TO 40 MPH	250 FEET	250 FEET	250 FEET		
URBAN (HIGH SPEED) - MORE THAN 40 MPH	350 FEET	350 FEET	350 FEET		
RURAL	500 FEET	500 FEET	500 FEET		
EXPRESSWAY / FREEWAY	1,000 FEET	1,500 FEET	2,640 FEET		

	REVISIONS		PROJECT NO. 150423		
REV.	DESCRIPTION	REV DONE BY	DATE	DRAWN JEL	
				DESIGNED BME	
				CHECKED CAA	
				CHECKED CAA	
				DATE	
					0 -
				MAY 6, 2015	SHEET NO 2 OF 5

