



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-1701420**
Date Issued: 05/18/2017
Start Date: 05/18/2017
Exp. Date: 08/15/2017
Project No: PWP730052
Quad: SE

UE/CR/PM NO:31233179

ENCROACHMENT PERMIT

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

Encroachment Type:

Trench			
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Location:

N/S CARPENTER RD 300' W/O HWY 99 FRNTG

In compliance with your request of **05/18/2017**, 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****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****

FORMS:

SS/WW		
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Est. Permit Fee: \$481.15

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

KRIS BALAJI, Director
Department of Public Works

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 _____

To: San Joaquin County
Department of Public Works

Greg Washington
(Applicant Name)

4040 West Lane
(Mailing Address)

Stockton, CA 95204
(City, State, Zip Code)

(707) 452-2231
(Area Code - Telephone Number)

OFFICE USE ONLY

JOB #	_____	REF #	_____
APN	_____	CR #	_____
EXP. DATE	_____		
VALID	_____	TO	_____
STREET	_____		
AREA	_____	QUAD	_____
TYPE	_____		
FORMS	_____		
NOTES	_____		
DRIVEWAYS:			
* _____			
* _____			
* _____			

Sketch (Detailed plans may be submitted)
Sketch included with application.

3123 3179

The undersigned hereby applies for permission to excavate, construct and/or otherwise encroach on County Highway Right-of-Way on the North side of Carpenter Rd approximately 300 feet/mile West of Hwy 99 Frontage Rd Stockton, by performing the following work (description of work):
Install SCADA Cabinet near existing gas facilities. This will include trenching in the street on Carpenter Rd.

Work will commence on or about 3/2/17 for approximately 90 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

VICINITY SKETCH

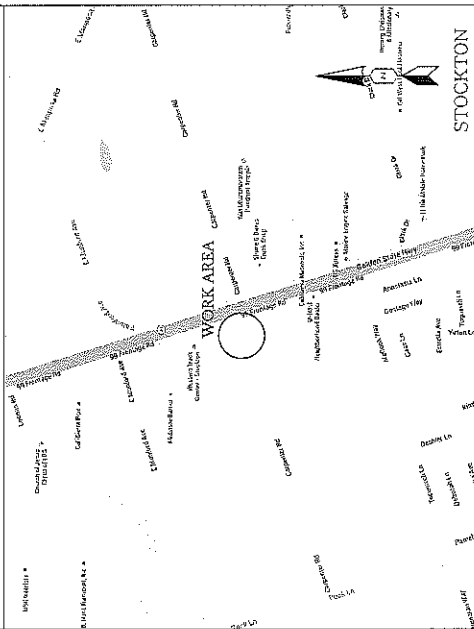
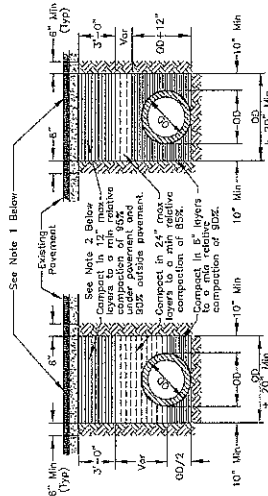


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- SHEET 1 - COVER SHEET
- SHEET 2 - PLAN VIEW SHEET
- SHEET 3 - STREET VIEW SHEET
- SHEET 4 - CABINET DETAIL SHEET
- SHEET 5 - POLE DETAIL SHEET (IF NEEDED)

RTU DIMENSIONS

RTU CABINET = 24" x 24" x 11"



- NOTES:**
1. The proposed shall be 1" thicker than existing pavement, minimum 18.25" FL. New base shall be 1" thicker than existing base, min of 0.50 FL.
 2. Select native material or imported granular material as approved by the Director of Public Works. Backfill with material equal to or better than the existing pavement and base as noted.
 3. The proposed shall be tested in accordance with the State of California, Dept. of Transportation Testing Manuals, last method No. California 216 or 231.
 4. All existing pavement shall be neatly cut to line prior to trench excavation.
 5. All existing pavement shall be neatly cut to line prior to trench excavation.
 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 bedding requirements may be shown on the plans or specified in the special provisions.

Approved by: *[Signature]*
 COUNTY OF SAN JOAQUIN
 PUBLIC WORKS
 Working for YOU
 TYPICAL TRENCH BACKFILL
 COUNTY OF SAN JOAQUIN
 STANDARD SPECIFICATIONS FOR PUBLIC WORKS
 (June 2014) Std. No. R-29

LEGEND

- GAS MAIN (SIZE AS NOTED) (EXISTING)
- PROPERTY LINE
- EDGE OF CURB, FACE OF CURB
- WATER (EXISTING)
- PHONE (EXISTING)
- PG&E ELECTRIC (SCADA) (INSTALL)
- SCADA SENSE LINE (INSTALL)
- FIRE VALVE (EXISTING)
- SCADA RTU CABINET (POST) (INSTALL)
- SCADA SPLICE BOX (INSTALL)
- POWER POLE (EXISTING)
- REGULATOR VAULT (EXISTING)
- MONITOR VAULT (EXISTING)
- VENT STACK (EXISTING)
- PROTECTION POST (EXISTING)
- RECORDING DEVICE (EXISTING)

PERMIT SKETCH

SCADA INSTALLATION
 CARPENTER RD & HWY 99
 STOCKTON, CA

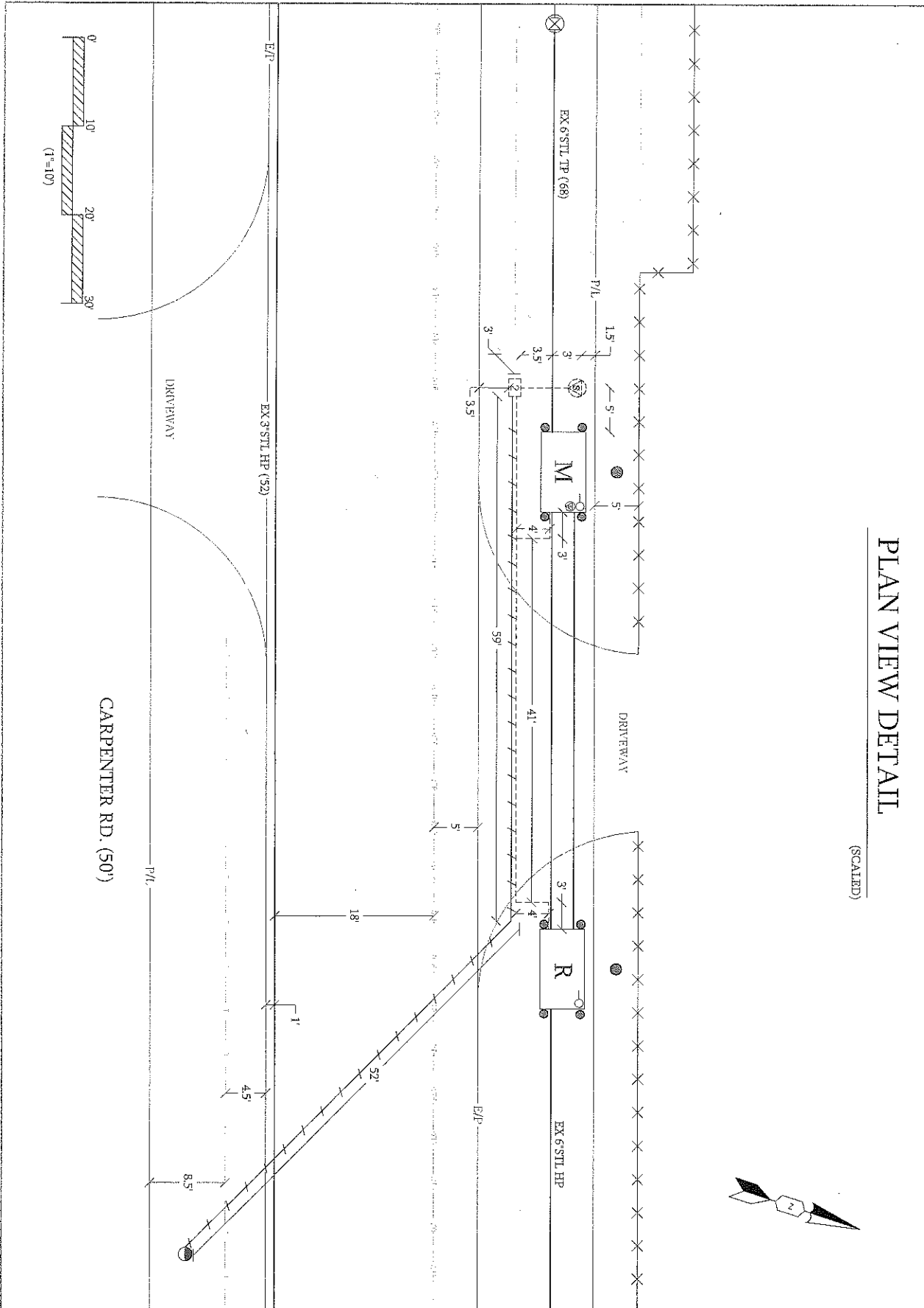
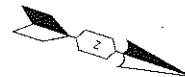
PACIFIC GAS AND ELECTRIC COMPANY

CO: _____
 SD: _____
 NOTIF: 111386842
 OTHER: _____
 SHT: 1 OF 5 SHEETS
 PM: 31233179
 REV: _____

EST: BRENT MULLENWABER
 ADE: SCOTT HART
 SUPV: GERALD GABRIEL
 REP: JACK PRICE
 PLNR: THACH HA
 DATE: 6/9/16
 SCALE: 1"=10'

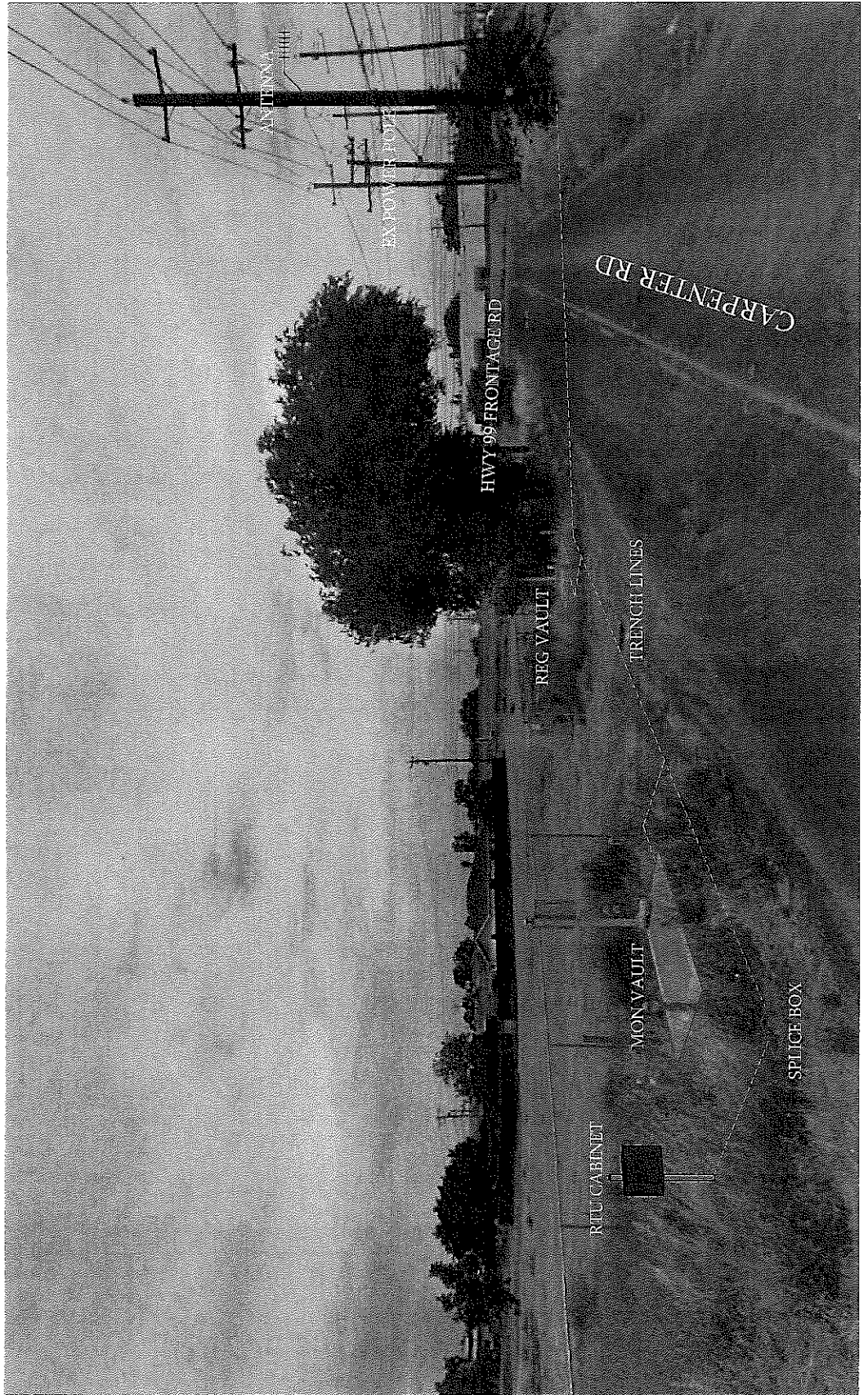
PLAN VIEW DETAIL

(SCALED)



EST: BRENT WULLENWABER		<div>PG&E</div>	PERMIT SKETCH SCADA INSTALLATION CARPENTER RD & HWY 99 STOCKTON, CA PACIFIC GAS AND ELECTRIC COMPANY	CO:	
ADE: SCOTT HART				SD:	
SUPV: GERALD GABRIEL				NOTIF.: 111386842	
REP: JACK PRICE				OTHER:	
PLNR: THACH HA				SHT: 2 OF 5 SHEETS	
SCALE: 1"=10'	DATE: 6/9/16			PM: 31233179	REV.

EST: BRENT WULLENWABER		ADE: SCOTT HART		SUPV: GERALD GABRIEL		REP: JACK PRICE		PLNR: THACH HA		SCALE: 1"=10'	
DATE: 6/9/16		PACIFIC GAS AND ELECTRIC COMPANY									
<div> <div> <div>PERMIT SKETCH</div> <div>SCADA INSTALLATION</div> <div>CARPENTER RD & HWY 99</div> <div>STOCKTON, CA</div> </div> <div> <div>CO:</div> <div>SD:</div> <div>NOTIF.: 111386842</div> <div>OTHER:</div> <div>SHT: 3 OF 5</div> <div>PM: 31233179</div> </div> </div>											



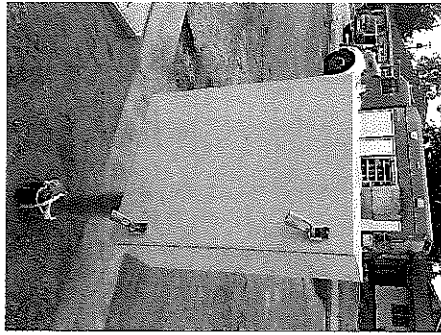
STREET VIEW DETAIL

(NTS)

CABINET DETAIL

(TYPICAL)
(N.T.S)

NOTE:
SCADA CABINET DIMENSIONS: 24" X 24" X 11"



NOTES:

CONCRETE STRENGTH:

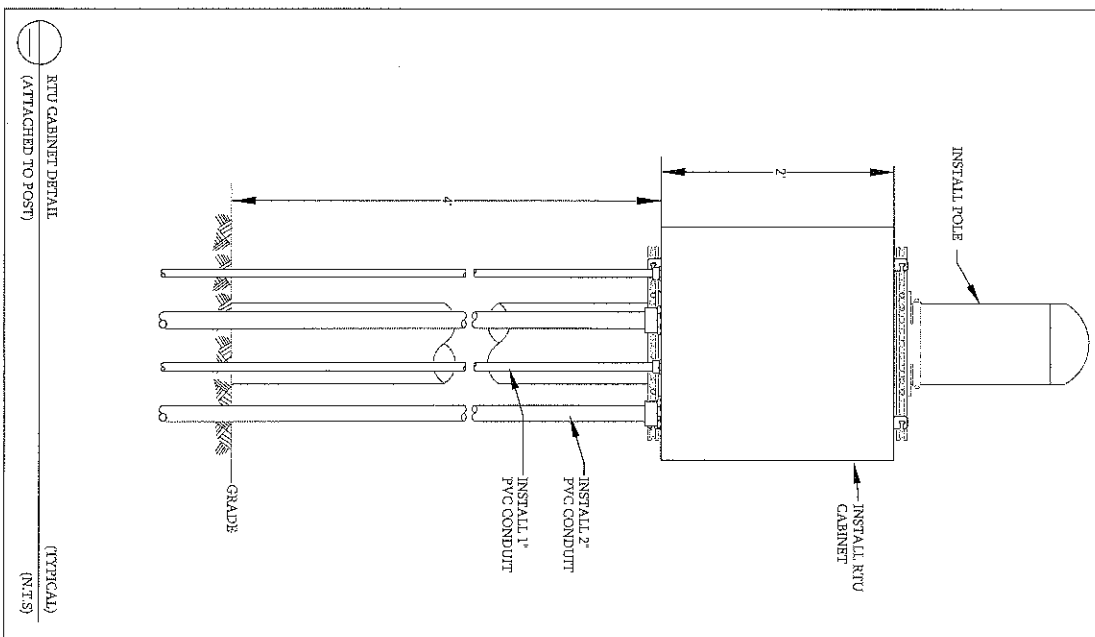
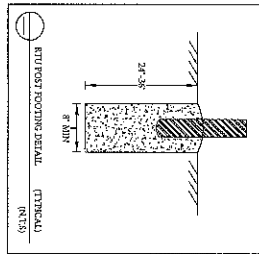
- ALL CONCRETE SHALL HAVE A MIN. 28 DAY COMPRESSIVE STRENGTH OF 2800 PSI, UNLESS OTHERWISE NOTED ON DRAWING.
- CEMENT SHALL BE PORTLAND CEMENT CONFORMING TO ASTM C 150 TYPE II.
- THE MAXIMUM SLUMP OF CONCRETE SHALL BE 4", UNLESS NOTED ON THE DRAWING.
- THE CEMENT-WATER RATIO SHALL BE 0.45 BY WEIGHT.

REINFORCEMENT:

- REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE ASTM-615, GRADE 60 DEFORMED STEEL BARS (YIELD STRENGTH OF $F_y=60,000$ PSI).
- CONCRETE COVERAGE (CLEAR) FOR REINFORCEMENT SHALL BE AS FOLLOWS:
- CONCRETE PLACED AGAINST EARTH (BOTTOM ONLY) - 3"
- FORMED SURFACES EXPOSED TO WEATHER OR GROUND - 2"

EXCAVATION AND FILLING:

- FIELD VERIFY LOCATION OF ALL UNDERGROUND LINES PRIOR TO EXCAVATION.
- STRUCTURAL FILL SHALL CONSIST OF EITHER CALTRANS CLASS 2 A/B OR 1/4" TO 3/4" CRUSHED ROCK.
- COMPACTED FILL MATERIAL TO 90% ASTM D-1557 METHOD OF COMPACTION.



PERMIT SKETCH
SCADA INSTALLATION
CARPENTER RD & HWY 99
STOCKTON, CA

PACIFIC GAS AND ELECTRIC COMPANY

CO:	
SD:	
NOTIF.:	111386842
OTHER:	
SHT:	4 OF 5
PM:	31233179
SHEETS	REV.

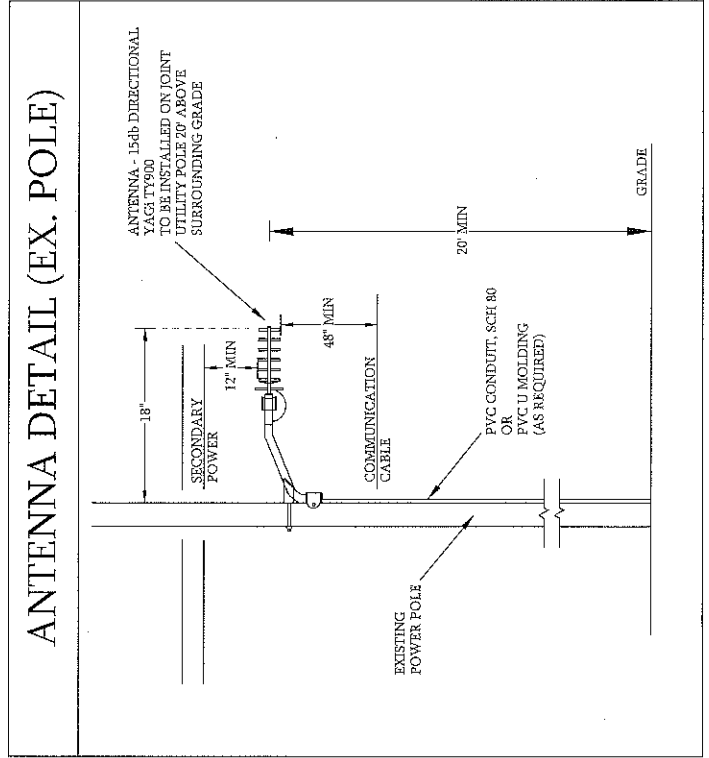
EST:	BRENT WULLENWABER
ADE:	SCOTT HART
SUPV:	GERALD GABRIEL
REP:	JACK PRICE
PLNR:	THACH HA
SCALE:	1"=10'
DATE:	6/9/16





ANTENNA ON EX. POLE DETAIL (EX.)

ANTENNA POLE DETAIL
(TYPICAL)
(N.T.S)



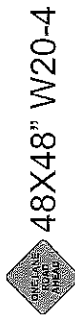
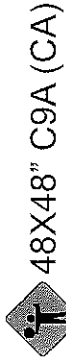
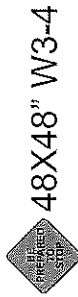
ANTENNA DETAIL (EX. POLE)

EST: BRENT WULLENWABER	DATE: 6/9/16	SCALE: 1"=10'
ADE: SCOTT HART	REP: JACK PRICE	PLNR: THACH HA
SUPV: GERALD GABRIEL		
PERMIT SKETCH		
SCADA INSTALLATION		
CARPENTER RD & HWY 99		
STOCKTON, CA		
PACIFIC GAS AND ELECTRIC COMPANY		
CO:	PM: 312333179	REV.
SD:	NOTIF.: 111386842	OTHER:
SHT: 5 OF 5		SHEETS

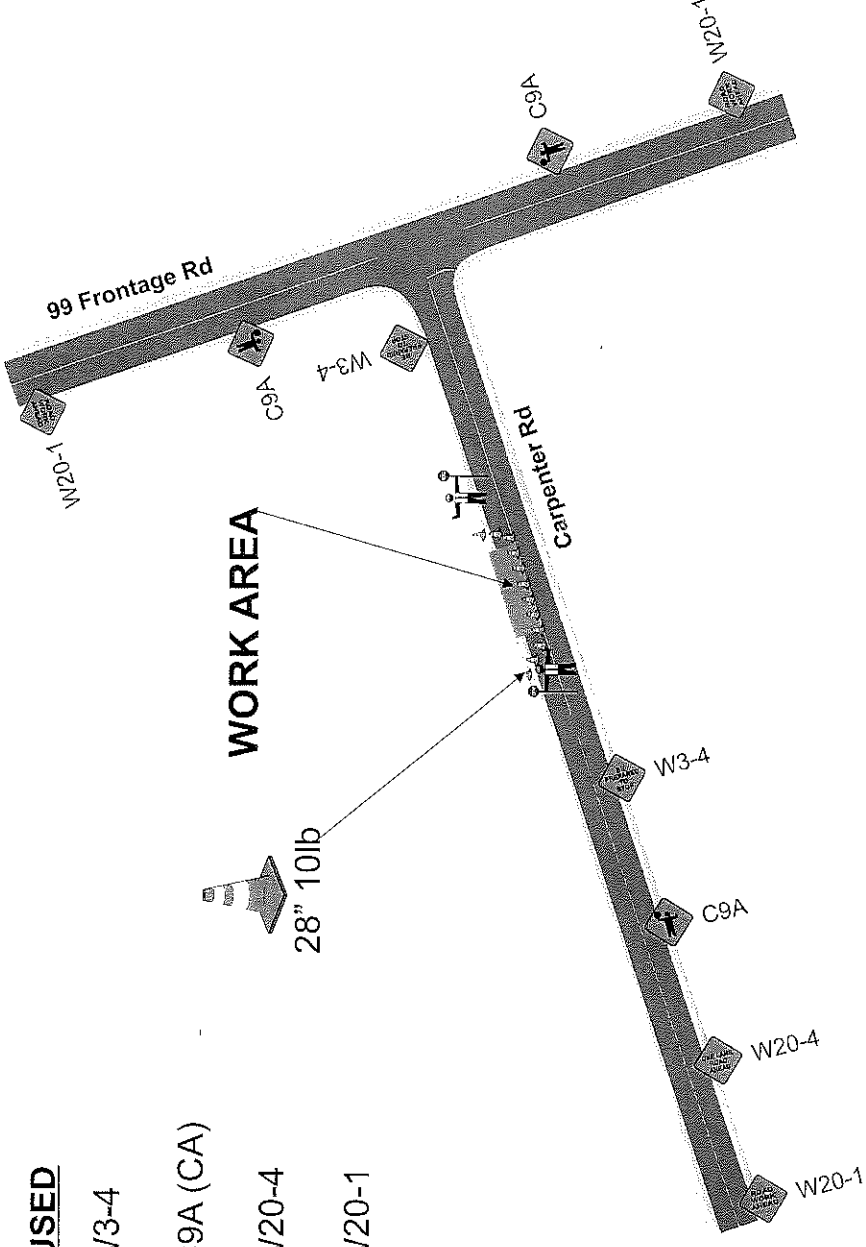
CLOSURE STIPULATIONS AND REQUIREMENTS THAT MUST BE FOLLOWED AT ALL TIMES DRIVEWAY ACCESS SHALL REMAIN OPEN OR ACCESSIBLE AT ALL TIMES

- All lane closures shall meet or exceed CA MUTCD 2014 specifications as well as conform to hours of work set forth by the County.
- All areas of work when encroaching upon sidewalk access OR pedestrian safety shall have the latest CA MUTCD 2014 Edition, Temporary Traffic Control, sidewalk closure detail in place to ensure pedestrian and public safety.
- Pedestrian traffic shall at all time have a minimum 4 feet wide area of travel.
- All open excavation areas shall be backfilled or trench plated prior to public usage.
- All closures set forth in this TCP are the minimum allowed on project, field conditions may change requiring further traffic safety devices or traffic control person to ensure safety of traveling public, pedestrians as well as work forces.
- All changes to ensure safety will be made immediately to ensure a safe environment for all parties.
- All traffic control devices, vehicles and personnel must be suited for the purpose intended as well as meet or exceed latest CA MUTCD 2014 Edition, Temporary Traffic Control requirements as well as County requirements.
- All Devices shall be removed when no longer required.
- All flaggers shall be certified and all intersections shall be flagged when required as shown on plans.
- If work is done at night or encroaches on the hours of darkness all road work ahead signs shall have a flashing beacon, light towers will be used for flaggers and work areas and all other latest CA MUTCD 2014 Edition, Temporary Traffic Control requirements shall be met or exceeded as well.
- NOT TO SCALE—SPACING OF SIGNS, TAPER AND TANGENTS WILL BE SPACED AS PER TABLE HAS SET FORTH AS GOVERNED BY TRAVEL SPEEDS.
- All traffic devices shall meet or exceed latest CA MUTCD 2014 Edition, Temporary Traffic Control. All signs shall be high intensity night time reflective, 48"x48" roll up signs. All signs shall have a minimum of 2, 18" day time flags attached to sign stands during day time hours and if applicable flashing 12", 12v beacons for night time work.
- Sign stands shall meet latest CA MUTCD 2014 Edition, Temporary Traffic Control, as well as allowing for 18" to 7' height for signs and spring equipped for windy conditions.
- All hours of work shall be dictated by the County specified lane closure charts or as directed by the County Inspector.
- Vehicle path of travel shall never be less than 12' in width. Closures and excavation not to exceed what forces expect to excavate per the daily shift.
- Roadway shall not be opened until safe for public use. All open trenches must be plated or backfilled prior to public usage.
- All areas of excavation must have a valid USA dig tag with corresponding dig ticket number. Proof must be carried with the excavating forces at all times.

SIGNS BEING USED



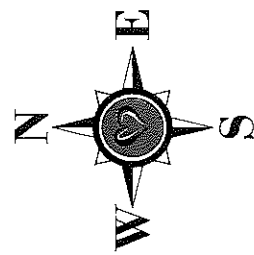
WORK AREA



mph	feet	CONES Spacing - feet
SPEED	TAPER	SIGN SPACING TAPER TANGENT
25	125'	100' 25' 50'
30	180'	250' 30' 60'
35	245'	35' 70'
40	320'	40' 80'
45	540'	45' 90'
50	600'	50' 100'

GAS

Shifting (1/2 taper) Shoulder (1/3 taper)



R30 24X24" Barricade mounted, placed on both sides of the street 20' apart 72hrs prior to the start of work.

TOW-AWAY ZONE

DATE: TIME:

SEE SPEC SHEET 2 FOR ADDITIONAL TRAFFIC CONTROL STIPULATIONS

Pedestrian and Bicycle Access to remain open at all times.

Minimum 12ft clearance for traffic

Work shall not exceed 12 hours

NOT TO SCALE

ADDITIONAL FLAGGER TO MAINTAIN CLOSURE AND ASSIST BICYCLE, PEDESTRIAN AND DRIVE WAY TRAFFIC SHOULD NEED ARISE

All flaggers will communicate through hand signals and walkie talkies with one another





For TCP questions call Robert at 209-200-3351

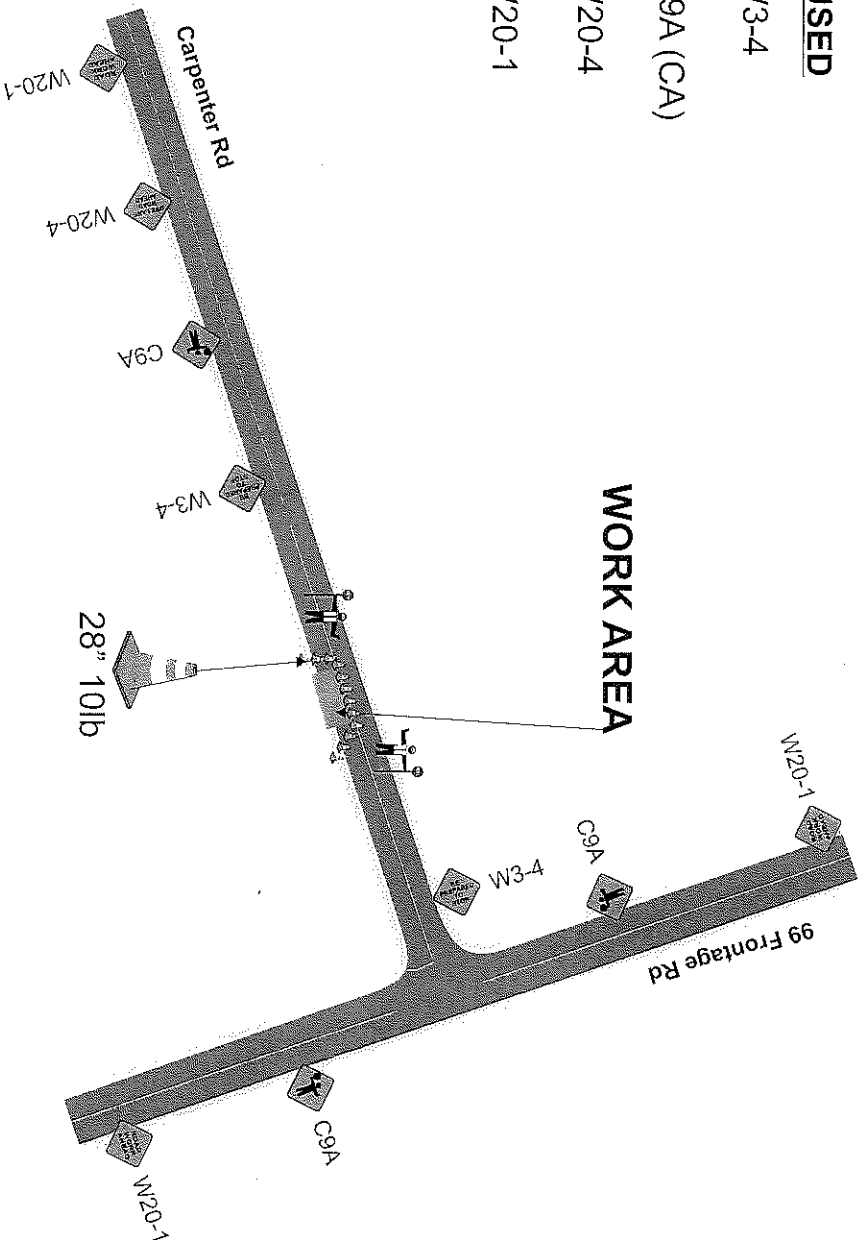
PM# 31233179

Owner	COUNTY OF SAN JOAQUIN
Project Location	Carpenter Rd @ 99 Frontage Rd
Project City	Stockton, CA
Prime Contractor	PG&E
Traffic Control Contractor	City Rise Services, Inc.
Phone	209-333-0807
Street Number	PS-1
Date	6-27-2016
Prepared By	CITY RISE SERVICES, INC

HOURS OF WORK SHALL BE DETERMINED BY THE COUNTY OF SAN JOAQUIN

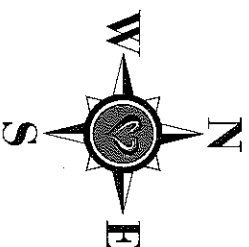
SIGNS BEING USED

-  48X48" W3-4
-  48X48" C9A (CA)
-  48X48" W20-4
-  48X48" W20-1



mph	feet	Sign Spacing - feet
SPEED	TAPER	TAPER TANGENT
25	125'	100'
30	180'	250'
35	245'	350'
40	320'	500'
45	540'	450'
50	600'	500'
Shoulder (1/2 taper)	Shoulder (1/3 taper)	
50	100'	

GAS



R30 24X24" Barricade mounted, placed on both sides of the street 20' apart 72hrs prior to the start of work.

DATE: _____
TIME: _____

For TCP questions call
Robert at 209-200-3351

PM# 31233179

Owner	CITY OF SAN JOAQUIN
Project Location	Carpenter Rd @ 99 Frontage Rd
Prime Contractor	Stockton, CA
PG&E	City Rise Services, Inc.
Phone	209-333-0807
PS-2	6-27-2016
Prepared by	CITY RISE SERVICES, INC

SEE SPEC SHEET 2 FOR ADDITIONAL TRAFFIC CONTROL STIPULATIONS

Pedestrian and Bicycle Access to remain open at all times.

Minimum 12ft clearance for traffic

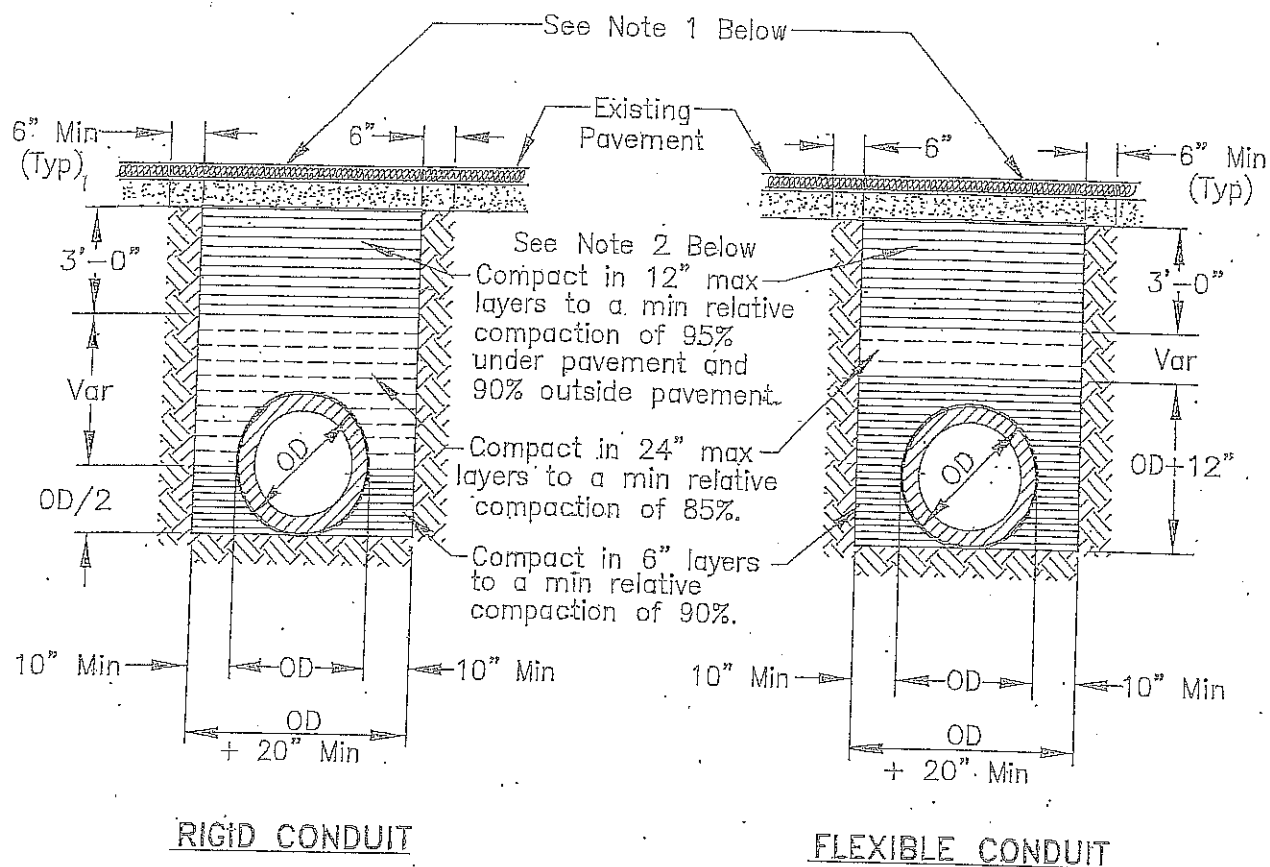
Work shall not exceed 12 hours

NOT TO SCALE

All flaggers will communicate through hand signals and walkie talkies with one another

ADDITIONAL FLAGGER TO MAINTAIN CLOSURE AND ASSIST BICYCLE, PEDESTRIAN AND DRIVE WAY TRAFFIC SHOULD NEED ARISE

HOURS OF WORK SHALL BE DETERMINED BY THE COUNTY OF SAN JOAQUIN



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. Goss

No.	Revision	Description	Date

Date: DEC 2014

Std. Dwg. No.

R-29

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 within 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

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.