



# 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-1701607**  
Date Issued: 05/31/2017  
Start Date: 06/01/2017  
Exp. Date: 10/31/2017  
Project No: PWP730052  
Quad: SW

UE/CR/PM NO:42646631

## ENCROACHMENT PERMIT

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

### Encroachment Type:

Trench			
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### Location:

ZUCKERMAN RD ON HENNING TRACT

In compliance with your request of **05/31/2017**, 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
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FORMS: 

SS/WW, R-29		
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Est. Permit Fee: \$698.55

KRIS BALAJI, Director  
Department of Public Works

WHITE -Permittee  
GOLDENROD -PWD Central File  
YELLOW -Field Inspection  
PINK -Permit Section

By:   
Permit Section



## ENCROACHMENT PERMIT GENERAL PROVISIONS

13-1

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.
7. 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.



# APPLICATION FOR ENCROACHMENT PERMIT

PLEASE PRINT:

Date 4/27/17

To: San Joaquin County  
Department of Public Works

PGE

(Applicant Name)

4010 West CW

(Mailing Address)

Stockton CA 95204

(City, State, Zip Code)

408-316-1767

(Area Code - Telephone Number)

## OFFICE USE ONLY

JOB # 730052 REF # \_\_\_\_\_

APN \_\_\_\_\_ CR # \_\_\_\_\_

EXP. DATE 10-31-17

VALID 6-1-17 TO 10-31-17

STREET Zuckerman Rd

AREA Pelta QUAD SW

TYPE \_\_\_\_\_

FORMS \_\_\_\_\_

NOTES \_\_\_\_\_

DRIVEWAYS:

\* \_\_\_\_\_

\* \_\_\_\_\_

\* \_\_\_\_\_

Sketch (Detailed plans may be submitted)

SEE ATTACHED SKETCH

4464631

The undersigned hereby applies for permission to excavate, construct and/or otherwise encroach on County Highway Right-of-Way on the E & W side of Zuckerman Rd approximately \_\_\_\_\_ feet/mile

of 1181 Zuckerman Stockton, by performing the following work (description of work):

To install new Transmission Line to pot hole for  
Transmission Main

Work will commence on or about 6-1-17 for approximately 150 days.

I, the undersigned, certify that I am the owner of the respective property, or am qualified to represent the owner and agree to do the work described above in accordance with the rules and regulations of San Joaquin County and subject to inspection and approval.

Signature of Applicant - Title

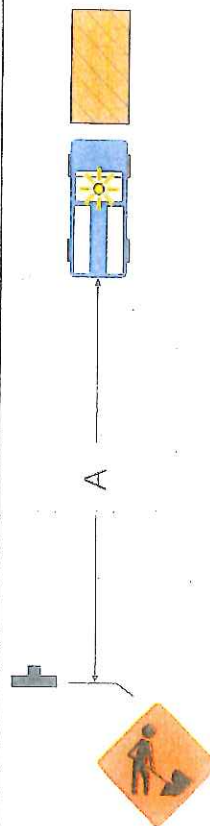
Date



## UTILITY TYPICAL APPLICATIONS

### UTA-1 Work Beyond the Shoulder

1. WORKER SYMBOL sign not required if the work space is 15 feet or more from the edge of any roadway. The WORKER SYMBOL sign should be used if motorists may be distracted by the work activity.
2. If the work space is in the median of a divided highway, an advance warning sign should also be placed on the left side of the directional roadway.
3. For short-term, short-duration, or mobile operation, all signs and channelizing devices (cones, etc.) may be eliminated if a vehicle with an activated flashing or revolving yellow light is used.



SIGN SPACING	DISTANCE
ROAD TYPE	A
Urban - 25 MPH or less	200'
Urban - 30 MPH or more	350'
Rural	500'
Expressway/Freeway	1000'

SEE:

• TABLE 1 for Buffer Length (page 26)

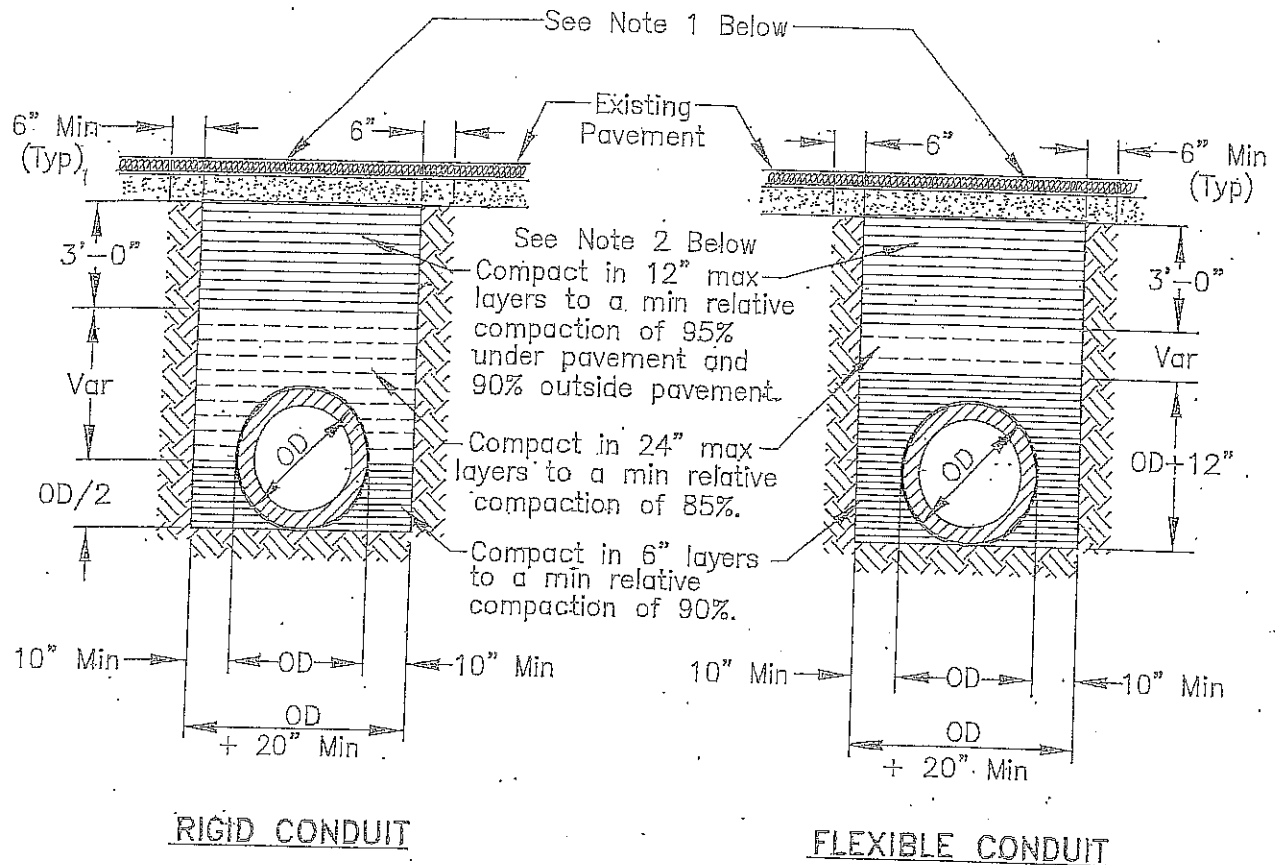
• TABLE 4 for "L" & Channelizer (cones, etc.) Quantity (page 28)

**NOTE: LOCAL REGULATIONS MAY VARY.**

PGEFM1A

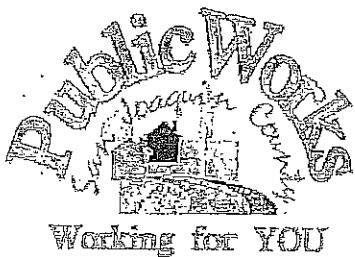
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#### NOTES:

1. New pavement shall be 1" thicker than existing pavement, minimum of 0.25 Ft. New base shall be 1" thicker than existing base, min of 0.50 Ft.
2. Select native material or imported granular material as approved by the Director of Public Works. Backfill with materials equal to or better than the existing pavement and base in quality.
3. Relative compaction of materials shall be tested in accordance with the State of California, Dept. of Transportation Testing Manuals, test method No. California 216 or 231.
4. All existing pavement shall be neatly cut to line prior to trench excavation.
5. Jetting or ponding will be permitted within the street right-of-way with a 3 year bond, when approved by the Director of Public Works.
6. When shown by soil composition and compactability, ninety percent (90%) compaction may be used, when approved by the Director of Public Works.
7. Special bedding and backfill requirements may be shown on the plans or specified in the special provisions.



### TYPICAL TRENCH BACKFILL

COUNTY OF SAN JOAQUIN  
DEPARTMENT OF PUBLIC WORKS

Approved by:

*Thomas M. Gill*

No.	Revision	Description	Date

Std. Dwg. No.

**R-29**

Date: DEC 2014





## GENERAL PROVISIONS

### GOVERNING INSTALLATION OF SUBSURFACE STRUCTURES AND PIPELINES WITHIN COUNTY ROAD RIGHTS-OF-WAY

#### PUBLIC CONVENIENCE AND SAFETY:

- A. Before obstructing any private driveway entrance or County road traveled way with a trench, spoil bank, equipment or other barrier permitted for any prolonged period of time, the Permittee shall notify the known users of the respective thoroughfare(s) involved, and shall provide access for vehicular and pedestrian traffic to and from the road.
  - 1. Unless otherwise permitted, all work shall be conducted in such a manner that no less than one lane of the existing County road traveled way will be maintained open to public traffic during working hours in a smooth and safe riding condition(s). Two lanes shall be open after working hours.
  - 2. In cases where road closure is permitted, the permission to close the road will be granted under the condition that the Permittee notify the following persons and/or agencies of the time, the period of closure, and the detour route at least twenty-four (24) hours prior to said road closure.
    - a. The County of San Joaquin Public Works Department
    - b. The County of San Joaquin Sheriff's Office
    - c. The local postal service
    - d. The local fire district
    - e. The local school district
    - f. The local residents involved
- B. Should hazardous conditions relative to the installation operations warrant flagmen, as many capable flagmen as may be necessary shall be provided by the Permittee and stationed in advance of work to warn and direct traffic.
- C. Lights, signs and barricades shall be furnished, erected and maintained by the Permittee for the adequate warning and convenience of the public, with particular attention to be taken in this regard after dark.
- D. Any excess dirt and/or debris which might be a hazard to either automobile or pedestrian traffic, uncontrollable by lights, signs and barricades, shall be removed from the jobsite daily.

#### STRUCTURES:

- A. Walls of structures shall be such quality and strength that they will resist all pressures and will not crack or be deformed in such a way as to create a hazard or maintenance problem at any time. Therefore, the minimum structural requirements for concrete pipe placed under county road rights-of-way shall conform to the following American Association of State Highway and Transportation Officials (AASHTO) designations.
  - 1. For concrete pipe up to and including thirty-three inches (33") inside diameter, extra strength concrete conforming to AASHTO Designation M 170M.
  - 2. For concrete pipe thirty-six inches (36") inside diameter and larger, reinforced concrete pipe conforming to AASHTO Designation M 170M Class III.
  - 3. Plastic pipe conforming to AASHTO Designation M294.
- B. All concrete pipe joints with County road rights-of-way shall be sealed against leakage and/or infiltration with rubber gasket in conformance with Section 65-1.06 of the California Standard Specifications, or with other methods as may be permitted under the Special Provisions.
- C. Cast-in-place concrete pipe, vitrified clay pipe, spiral welded steel pipe, or corrugated aluminum alloy pipe shall not be installed within the County road rights-of-way unless specifically so stated in the Special Provisions, and only under the conditions as provided.
- D. All structures to be buried within the County rights-of-way shall be set at such elevations as to allow minimum coverage of thirty inches (30") to the centerline of the roadways and twelve inches (12") at the bottoms of borrow ditches each side of the roadways. The depths of structures shall be established below a flat plane extending across the rights-of-way, no part of which shall extend above the elevations stated above; manholes, lampholes, valves, etc. not included. Future surface elevations shall be anticipated as nearly as possible and structure elevations shall be established for future adjustments accordingly.
- E. The County hereby reserves the right to specify in the Special Provisions the gage and surface treatment of any galvanized corrugated metal pipe that is to be installed.
- F. All longitudinal utility facilities are to be established (and dimensioned on sketches) from surveyed centerline of road right-of-way, not from right-of-way (border) lines.

#### REPAIRS OF THE COUNTY RIGHT-OF-WAY:

- A. All excavations shall be backfilled and compacted immediately after work therein has been completed.
- B. Trenched shall not be left open farther than 300 feet in advance of pipe laying operations, or 200 feet to the rear thereof, unless otherwise permitted by the Engineer.
- C. Unless otherwise permitted under the Special Provisions, backfill shall be placed and mechanically compacted in such a manner that the relative compaction throughout the entire fill within the County road right-of-way shall conform to the percentages of compaction as shown on the Trench detail.
- D. Backfill material shall be placed in horizontal uniform layers not to exceed in thickness, before compaction, 0.67 foot in the bedding region, one foot where 90% compaction is required, and two feet where 80% compaction is required.
- E. No portion of the excavation(s) shall be compacted by ponding or jetting unless a maintenance bond is provided.
- F. Gravel backfill material shall be utilized only where specifically so stated on the face of the permit. It shall be compacted by means of a high-frequency internal vibrator, the compactor to be a size and type approved by the Engineer. Points of compaction shall not be greater than 18" centers and to the full depth of the lift.
- G. All pavements, curbs, gutters, sidewalks, borrow ditches, pipes, head walls, road signs, trees, shrubbery, and/or other permanent road facilities impaired by or as a result of construction operations at the construction site(s) occupied by materials and/or equipment, shall be restored immediately upon backfilling of the excavation to the original grades and cross sections, and to a condition as good as, or better than existing prior to construction.
- H. All surfacing materials of roadways and driveway approaches cut or damaged by or as a result of construction operations, shall be replaced within ONE WEEK following the backfilling of excavation, weather permitting, with compacted layers of surfacing materials at least as thick as the existing, and no less than two inches (2") of asphalt concrete over six inches (6") of aggregate base, both as specified below.
  - 1. Asphalt Concrete: Combined mineral aggregate shall conform to the quality and gradation requirements for Type "B" one-half inch (1/2) maximum aggregate, coarse or medium gradation as specified in Section 39 of the California Standard Specifications. The bituminous binder to be mixed with mineral aggregate shall be paving asphalt having (Grade PG 64-10), unless otherwise directed by the Engineer. Placement of asphalt concrete surfacing shall conform to the applicable provisions of Section 39 of the California Standard Specifications.
  - 2. Aggregate Base: Combined mineral aggregates shall conform to the quality and the grading for three-quarter inch (3/4") maximum size aggregate Class 2 Aggregate Base specified in Section 26 of the California Standard Specifications.
- I. Before acceptance of repairs to the County road rights-of-way, all unsightly and detrimental dirt, dust and/or debris shall be removed and the construction areas left in a neat and presentable condition(s).
  - 1. If necessary, County road traveled way and driveway pavements shall be washed with water to remove dirt and dust.
  - 2. Driveway approaches and field entrance pavements damaged by equipment or spoil banks shall be repaired as directed by the Engineer.
- J. Upon request by the County, any settlement, sagging of surface, or cracking of pavement shall be repaired immediately by and at the sole expense of the Permittee for a period of one year following acceptance of the work.

## SPECIAL PROVISIONS

### Winter Weather Utility Work

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1. SUPERVISION: The utility company (permittee) shall furnish full-time supervision of all work to insure compliance with the permit provision.
2. START OF WORK: No work within the County right-of-way shall be started until the utility company representative has made an evaluation of weather conditions and has determined the work can be accomplished under the provisions of the permit.
3. CLEAN PAVEMENT: Dirt and mud shall not be deposited on the pavement outside the area of work, and if inadvertently tracked onto the road travel way shall be removed immediately.
4. DAILY RESTORATION: Private driveways and road intersections shall be restored daily.
5. WEATHER-TIGHT CONDITIONS: All trenches shall be filled and compacted, ditches and other drainage facilities regarded and opened, and the entire work area restored to weather-tight condition prior to any rain.



SCHEDULE OF SHEETS:

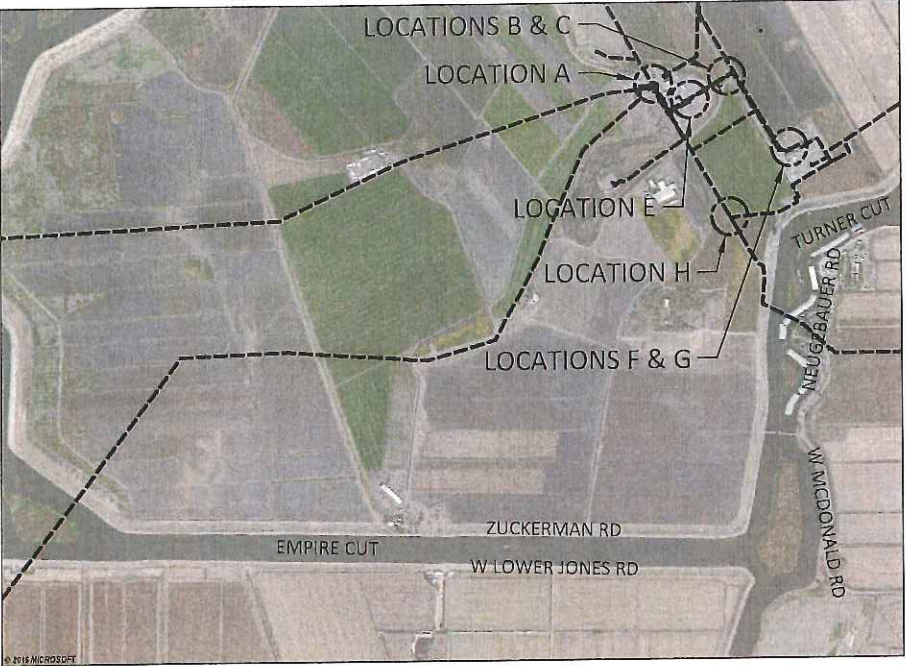
SHEET 01 - TITLE / CONSTRUCTION NOTES  
SHEET 02 - DETAIL / STAMPS / LEGEND  
SHEET 03 - CTS / ETS DETAIL  
SHEET 04 - EXCAVATION LOCATIONS A, B, & C  
SHEET 05 - EXCAVATION LOCATION E  
SHEET 06 - EXCAVATION LOCATIONS F & G  
SHEET 07 - EXCAVATION LOCATION H

CONTACT INFORMATION:

PROJECT ENGINEER ----- NICK ESTAKHRI (925) 212 - 8935  
PROJECT MANAGER ----- GABE SASSER (510) 610 - 3624  
CONTRACT ENGINEER ----- COLE MERRITT (925) 640 - 8816

EC17-057  
L-057A-M15, MP 0.3906  
L-057A-MD3, MP 0.0163 - 0.0323  
L-057A-MD1, MP 0.4138  
L-057A-MT, MP 0.4196  
L-057A-WT, MP 0.6277 - 0.6804  
ECDA INVESTIGATION DIG

ORDER #42646631  
PSRS #42379



VICINITY MAP  
NOT TO SCALE

SAN JOAQUIN  
COUNTY, CA

GENERAL NOTES:

- THIS DRAWING IS ISSUED FOR PERMIT. REFER TO CONTRACT DOCUMENTATION FOR ADDITIONAL CLARITY OF SCOPE OF WORK.
- THIS DRAWING HAS BEEN CREATED BY REVIEW OF THE AS-BUILT DRAWINGS & RECORDS. ACCURACY IS DEPENDENT UPON THE SOURCE DOCUMENTS LISTED IN THE REFERENCE DOCUMENTS.
- UTILITIES SHOWN ON DRAWING ARE APPROXIMATE BASED UPON REVIEW OF PG&E DIG SHEET, DIGS BASIS MEMO, & GIS. CONTRACTOR TO CALL USA TO HAVE LOCATION OF THESE FACILITIES MARKED & POTHOLE TO EXPOSE/VERIFY LOCATION.

CONSTRUCTION NOTES:

- UNDERGROUND SERVICE ALERT : CALL 811 (1-800-227-2600) A MINIMUM OF 2 BUSINESS DAYS (NOT INCLUDING INITIAL DAY OF CONTACT) IN ADVANCE FOR THE MARKING OF UNDERGROUND UTILITIES, INCLUDING ALL NON-UTILITIES BEFORE YOU DIG, GRADE, OR EXCAVATE.
- UTILITY NOTES:
  - DIMENSIONS SHOWN ON THESE DRAWINGS ARE BASED ON THE BEST AVAILABLE INFORMATION FROM SEVERAL SOURCES, & SHALL BE VERIFIED IN THE FIELD BY CONSTRUCTION PERSONNEL PRIOR TO EXCAVATION.
  - THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE & LOCATION OF UNDERGROUND UTILITIES, PROPERTY LINES, & OTHER SUBSTRUCTURES IS NOT GUARANTEED TO BE ACCURATE OR ALL-INCLUSIVE, UNLESS OTHERWISE NOTED. CONSTRUCTION PERSONNEL ARE RESPONSIBLE FOR MAKING ALL DETERMINATIONS AS TO THE TYPE & LOCATION OF UNDERGROUND UTILITIES & OTHER SUBSTRUCTURES AS NECESSARY TO AVOID DAMAGE OR ENCROACHMENTS.
  - PROSPECTING IS REQUIRED AHEAD OF WORK.
  - ALL EXCAVATIONS WITHIN EXISTING STATIONS SHALL BE HAND DUG OR EXCAVATED USING SOFT DIG METHODS (e.g. VACUUM EXCAVATIONS OR SIMILAR).

- COATING REMOVAL:  
BEFORE REMOVING THE PIPE COATING ON PRE-1972 PIPE (DOES NOT INCLUDE PLASTIC TAPE OR FUSION BONDED EPOXY COATINGS) THE FOLLOWING STEPS SHALL BE TAKEN:
  - FOR ALL NON-EMERGENCY WORK, PRE-1972 PIPE WRAP MUST BE EVALUATED TO DETERMINE IF IT CONTAINS ASBESTOS PRIOR TO REMOVAL.
  - FOR EMERGENCY WORK ON PRE-1972 PIPE, ASSUME THE WRAP CONTAINS > 1% ASBESTOS UNTIL THE WRAP CAN BE TESTED.
  - OBTAIN SAMPLES OF THE WRAP, & HAVE SAMPLES TESTED FOR ASBESTOS IN ACCORDANCE WITH WP 4711-01.
  - TEST RESULTS ARE TO BE INCLUDED WITH THE FINAL JOB PACKAGE.
  - FOLLOW PROCEDURE IN WP 4711-01 FOR REMOVAL OF PIPE WRAP.
- RESTORATION & CLEAN UP:
  - RESTORATION OF PUBLIC STREETS, SIDEWALKS, CURBS, ETC. ABOVE PIPE BEDDING SHALL BE IN ACCORDANCE WITH THE LATEST CITY, COUNTY, OR AGENCY STANDARDS.
  - WHEREVER THERE ARE ROW CROPS, THE TOPSOIL SHALL BE REMOVED TO A DEPTH OF 12" & STORED ON SITE. UPON COMPLETION OF CONSTRUCTION, THE TOPSOIL SHALL BE RESTORED. TAKE CARE TO PREVENT MIXING OF TOPSOIL & SUBSOIL.
- WELDING REQUIREMENTS:
  - INSTALL TEST STATIONS WITH THERMITE WELD CONNECTION IN ACCORDANCE WITH GAS T & D CORROSION CONTROL MANUAL O-10, O-10.1, & O-10.2.
- PAINTING & COATING REQUIREMENTS:
  - ALL EXPOSED PIPE & FITTINGS ARE TO BE PAINTED IN ACCORDANCE WITH GAS STANDARD E-30. ALL COATING ON BURIED PIPE & FITTINGS ARE TO BE APPLIED IN ACCORDANCE WITH GAS STANDARD E-35.
  - FOR COATING SELECTIONS ON BURIED PIPE, SEE DIRECT BURIAL COATING SELECTIONS TABLE.
- DOCUMENTATION OF INSPECTION OF EXISTING PIPELINE:  
WHENEVER EXISTING BURIED GAS FACILITIES ARE EXCAVATED DURING ENGINEERING OR DURING CONSTRUCTION, AN A-FORM (TD-4110P-03-F01) SHALL BE COMPLETED FOR THE GENERAL INSPECTION. THIS ALSO APPLIES TO GAS FACILITIES BEING DEACTIVATED. THE COMPLETED A-FORM SHALL BE SUBMITTED WITH THE FINAL JOB PACKAGE.
- COPIES OF REFERENCE DRAWINGS ARE AVAILABLE TO FIELD PERSONNEL (PG&E, INSPECTION OR CONTRACTOR) ON AN AS NEEDED BASIS. CONTACT THE CONTRACT ENGINEER IDENTIFIED IN CONTACTS TO OBTAIN COPIES OF REFERENCE DRAWINGS.

REFERENCE DOCUMENTS:

PRELIMINARY FORM "N", EC17-057, ISSUED 9/13/2016  
483286, SHT. 1, REV. 18 - 12" COLLECTION MAIN - AREA NO. 7 MCDONALD ISLAND COMPRESSOR STATION  
483194, REV. 31 - MCDONALD ISLAND COMPRESSOR STATION  
386181, CHANGE 2 - TIE-IN ZUCKERMAN - HENNING NO. 1 MCDONALD ISLAND FIELD  
485561, CHANGE 7 - PIPELINE SECTIONS & DETAILS WHISKY SLOUGH & TURNER CUT  
B-4800728 - K7, K8, K9 RENTAL COMPRESSOR MCDONALD ISLAND GAS STORAGE FIELD  
B-485661 - WHISKY SLOUGH & TURNER CUT, TUBING X-TIE  
B-485983, REV. 13 - WELL GATHERING YARD, TURNER CUT STATION  
B-486454, REV. 10 - AUXILIARY & CONTROL, NORTH YARD TURNER CUT STATION  
B-MAOP08628676 - MCDONALD ISLAND STORAGE PROJECT

SEQUENCE OF OPERATIONS:

- INSTALL BMPS.
- EXCAVATE & EXPOSE PIPELINE AS SHOWN IN LOCATION IMAGE(S) & IDENTIFIED IN ECDA DIG SHEET (FORM N).
- COMPLETE PIPELINE INSPECTION IN ACCORDANCE WITH RMP-09 PROCEDURE FOR EXTERNAL CORROSION DIRECT ASSESSMENT.
- COMPLETE "H" FORM INSPECTION.
- PERFORM REPAIRS AS NEEDED.
- RECOAT THE PIPELINE IN ACCORDANCE WITH GAS STANDARD E-35.
- COMPLETE DOCUMENTATION AS REQUESTED BY THE PROJECT ENGINEER.
- BACKFILL & COMPACT EXCAVATION PER PERMIT STANDARDS.
- INSTALL PG&E GAS WARNING DECALS & PIPELINE MARKER DECALS AS NEEDED.
- REMOVE BMPS.
- RESTORE PROJECT SITE.



SAFETY PLEDGE

I ALWAYS PUT SAFETY FIRST.  
I LOOK FOR AND ACT TO  
RESOLVE UNSAFE SITUATIONS.  
I HELP AND ENCOURAGE  
OTHERS TO ACT SAFELY.



875 Lannon Lane, Suite 250  
Walnut Creek, CA  
(925) 478-8800  
www.gtsinc.com  
Project No. 15241

ISSUED  
FOR  
PERMIT

**WARNING:**  
THIS DOCUMENT CONTAINS CONFIDENTIAL, PROPRIETARY INFORMATION THAT IS THE SOLE PROPERTY OF PACIFIC GAS AND ELECTRIC COMPANY AND IS INTENDED FOR USE ONLY BY AUTHORIZED PACIFIC GAS AND ELECTRIC COMPANY EMPLOYEES & AGENTS. COPYRIGHT PACIFIC GAS AND ELECTRIC COMPANY.



Know what's below.  
Call before you dig.

THIS DRAWING IS FOR  
VISUAL REFERENCE ONLY.  
SCALE IS APPROXIMATE.  
LOCATION OF EXISTING  
AND PROPOSED  
STRUCTURES IS  
APPROXIMATE. ANY AND  
ALL DIMENSIONS ARE  
APPROXIMATE. ORIGINAL  
DRAWING SIZE 11"x17".  
IMAGE SOURCE:  
MICROSOFT BING

NO.	DATE	DESCRIPTION	GM/SPEC	DWN	CHKD	SUPV	APVD BY
D	04/12/17	ISSUED FOR PERMIT - REVISED BELL HOLES	42646631	MG	BL	BTC	BTC
C	03/21/17	ISSUED FOR PERMIT - REVISED WORK AREAS	42646631	MG	SH	BTC	BTC
B	02/10/17	ISSUED FOR REVIEW - REMOVED LOCATION D & ADDED LOCATION H	42646631	MG	SH	BTC	BTC
A	01/25/17	ISSUED FOR REVIEW	42646631	MG	CGM	BTC	BTC
REVISIONS							

APPROVED BY	GM 42646631
	SUPV
	DSGN
	DWN MG
	CHKD CGM
	OK BTC
DATE	01/25/2017
SCALES	AS SHOWN

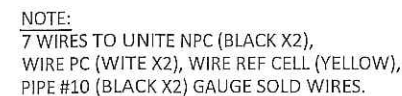
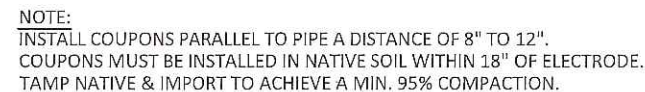
EC17-057	
L-057A-M15, MP 0.3906	
L-057A-MD3, MP 0.0163 - 0.0323	
L-057A-MD1, MP 0.4138	
L-057A-MT, MP 0.4196	
L-057A-WT, MP 0.6277 - 0.6804	
ECDA INVESTIGATION DIG	
SAN JOAQUIN COUNTY, CALIFORNIA	
DRAWING NUMBER	SHEET
GTS-15241	01 OF 07
D	







BILL OF MATERIAL						
Item Number	Description	PG&E Material Code	Units	Quantity	Catalog or Drawing Reference Number	Purchase Order Information
1	Royston 4" x 4" Handy Cap	M562324	Ea.	22	GS&S O-10	
2	Liquid Adhesive, Royston Roybond 747, 16 oz Spray Can, 12 Per Carton	M130850	Ea.	2	GS&S O-10	
3	Sleeve, Copper, Thermoweld A200 or Equivalent	M303755	Ea.	22	GS&S O-10	
4	Cartridges, Cadweld CA-15, or Thermoweld 15P, 15-Gram, 20 Per Box	M159260	Ea.	22	GS&S O-10	
5	Wire, 500' Coil, #10, HMWPE With 30 Mil Thickness, Solid Copper, Black Insulation	M294991	Ft.	1000'	GS&S O-10	
6	Wire, 500' Coil, #10, HMWPE With 30 Mil Thickness, Solid Copper, White Insulation	M294107	Ft.	1000'	GS&S O-10	
7	Coupon Test Station	M560691	Ea.	7	GS&S O-10.2	
8	Test Lead Box, Big Fink, 5-Terminal (Orange)	M569390	Ea.	2	GS&S O-10.1	
9	Electrode, Reference, Stelth 2 CUCUSO4 Borin Manufacturing #SRE-007-CUY with 50' of Wire	M241423	Ea.	7	GS&S O-70	
10	Borin, Backfill, Gelatin (Electric Mud), 1 Container	M041192	Ea.	7	GS&S O-70	
11	Warning Tape	M379947	Ft.	1000'	GS&S L-16	
12	3" PVC, Schedule 80, with two Gas Pipeline Warning Decals	M016071	Ft.	12'	UG-1 Conduits	



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575 Lannon Lane, Suite 250  
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[www.gtsinc.com](http://www.gtsinc.com)  
Project No. 15241

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APPROXIMATE. ORIGINAL  
DRAWING SIZE 11"x17".  
IMAGE SOURCE:  
MICROSOFT BING

[illegible]

APPROVED	GM 42646631	
BY	SUPV	
	DSGN	
	DWN	MG
	CHKD	CGM
	OK	BTC
	DATE 01/25/2017	
	SCALES	
	AS SHOWN	

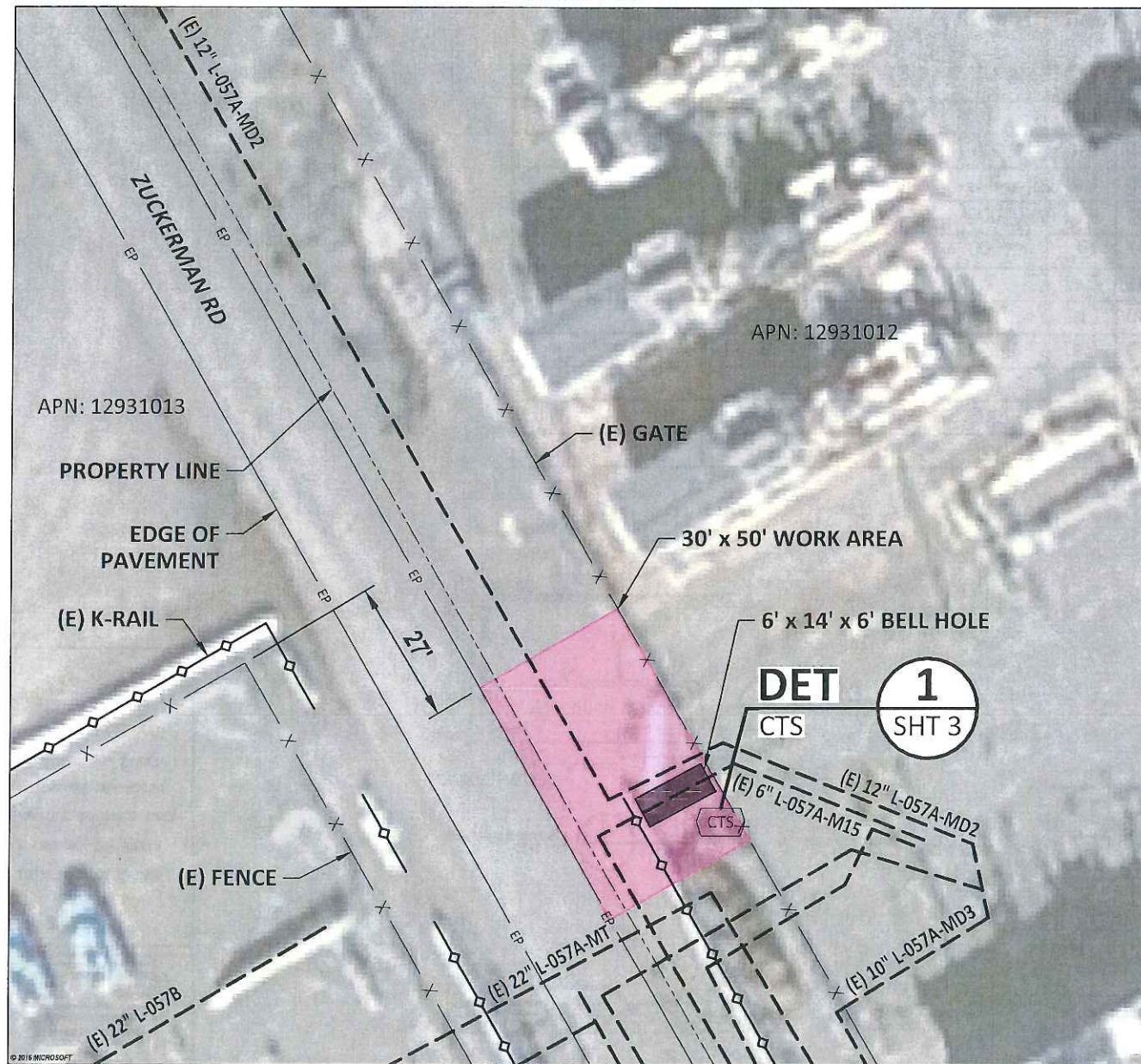
EC17-057  
L-057A-M15, MP 0.3906  
L-057A-MD3, MP 0.0163 - 0.0323  
L-057A-MD1, MP 0.4138  
L-057A-MT, MP 0.4196  
L-057A-WT, MP 0.6277 - 0.6804  
ECDA INVESTIGATION DIG  
SAN JOAQUIN COUNTY, CALIFORNIA

DRAWING NUMBER  
GTS-15241

SHEET  
03 OF 07

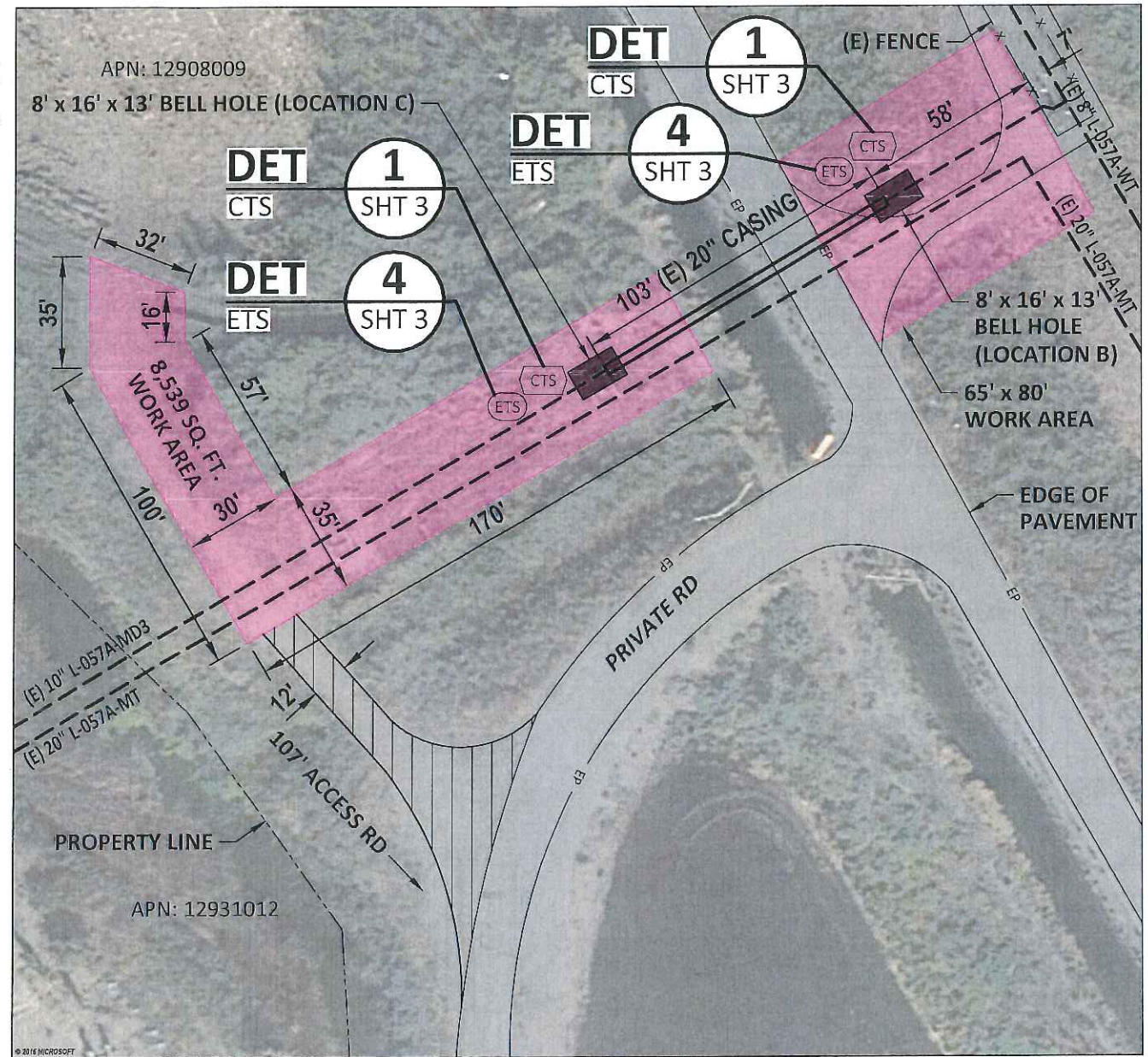


LOCATION A  
1181 ZUCKERMAN RD  
STOCKTON, CA  
WALL MAP: 3002, PLAT: A1, BLOCK: N/A, CPA: N/A  
(SCALE: 1" = 30')



LOCATION A  
L-057A-M15, DIG MP: 0.3906, STATION: 21+02  
REGION: 1B, PRIORITY: SCH  
DE TYPE: REQ, GOVERNING TOOL-CLASS: CIS  
COVER TYPE: GRAVEL, T.O.P.: 46"  
EXCAVATION DEPTH: 76"  
CENTER OF BELL HOLE: 4205698.971mN / 633373.209mE  
UTM Z10/NAD83  
PIPE: 6.625" OD x 0.432" WT, API 5L, GR B, SMLS  
MAOP: 2,160 PSIG, YEAR INSTALL: 1985

LOCATIONS B & C  
1181 ZUCKERMAN RD  
STOCKTON, CA  
WALL MAP: 3002, PLAT: A1, BLOCK: N/A, CPA: N/A  
(SCALE: 1" = 50')



LOCATION B  
L-057A-MD3, DIG MP: 0.0163, STATION: 0+80  
REGION: 3C, PRIORITY: SCH  
DE TYPE: REQ, GOVERNING TOOL-CLASS: PCM  
COVER TYPE: SOIL, T.O.P.: 120"  
EXCAVATION DEPTH: 164"  
CENTER OF BELL HOLE: 4205741.501mN / 633692.647mE  
UTM Z10/NAD83  
PIPE: 10.750" OD x 0.594" WT, API 5LX, X-42, SMLS  
MAOP: 2,160 PSIG, YEAR INSTALL: 1974

LOCATION C  
L-057A-MD3, DIG MP: 0.0323, STATION: 1+63  
REGION: 3C, PRIORITY: SCH  
DE TYPE: REQ, GOVERNING TOOL-CLASS: PCM  
COVER TYPE: SOIL, T.O.P.: 110"  
EXCAVATION DEPTH: 154"  
CENTER OF BELL HOLE: 4205727.716mN / 633670.961mE  
UTM Z10/NAD83  
PIPE: 10.750" OD x 0.594" WT, API 5LX, X-42, SMLS  
MAOP: 2,160 PSIG, YEAR INSTALL: 1974

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DRAWING SIZE 11"x17".  
IMAGE SOURCE:  
MICROSOFT BING

NO.	DATE	DESCRIPTION	GM/SPEC	DWN	CHKD	SUPV	APVD BY
D	04/12/17	ISSUED FOR PERMIT - REVISED BELL HOLES	42646631	MG	BL	BTC	BTC
C	03/21/17	ISSUED FOR PERMIT - REVISED WORK AREAS	42646631	MG	SH	BTC	BTC
B	02/10/17	ISSUED FOR REVIEW - REMOVED LOCATION D & ADDED LOCATION H	42646631	MG	SH	BTC	BTC
A	01/25/17	ISSUED FOR REVIEW	42646631	MG	CGM	BTC	BTC
REVISIONS							

APPROVED BY	GM 42646631
	SUPV
	DSGN
	DWN MG
	CHKD CGM
	OK BTC
DATE	01/25/2017
SCALES	AS SHOWN

EC17-057  
L-057A-M15, MP 0.3906  
L-057A-MD3, MP 0.0163 - 0.0323  
L-057A-MD1, MP 0.4138  
L-057A-MT, MP 0.4196  
L-057A-WT, MP 0.6277 - 0.6804  
ECDA INVESTIGATION DIG  
SAN JOAQUIN COUNTY, CALIFORNIA

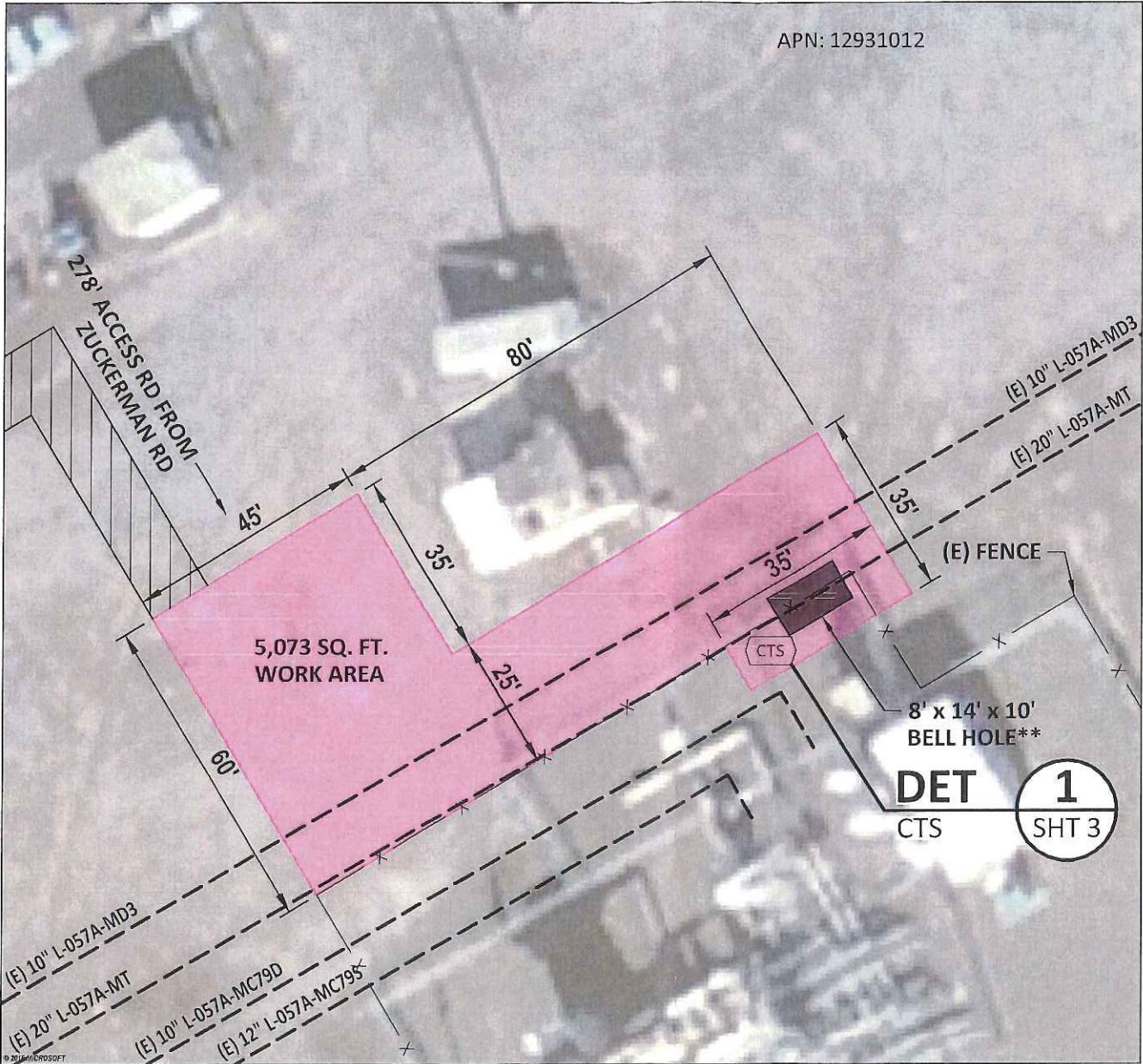
DRAWING NUMBER  
GTS-15241

SHEET  
04 OF 07

D



LOCATION E  
1181 ZUCKERMAN RD  
STOCKTON, CA  
WALL MAP: 3002, PLAT: A1, BLOCK: N/A, CPA: N/A  
(SCALE: 1" = 30')



LOCATION E  
L-057A-MT, DIG MP: 0.4196, STATION: 22+59  
REGION: 1B, PRIORITY: NRI  
DE TYPE: EFF REQ, GOVERNING TOOL-CLASS: CIS  
COVER TYPE: GRAVEL, T.O.P.: 71"  
EXCAVATION DEPTH: 115"  
CENTER OF BELL HOLE: 4205635.087mN / 633528.739mE  
UTM Z10/NAD83  
PIPE: 20.000" OD x 0.720" WT, API 5LX, X-60, DSAW  
MAOP: 2,160 PSIG, YEAR INSTALL: 1974

NOTE:  
\*\*REFERENCE DRAWING 4800728 FOR STATION PIPING ARRANGEMENT.  
HAND OR SOFT DIG WITHIN STATION.



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IMAGE SOURCE:  
MICROSOFT BING

NO.	DATE	DESCRIPTION	GM/SPEC	DWN	CHKD	SUPV	APVD BY
D	04/12/17	ISSUED FOR PERMIT - REVISED BELL HOLES	42646631	MG	BL	BTC	BTC
C	03/21/17	ISSUED FOR PERMIT - REVISED WORK AREAS	42646631	MG	SH	BTC	BTC
B	02/10/17	ISSUED FOR REVIEW - REMOVED LOCATION D & ADDED LOCATION H	42646631	MG	SH	BTC	BTC
A	01/25/17	ISSUED FOR REVIEW	42646631	MG	CGM	BTC	BTC
REVISIONS							

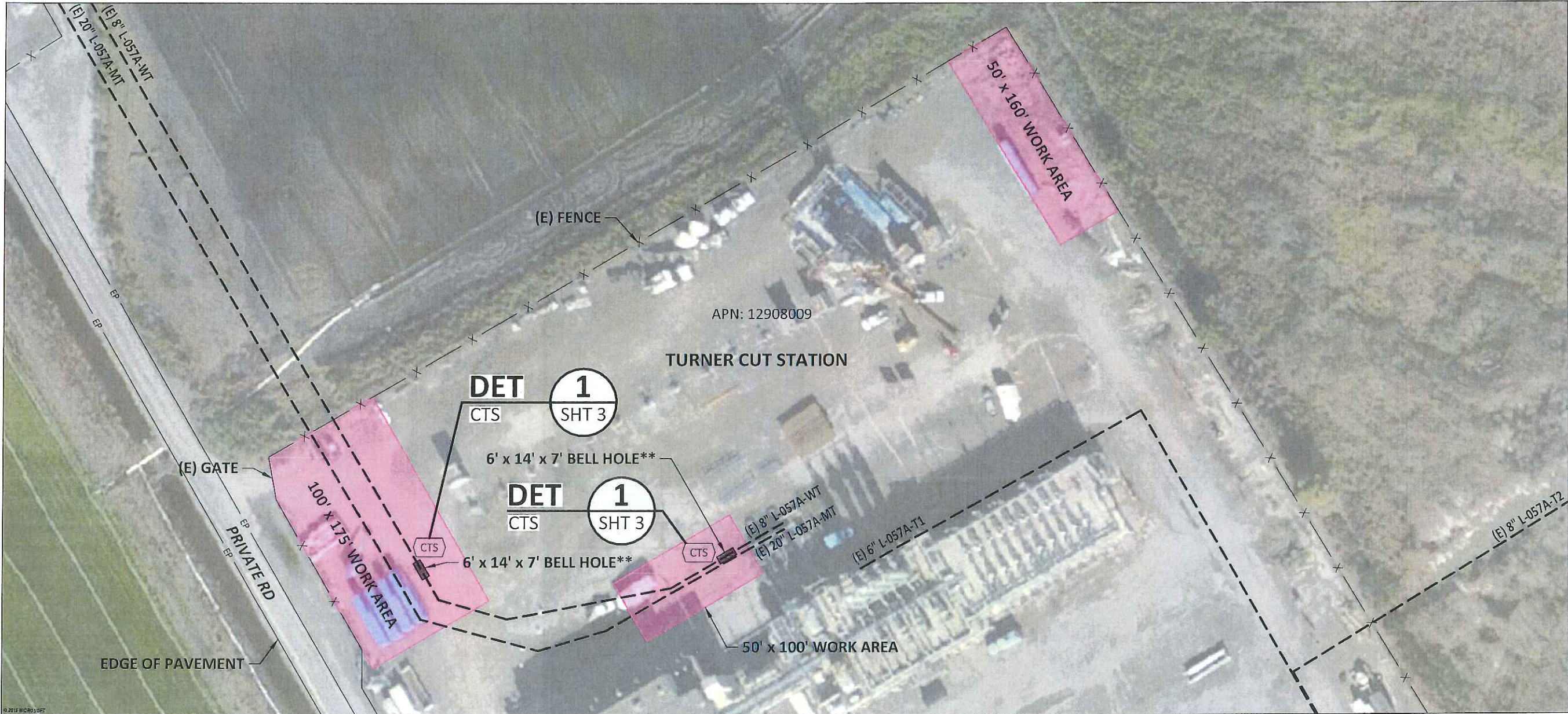
APPROVED BY	GM 42646631
	SUPV
	DSGN
	DWN MG
	CHKD CGM
	OK BTC
DATE	01/25/2017
SCALES	AS SHOWN

EC17-057 L-057A-M15, MP 0.3906 L-057A-MD3, MP 0.0163 - 0.0323 L-057A-MD1, MP 0.4138 L-057A-MT, MP 0.4196 L-057A-WT, MP 0.6277 - 0.6804 ECDA INVESTIGATION DIG SAN JOAQUIN COUNTY, CALIFORNIA		
DRAWING NUMBER	GTS-15241	SHEET 05 OF 07

INCH  
0  
1  
2  
3  
4  
5



LOCATIONS F & G  
TURNER CUT STATION  
STOCKTON, CA  
WALL MAP: 3002, PLAT: A1, BLOCK: N/A, CPA: N/A  
(SCALE: 1" = 80')



**LOCATION F**  
L-057A-WT, DIG MP: 0.6804, STATION: 5+00  
REGION: 1B, PRIORITY: MON  
DE TYPE: REQ, GOVERNING TOOL-CLASS: CIS  
COVER TYPE: SOIL, T.O.P.: 51"  
EXCAVATION DEPTH: 83"  
CENTER OF BELL HOLE: 4205443.133mN / 633982.522mE  
UTM Z10/NAD83  
PIPE: 8.625" OD x 0.500" WT, API 5LX, X-42, SMLS  
MAOP: 2,160 PSIG, YEAR INSTALL: 1975

**LOCATION G**  
L-057A-WT, DIG MP: 0.6277, STATION: 2+45  
REGION: 1B, PRIORITY: NRI  
DE TYPE: ADD 1ST, GOVERNING TOOL-CLASS: CIS  
COVER TYPE: GRAVEL, T.O.P.: 52"  
EXCAVATION DEPTH: 84"  
CENTER OF BELL HOLE: 4205438.303mN / 633912.956mE  
UTM Z10/NAD83  
PIPE: 8.625" OD x 0.500" WT, API 5LX, X-42, SMLS  
MAOP: 2,160 PSIG, YEAR INSTALL: 1973

**NOTE:**  
\*\*REFERENCE DRAWING 485983 FOR STATION PIPING ARRANGEMENT.  
HAND OR SOFT DIG WITHIN STATION.



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D	04/12/17	ISSUED FOR PERMIT - REVISED BELL HOLES	42646631	MG	BL	BTC	BTC
C	03/21/17	ISSUED FOR PERMIT - REVISED WORK AREAS	42646631	MG	SH	BTC	BTC
B	02/10/17	ISSUED FOR REVIEW - REMOVED LOCATION D & ADDED LOCATION H	42646631	MG	SH	BTC	BTC
A	01/25/17	ISSUED FOR REVIEW	42646631	MG	CGM	BTC	BTC

REVISIONS

APPROVED BY	GM 42646631
	SUPV
	DSGN
	DWN MG
	CHKD CGM
	OK BTC
DATE	01/25/2017
SCALES	AS SHOWN

EC17-057  
L-057A-M15, MP 0.3906  
L-057A-MD3, MP 0.0163 - 0.0323  
L-057A-MD1, MP 0.4138  
L-057A-MT, MP 0.4196  
L-057A-WT, MP 0.6277 - 0.6804  
ECDA INVESTIGATION DIG  
SAN JOAQUIN COUNTY, CALIFORNIA

DRAWING NUMBER  
GTS-15241

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06 OF 07

D



LOCATION H  
1171 ZUCKERMAN RD  
STOCKTON, CA  
WALL MAP: 3002, PLAT: A1, BLOCK: 0, CPA: N/A  
(SCALE: 1" = 60')



LOCATION H  
L-057A-MD1, DIG MP: 0.4138, STATION: 21+11  
REGION: 1A, PRIORITY: MON  
DE TYPE: REQ, GOVERNING TOOL-CLASS: DCVG  
COVER TYPE: SOIL, T.O.P.: 85"  
EXCAVATION DEPTH: 119"  
CENTER OF BELL HOLE: 4205145.998mN / 633708.094mE  
UTM Z10/NAD83  
PIPE: 10.750" OD x 0.500" WT, API 5L, X-42, ERW\*  
MAOP: 2,160 PSIG, YEAR INSTALL: 1961

NOTE:  
\*ASSUMED VALUES PER PG&E TECHNICAL GUIDANCE SPECIFICATION,  
RESOLVING UNKNOWN PIPELINE FEATURES, 12/05/2012.

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A	01/25/17	ISSUED FOR REVIEW	42646631	MG	CGM	BTC	BTC

APPROVED BY	GM 42646631
	SUPV
	DSGN
	DWN MG
	CHKD CGM
	OK BTC
DATE	01/25/2017
SCALES	AS SHOWN

EC17-057  
L-057A-M15, MP 0.3906  
L-057A-MD3, MP 0.0163 - 0.0323  
L-057A-MD1, MP 0.4138  
L-057A-MT, MP 0.4196  
L-057A-WT, MP 0.6277 - 0.6804  
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