

## Temporary Permit to Enter and Use Property

This Temporary Permit to Enter and Use Property (Permit) is entered into on the 30<sup>th</sup> day of August, 2016 by and between the **County of Monterey** (“Owner”) and **Pacific Gas and Electric Company** (“PG&E”). The Owner owns the property located at:

- Location E - Barloy Canyon Road & Border Road, APN 031-161-032
- Location F - Sloat Street & Watkins Gate Road, APN 031-161-032
- Location G - 8<sup>th</sup> Avenue & Engineering Equipment Road, APN 031-101-056

The property is located within the unincorporated area of the County of Monterey, California (“the Property”).

The County of Monterey became owner of APN 031-161-032-000 (Parcel L23.3.3.1) by Quitclaim Deed recorded on June 9, 2016 at Document No. 2016031638, Official Records of Monterey County.

The County of Monterey became owner of APN 031-101-056-000 (Parcel E8a.1.1.2) by Quitclaim Deed approved and accepted by the Monterey County Board of Supervisors on August 23, 2016, and is not yet recorded with the Monterey County Recorder.

Owner and PG&E agree as follows:

1. **Right of Entry and Use** – Owner hereby grants permission to PG&E, its agents, employees, contractors, and assigns, a temporary right of entry on portion of the Property described and depicted in **Attachments “A”, “A-1”, and “A-2”** attached hereto and by this reference made a part hereof (“Permit Area”), together with a right of ingress and egress, for the purpose excavation activities, storing construction materials, equipment and parking vehicles in conjunction with T-1051 Hydrostatic Pressure Testing of PG&E’s underground gas transmission facilities. PG&E’s use of the Permit Area will be irrevocable during the term of this Permit, except in the case of a material breach of the terms of this Permit.

PG&E’s use of the permit area is explicitly subject to all land use restrictions and controls that are set forth in any relevant documents pertaining thereto, including, but not limited to:

- *Department of the Army Easement for Electric Power and for Natural Gas Pipeline Right-of-Way Located on Presidio of Monterey Annex and Certain Excess Lands Formerly Designated as Fort Ord Military Installation, Monterey, California*, recorded on April 17, 1997 at Reel 3506 Page 1533, Official Records of Monterey County;
- Monterey County Code Section 16.10, Digging and Excavation on the Former Fort Ord (Ordinance No. 05012);
- *Arborist Evaluation for T-1051-15 IFB (Salinas)*, Revised June 1, 2016;
- *Installation-Wide Multispecies Habitat Management Plan* for Former Fort Ord, California, US Army Corps of Engineers, April 1997;
- *Quitclaim Deed from the U.S. Army to the Fort Ord Reuse Authority for Parcels L23.3.2.2, L23.3.3.1, L23.3.3.2*, recorded on July 10, 2009 at Document No. 2009043253, Official Records of Monterey County;
- *Quitclaim Deed from the Fort Ord Reuse Authority to the Redevelopment Agency of the County of Monterey for Parcels L23.3.2.2, L23.3.3.1, L23.3.3.2*, recorded on May 25, 2010 at Document No. 2010028915, Official Records of Monterey County;
- *Quitclaim Deed from the Successor Agency to the Redevelopment Agency of the County of Monterey to the County of Monterey for Parcels L23.3.2.2, L23.3.3.1, L23.3.3.2*, recorded on June 9, 2016 at Document No. 2016031638, Official Records of Monterey County.
- *Quitclaim Deed from the U.S. Army to the Fort Ord Reuse Authority for Parcel E8a.1.1.2*, recorded on June 26, 2006 at Document No. 2006056382, Official Records of Monterey County; and
- *Quitclaim Deed from the Fort Ord Reuse Authority to the Redevelopment Agency of the County*

of Monterey for Parcel E8a.1.1.2, recorded on July 26, 2007 at Document No. 2007058699, Official Records of Monterey County; and

- *Quitclaim Deed from the Successor Agency to the Redevelopment Agency of the County of Monterey to the County of Monterey for Parcel E8a.1.1.2*, approved and accepted by the Monterey County Board of Supervisors on August 23, 2016, and not yet recorded with the Monterey County Recorder
2. **Work Plan** – PG&E agrees and covenants that all of its activities under this Permit shall be performed solely within the Permit Area and in accordance with the Work Plan set forth in **Attachment “B,”** Work Plan, consisting of one page, and **Attachment “B-1,”** Arborist Evaluation for T-1051-15 IFB (Salinas), Rev June 1, 2016, consisting of thirty one (31) pages, both of which are attached hereto and by this reference made a part hereof.
  3. **Term** – The term of this Permit shall be for the period commencing on September 7, 2016 and shall terminate on December 30, 2016. PG&E shall have the right to extend the term of this Permit for up to two (2) months by giving the Owner written notice of its intention to do so not less than ten (10) days prior to the expiration of the initial term.
  4. **Surrender** – Upon the expiration or termination of this Permit, PG&E shall remove all vehicles, personal property, debris and waste material resulting from PG&E’s activities and return the Permit Area in substantially the same condition that existed at the commencement of the term.
  5. **Damages** – PG&E shall repair and mitigate any damage to the Permit Area or Property that is caused by PG&E, its employees, contractors, agents, and representatives.
  6. **Default** – PG&E shall be in default if PG&E fails to perform any obligation hereunder as and when due. If Owner determines that there has been a violation of any term, covenant or condition of the Permit, Owner shall provide PG&E ten (10) days to remedy such default or, if it reasonably necessary to remedy such default after PG&E’s receipt of such written notice, provided PG&E have undertaken to cure such default within such ten (10) day period and diligently pursues such efforts to cure to completion. Any such notice of violation shall specify the nature of the default. In the event the default has not been cured, Owner shall have all rights and remedies allowed by law. In addition, Owner shall have the right to terminate this Permit. Upon any such termination, PG&E shall immediately surrender possession of the Permit Area.
  7. **Indemnification** – PG&E shall hold harmless, defend, and indemnify Owner and its officers, officials, and employees from and against any and all liability, loss, damage, expense, costs (including without limitation costs and fees of litigation) of every nature arising out of or in connection with PG&E’s performance of the work hereunder or its failure to comply with any of its obligations contained in the permit, except such loss or damage which was caused by the sole negligence or willful misconduct of Owner.
  8. **Insurance** – PG&E certifies it is insured under a major risk management program with large self-insured retentions, with the minimum amount of \$1,000,000 covering PG&E’s use of the Permit Area under this Permit.
  9. **Compliance** – In exercising the rights granted under this Permit, PG&E shall comply with all laws, ordinances, and regulations pertaining to its use of your property.
  10. **Entire Agreement** – This Permit supersedes all previous oral and written agreements between and representations by or on behalf of the parties and constitutes the entire agreement of the parties with respect to the subject matter hereof. This Permit may not be amended except by a written agreement executed by both parties.
  11. **Counterparts** – This Permit may be signed in identical counterpart copies, each of which shall be an original, but all of which taken together shall constitute one and the same agreement.

IN WITNESS WHEREOF, the parties have executed this Permit as of the date set forth below each signature, effective upon the Effective Date first written above.

“PG&E”  
PACIFIC GAS AND ELECTRIC COMPANY,  
a California corporation

“OWNER”  
COUNTY OF MONTEREY

By: \_\_\_\_\_  
Michael Sosinski, Manager, Land Acquisition

By: \_\_\_\_\_  
Jane Parker, Chair, Board of Supervisors

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**Mailing Address:**

Atten: Rosalyn Zeigler, R/W Consultant  
Land Management Bldg Y, 3<sup>rd</sup> Floor  
6111 Bollinger Canyon Road, #3410-I  
San Ramon, CA 94583

**Mailing Address:**

Monterey County  
Resource Management Agency  
Atten: Nick Nichols  
168 W. Alisal St. 2nd Floor,  
Salinas, CA 93901  
Telephone: #831-755-5386  
Email: [NicholsN@co.monterey.ca.us](mailto:NicholsN@co.monterey.ca.us)

ATTACHMENTS “A”, “A-1”, “A-2”, “B”, and “B-1” attached

# Attachment "A"

T-1051 Hydrostatic Pressure Testing, Location E

Barloy Canyon Road & Border Road

APN 031-161-032-000

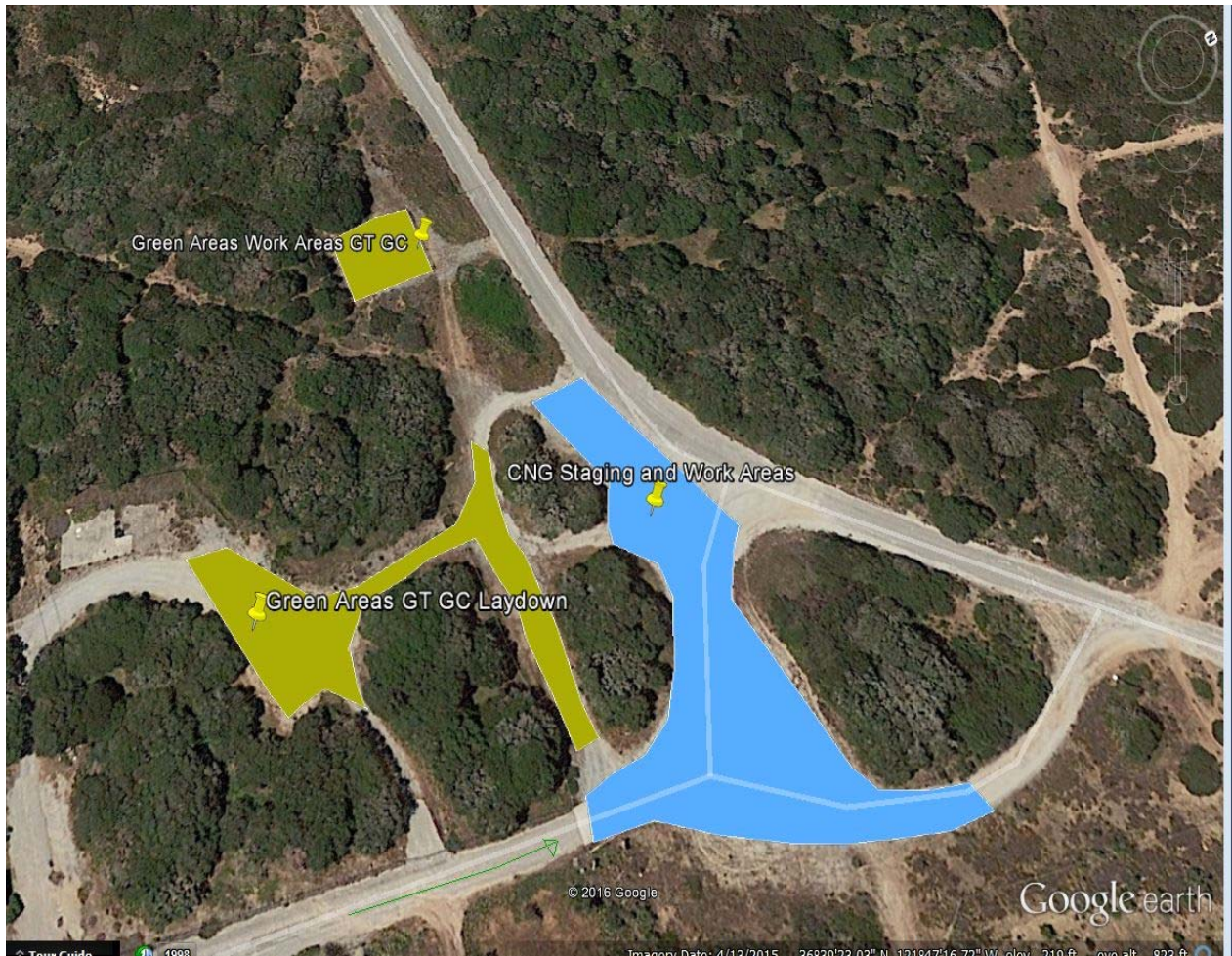


**Attachment "A-1"**  
**T-1069 Hydrostatic Pressure Testing**  
Location F (County of Monterey)  
Barloy Canyon Road



Note. Tap H - There will be one ambient trailer and three tube trailers.

**Attachment "A-2"**  
**T-1069 Hydrostatic Pressure Testing**  
Location G (County of Monterey)  
CNG Staging and Work Areas - Engineer Equipment Road



## ATTACHMENT "B"

### Work Plan

- a. **Scope of Work:** Said Property will be used for a construction staging yard for the purpose of excavation activities, storing construction materials, equipment and parking vehicles which is required in conjunction with T-1051 Hydrostatic Pressure Test.
    - a. Access to the following Properties:
      - **Location E** - via Barloy Canyon Road from the south, using Eucalyptus Rd through the Fort Ord National Monument which is accessible only via a locked gate onto County-owned land at Gigling Road and 8<sup>th</sup> Avenue in Seaside, **APN 031-161-032**
      - **Location F** - Watkins Gate/Barloy Canyon Road is privately owned and gated – the County can assist in getting property owner permission to use their gates, **APN 031-161-032**
      - **Location G** - Avenue & Engineering Equipment Road, **APN 031-101-056**
    - b. All construction activities performed by PG&E's Contractor shall be contained within the existing PG&E easement alignment, as any vegetation removal or grading activity outside these locations is subject to the various environmental protections and restrictions contained in the deed to this property.
    - c. PG&E's Contractor shall provide the County with assurances that its crews will implement all precautionary measures regarding protection of environmentally-sensitive habitat area immediately adjacent to the proposed work areas, including soil erosion and sedimentation controls, as well as habitat preservation.
    - d. PG&E's Contractor shall take photos before and after use of property, and make said photos available to the County.
  - e. **Mitigation of Impacts:** Promptly, upon completion of the Hydrotest Activities PG&E's Contractor shall mitigate all affected areas as near as practical to its pre-existing condition. PG&E's contractor shall remove all debris, vehicles, equipment and personal property from the site. If access is through a locked gate, PG&E's padlock shall be removed upon completion of the excavation and mitigation
- Note. Site restoration shall comply with any permits or other agency authorizations PG&E receives to perform work, including but not limited to stabilization requirements to prevent soil erosion and sediment run-off. Final stabilization requirements have been met when all disturbed areas have been returned to pre-construction conditions, specifically:
- a. A uniform vegetative cover equivalent to 70% coverage of pre-construction vegetative conditions shall be established (wood mulch or gravel is acceptable also); or
  - b. In areas with no vegetative cover, the site shall be returned to its original line and grade and/or compacted to achieve stabilization
3. **Schedule:** Use of Property to commence on September 7, 2016 and shall be completed no later than December 30, 2016. In general PG&E's Contractor's working hours will be from 7:00 a.m. to 7:00 pm. Work may occur seven (7) days per week. After hours work may be required from time to time and coordination will occur if required.



## ATTACHMENT "B-1"

# Arborist Evaluation for T-1051-15 IFB (Salinas)

### Prepared by:

Ploua Her  
Lead Forestry Technician  
ISA Certified Arborist / Utility Specialist WE-5528AU

Locations for PG&E Hydrotest T-1051-15 according to construction drawings as drawn with "Issued for Bid" (IFB), Figure 1, were re-evaluated on 4/19/16. The revised report was written on 6/1/16 by Ploua Her.

These recommendations may change as Design Drawings are developed. All bell holes labeled in the pictures and figures are according to construction drawings only.



Figure 1. Plan view of construction drawing of T-1051-15 IFB.



**Location A-** Reservation Rd & Hilltown Rd. Salinas, CA

Location A includes an 8'x16' bell hole and an 8,000 Sq. Ft. Laydown and Staging Area (Figure 2). The additional 39,300 Laydown and Staging Area is in an exhibit on Figure 3.

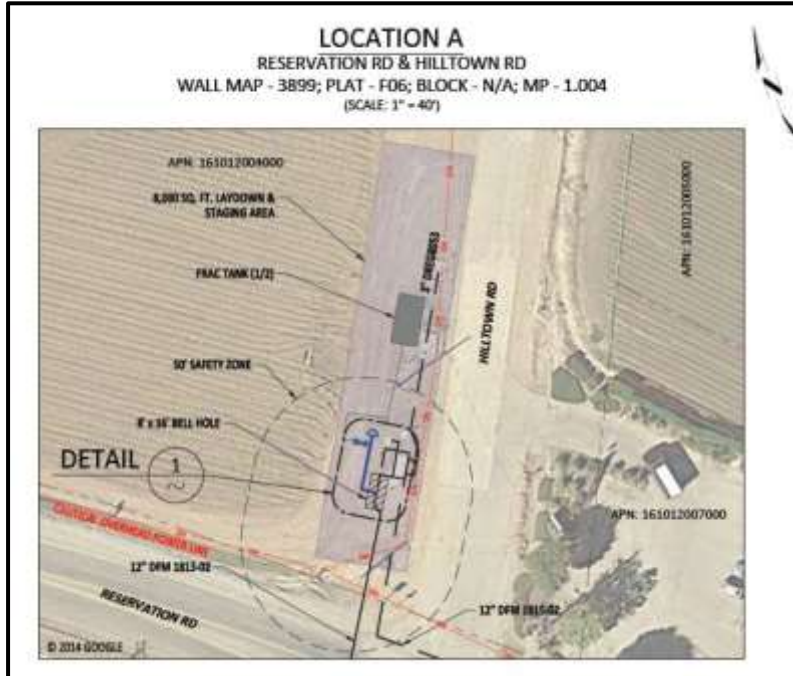


Figure 2. Construction drawing of T-1051-15 Location A.



Figure 3. Exhibit for additional 39,300 Sq. Ft. Laydown and Staging Area.

The 8'x16' bell hole and the 8,000 Sq. Ft. Laydown and Staging area are adjacent to an agriculture lot and is currently unplanted (Figure 4). Contractor will need to avoid damaging the drainage ditch on the south edge of the 8,000 Sq. Ft. Laydown and Staging Area.



Figure 4. The 8'x16' bell hole and 8,000 Sq. Ft. Laydown and Staging Area.

The additional Laydown and Staging Area (39,300 Sq. Ft.) is located approximately 500' north of the 8'x16' bell hole in a paved lot (Figure 5). There are no vegetation issues at Location A.



Figure 5. The additional 39,300 Sq. Ft. Laydown and Staging Area.

**Location B-** Gen Jim Moore Ave & 8<sup>th</sup> St., Marina, CA

Location B located in the Fort Ord community includes an 8'x16' bell hole, a 6'x6' bell hole for sniff hole, and two Laydown and Staging areas (50,000 and 10,000 Sq. Ft.), see Figure 6.

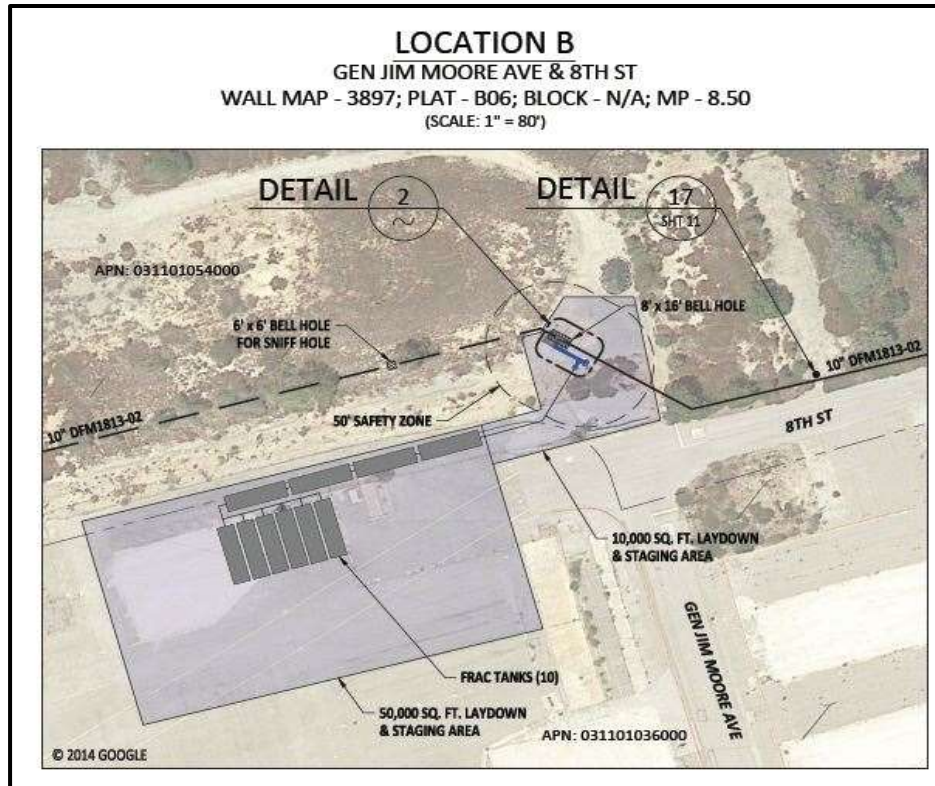


Figure 6. Construction drawing of T-1051-15 Location B.

**Vegetation issues and works for Location B:**

Summarization of vegetation issue/work is listed in Table 1 below. The description of each vegetation issue/work will be addressed in the report.

Table 1. Summary of vegetation issues and works for Location B

Vegetation#	Species	DBH (inches)	Height (Feet)	Prescription	Location	Figure	Private / public land	APN
B1	Pampas grasses	1	2	Contractor to remove if needed	At 10,000 Sq. Ft. Laydown and Staging Area	5	Monterey County	#031101054000
B2	Ice plants	1	1	Contractor to remove if needed	At 10,000 Sq. Ft. Laydown and Staging Area	5	Monterey County	#031101054000
B3	Mimosa	2	7	TPZ	At 10,000 Sq. Ft. Laydown and Staging Area	6	Monterey County	#031101054000
B4	Mimosa	16 (2xsten)	12	TPZ	At 10,000 Sq. Ft. Laydown and Staging Area	6	Monterey County	#031101054000
B5	Willow	2	7	TPZ	At 10,000 Sq. Ft. Laydown and Staging Area	6	Monterey County	#031101054000
B6	Mimosa	1	5	TPZ	At 10,000 Sq. Ft. Laydown and Staging Area	6	Monterey County	#031101054000
B7	Mimosa	4	12	TPZ	At 10,000 Sq. Ft. Laydown and Staging Area	6	Monterey County	#031101054000
B8	Acacia	10 (xstem)	12	TPZ	At sniff hole	7	Monterey County	#031101054000

The 8'x16' bell hole is at a paved road and located in front of the gas paddle marker (Figure 7). Contractor can remove Pampas grasses, *Cortaderia selloana*, (B1) and ice plants, *Carpobrotus edulis*, (B2) if needed to access the bell hole and to facilitate work. There is a 10,000 Sq. Ft. Laydown and Staging Area encircling the 8'x16' bell hole.



Figure 7. The 8'x16' bell hole and 10,000 Sq. Ft. Laydown and Staging Area.

Adjacent and southeast corner of the 10,000 Sq. Ft. Laydown and Staging Area, there are a few vegetation that will need Tree Protection Zone fencing (Figure 8). Due to the paved area, the vegetation will be cone off during construction work.

**Vegetation# B3** is a 2" DBH Mimosa (*Albiza julibrissin*) brush size tree.

**Vegetation# B4** is a 16" DBH multistem Mimosa tree.

**Vegetation# B5** is a multistem Willow (*Salix spp.*) tree.

**Vegetation# B6** is a small immature Mimosa brush size tree.

**Vegetation# B7** is a 2" DBH Mimosa brush size tree.



Figure 8. Vegetation# B3, B4, B5, B6, and B7 need TPZ fencing.

The 6'x6' bell hole for sniff hole is west of the 8'x16' bell hole and adjacent to one Acacia tree that will need TPZ fencing (Figure 9). Arborist will install TPZ 8' from the trunk of the tree in a semi-circle. Contractor will need to remove Ice plants (B2) and Pampas grasses (B1) if necessary to facilitate the bell hole and work area.

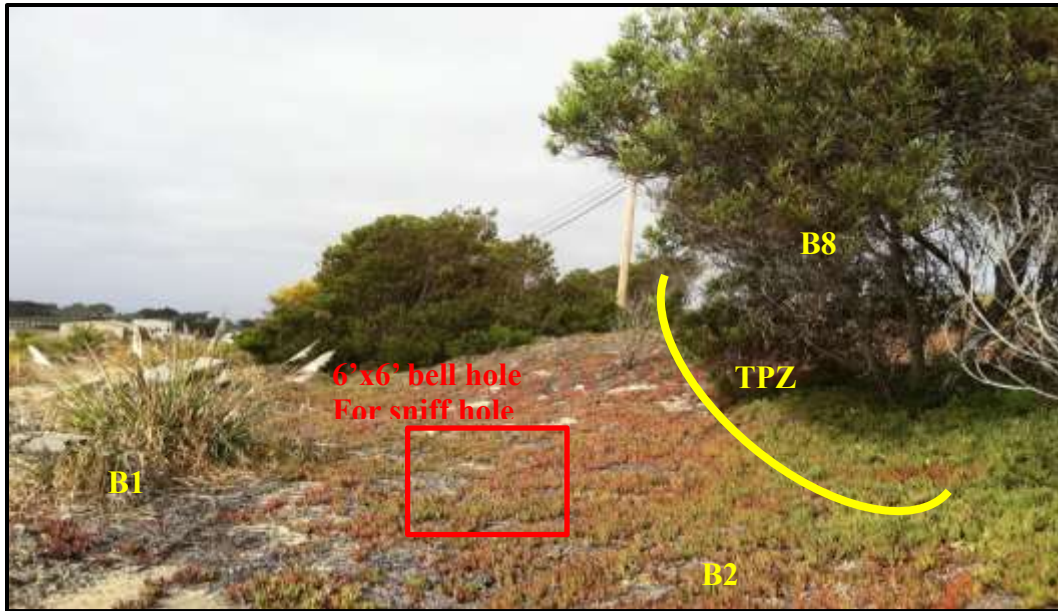


Figure 9. The 6'x6' sniff hole and Acacia tree (B8).

The 50,000 Sq. Ft. Laydown and Staging Area will be southwest of the 8'x16' bell hole and in a paved parking lot (Figure 10). Contractor will need to remove Pampas grasses (B1) if needed for access to the bell hole.



Figure 10. The 50,000 Sq. Ft. Laydown and Staging Area.

**Location C- Merrill Rd. & Reservation Rd. Salinas, CA**

Location C calls for a 4'x4' bell hole to access the HPR Set (Figure 11).



Figure 11. Construction drawing of T-1051-15 Location C.

**Vegetation issues and works for Location C:**

Summarization of vegetation issue/work is listed in Table 2 below. The description of each vegetation issue/work will be addressed in the report.

Table 2. Summary of vegetation issues and works for Location C.

Vegetation#	Species	DBH (inches)	Height (Feet)	Prescription	Location	Figure	Private / public land	APN
C1	Oleander	2	8	Trim	At 4'x4' bell hole	10	Private	#203061001000
C2	Oleander	2	8	Trim	At 4'x4' bell hole	10	Private	#203061001000
C3	Oleander	2	8	Trim	At 4'x4' bell hole	10	Private	#203061001000
C4	Willow	2	14	Trim	At 4'x4' bell hole	10	Private	#203061001000



The 4'x4' bell hole will be at the aboveground HPR set (Figure 12). Vegetation has overgrown around the HPR set and will need trimming for access to the bell hole and work site. Three Oleander (*Nerium*) shrubs (C1, C2, and C3) and one Willow (*Salix spp.*) brush size tree (C4) on private property will need to be trimmed to accommodate the excavation (Figure 12). The property owner shall be notified by the Land Agent.

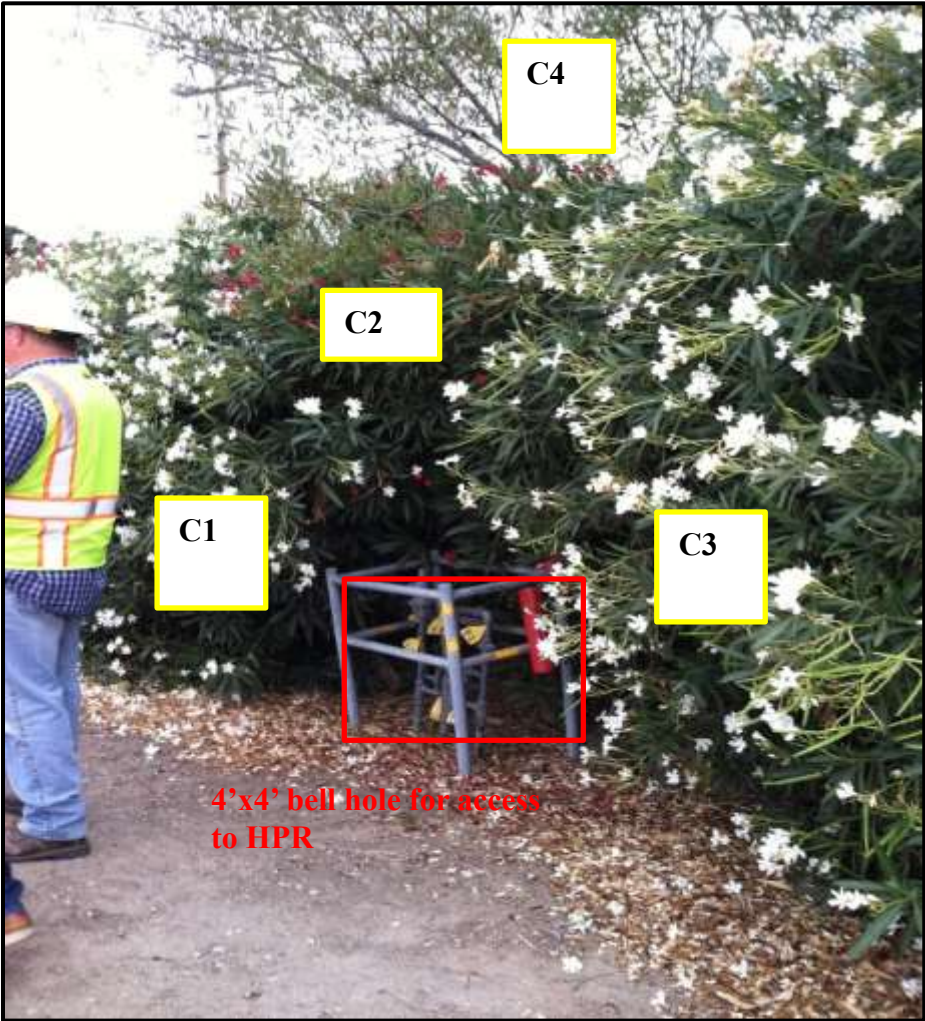


Figure 12. The 4'x4' bell hole and vegetation issues (C1, C2, C3 and C4)

**Location D-** Reservation Rd. & South Davis Rd. Salinas, CA

Location D is located in a private gated community; contact Land Acquisition, for gate code. The construction drawing includes two bell holes (14'x28' and 6'x8'), a 6'x6' bell hole for sniff hole, and two Laydown and Staging Areas (1,200 and 1,000 Sq. Ft.), see Figure 13. The additional Laydown and Staging Area (800 Sq. Ft.) is in an exhibit on Figure 14.

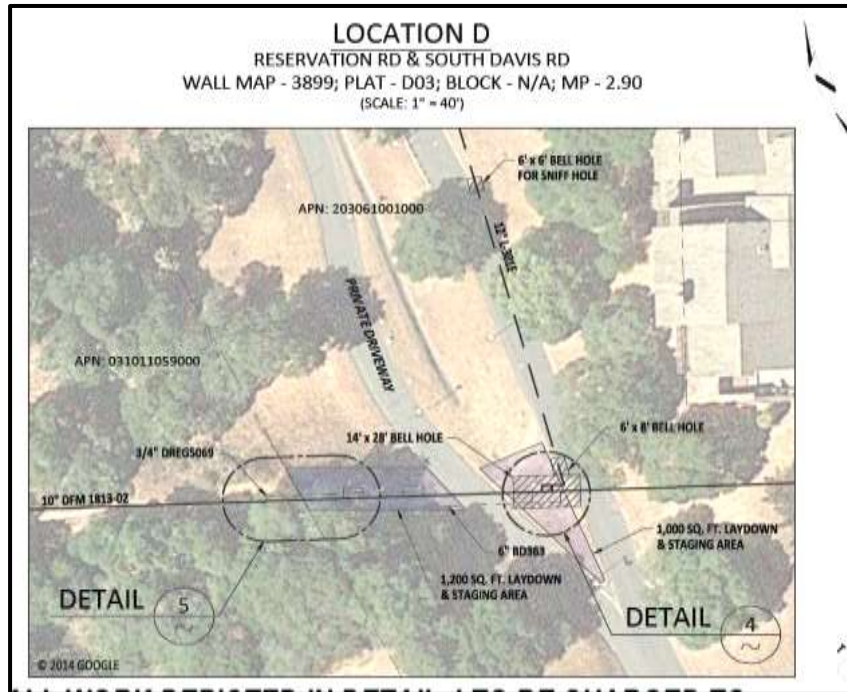


Figure 13. Construction drawing of T-1051-15 Loc D.



Figure 14. Exhibit of Laydown and Staging Areas at Location D.

**Vegetation issues for Location D:**

Summarization of vegetation issue is listed in Table 3 below. The description of each vegetation issue will be addressed in the report. Google earth map of the vegetation issues is in Figure 14A.

Table 3. Summary of vegetation issues and works for Location D.

Vegetation#	Species	DBH (inches)	Height (Feet)	Prescription	Location	Figure	Private / public land	APN
D1	Coast Live oak	8 (2xstem)	12	trim	At 1,200 Sq. Ft. Laydown and Staging Area	15	Private	#203061001000
D2	Toyon	2	7	trim	At 1,200 Sq. Ft. Laydown and Staging Area	15	Private	#031011059000
D3	Coast Live oak	16 (2xstem)	30	trim	At 1,200 Sq. Ft. Laydown and Staging Area	15	Private	#031011059000
D4	California Pepper tree	12	15	trim	At 800 Sq. Ft. Laydown and Staging Area	16	Private	#203061001000
D5	California Pepper tree	12	15	trim	At 800 Sq. Ft. Laydown and Staging Area	16	Private	#203061001000



Figure 14A. Google earth map of vegetation issues.

The two bell holes (14'x28' and 6'x8') and the 1,000 Sq. Ft. Laydown and Staging Area are located in the median between the roads (Figure 15). The 6'x6' sniff hole will be 100' north of the two bell holes and located on the edge of the roadway (Figure 16).



Figure 15. The 14'x28' and 6'x8' bell holes.



Figure 16. The 6'x6' bell hole for sniff hole.

### Vegetation Description

The 1,200 Sq. Ft. Laydown and Staging Area will be across the road from the two bell holes and there are vegetation issues (D1, D2, and D3), see Figure 17.

**Vegetation #D1** is one 8" DBH multistem Coast live oak (*Quercus agrifolia*) tree and located at the entrance to the 1,200 Sq. Ft. Laydown and Staging Area. The tree will need to be side trimmed to provide space to facilitate work. All trimming will be chipped and haul off site.

**Vegetation #D2** is a 2" DBH Toyon (*Heteromeles arbutifolia*) brush size tree and will need to be side trimmed to prevent it from getting damage. All trimming will be chipped and haul off site.

**Vegetation #D3** is one 16" DBH multistem Coast live oak tree and located on the west end of the Laydown and Staging Area. The tree will be side trimmed to provide overhead and side clearance for vehicles and equipment. Also the tree will be protected with exclusion fencing since there are signs of previous damage to the trunk from vehicles and equipment. All trimming will be chipped and haul off site.

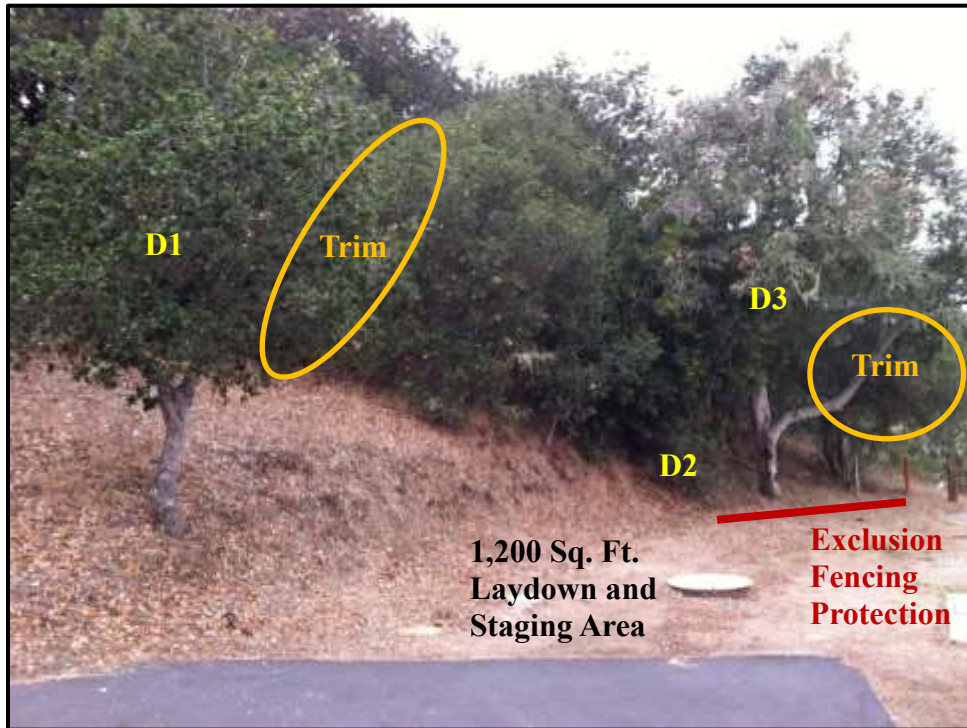


Figure 17. The 1,200 Sq. Ft. Laydown and Staging Area.  
Vegetation #D1, D2, and D3 will need trimming work.

The additional 800 Sq. Ft. Laydown and Staging Area is located uphill above the two bell holes and at a small parking lot, adjacent to two trees (Figure 18). Two California Pepper (*Schinus molle*) trees, D4 and D5, will need to be side trimmed due to the low hanging branches over the parking lot. The tree branches can get damage if not trimmed since trucks and equipment will be staging at the parking lot.



Figure 18. The 800 Sq. Ft. Laydown and Staging Area.  
Two pepper trees (D4 and D5) need trimming.

**Location E-** Barloy Canyon Rd & Boarder Rd, Salinas, CA

Location E is located on Fort Ord property and the exhibit calls for a 6'x12' bell hole and an unknown size of Laydown and Staging Area (Figure 19). Construction drawing will be available at a later date.



Figure 19. Exhibit of T-1051-15 Loc E.



**Vegetation issues for Location E:**

Four Coast live oak trees belonging to Monterey County will need to be trimmed to facilitate work at the bell hole (Figure 20). Contractor will need to mow grasses and weeds for fire safety around the work site. Google earth map of the vegetation issues is in Figure 21A.

**Vegetation# E1** is one 8” DBH Coast live oak tree and height of 25’ tall.

**Vegetation# E2** is one 2” DBH Coast live oak tree and height of 15’ tall.

**Vegetation# E3** is one 4” DBH Coast live oak tree and height of 20’ tall.

**Vegetation# E4** is one 6” DBH Coast live oak tree and height of 25’ tall.

**Vegetation# E5** is 0.5 unit of Coyote brush adjacent to the locked gate will need to be removed for access to the work site (Figure 21).

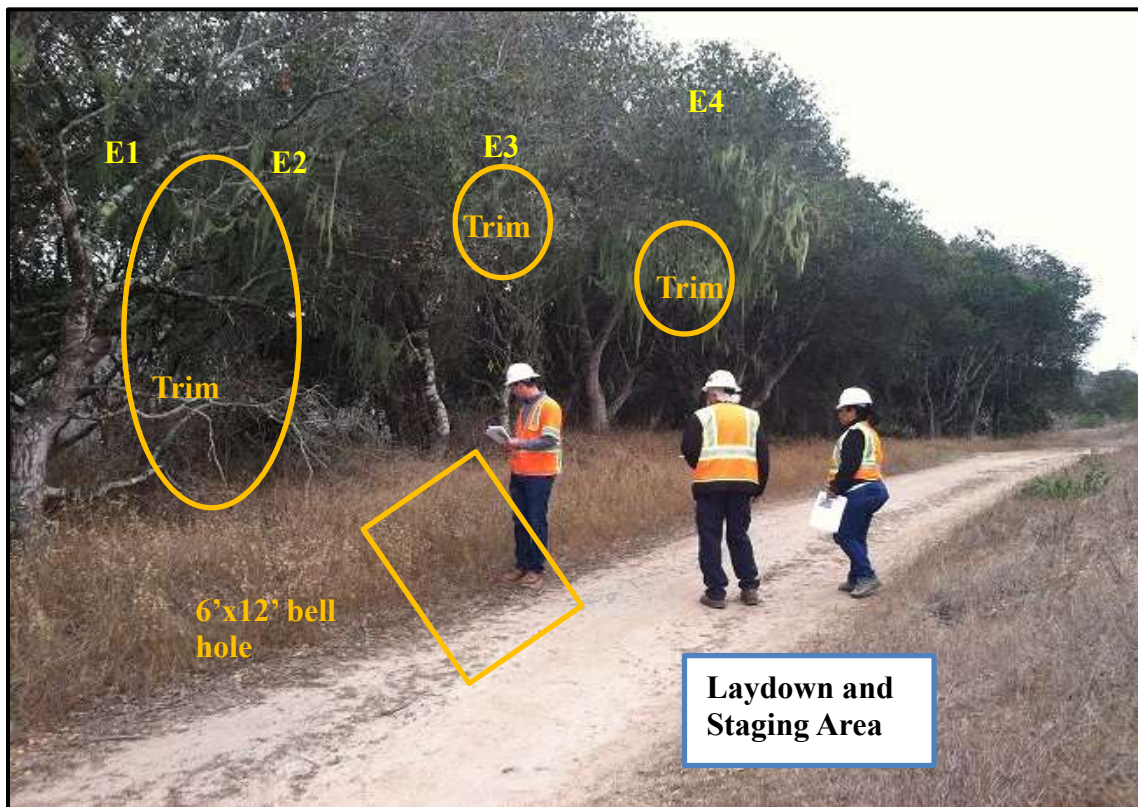


Figure 20. Four Coast live oak trees (E1, E2, E3, and E4) need trimming to facilitate work.



Figure 21. Coyote brush (E5) will need to be removed.



Figure 21A. Google map of the vegetation issues (E1 through E5)

**Location F-** Sloat St & Watkins Gate Rd. Salinas, CA

Exhibit of Location F shows one 6'x12' bell hole and an unknown size of Laydown and Staging Area (Figure 22). There is one 6'x6' sniff hole (Figure 22A).



Figure 22. Exhibit of T-1051-15 Loc F.



Figure 22A. The location of the 6'x6' sniff hole at Location F.

### Vegetation issues and works:

Approximately 6 units of immature 2" DBH Coast live oak brushes (F1, F2, F3, F4, F5, and F6) will need to be removed for the 6'x12' bell hole and Laydown and Staging area to facilitate work (Figure 23). The vegetation brushes belong to Monterey County. Vegetation# F1, F2, F3, and F4 will need to be removed to facilitate work at the 6'x6' sniff hole. The Coast live oak vegetation# F5 and F6 are overgrowing into the roadway. If the vegetation will not be removed then the vegetation will get run over during construction work. Also the vegetation will need to be removed for fire safety around the work site. Grasses and weeds will need to be mowed for fire safety. Google earth map of the vegetation issues is in Figure 23C.



Figure 23. The 6'x12' bell hole. Vegetation (F1 through F6) for removal.

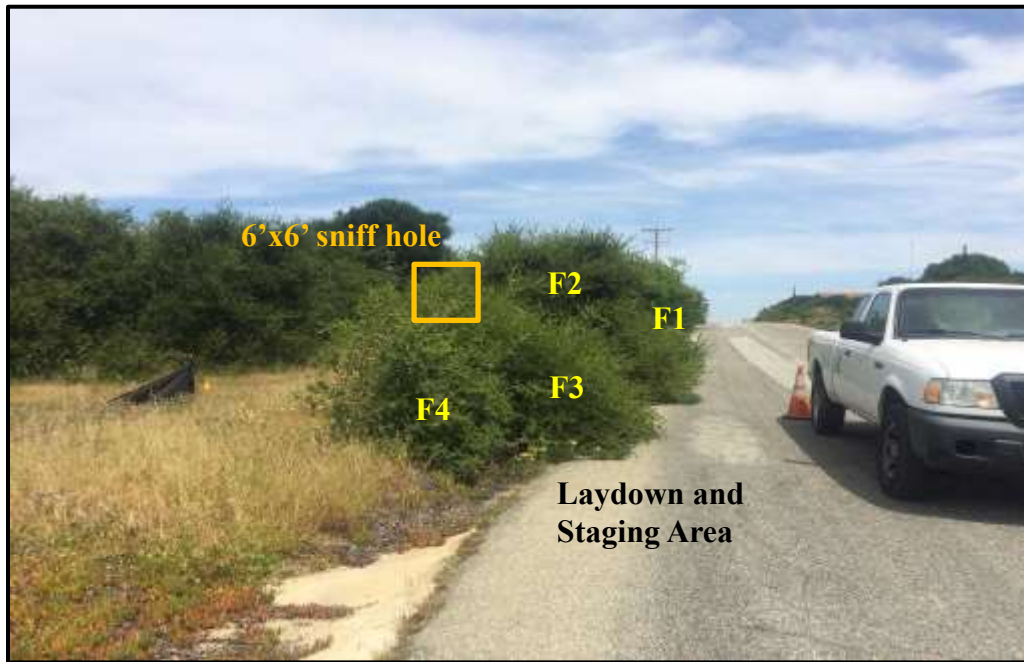


Figure 23A. Close up view of Vegetation# F1, F2, F3, and F4.



Figure 23B. Close up view of Vegetation# F5 and F6.



Figure 23C. Google earth map of vegetation (F1, F2, F3, F4, F5, and F6) and 6'x6' sniff hole.

**Location G-** 8<sup>th</sup> St. & Engineering Equipment Rd, Seaside, CA

Location G includes two bell holes (6'x12' and 14'x22') and two Laydown and Staging Areas (1,000 and 6,000 Sq. Ft.), see Figure 24.

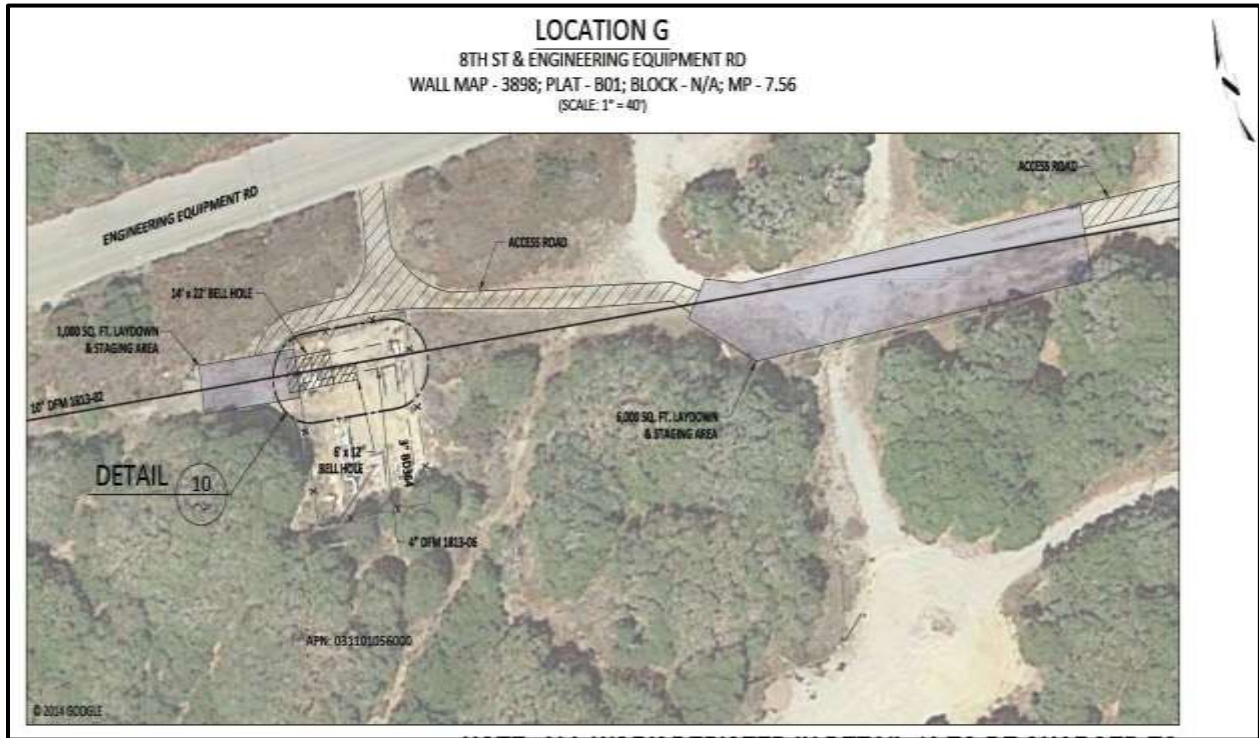


Figure 24. Construction drawing of T-105-15 Loc G.

**Vegetation issues and works for Location G:**

Summarization of vegetation issue/work is listed in Table 4 below. The description of each vegetation issue/work will be addressed in the report.

Table 4. Summary of vegetation issues and works for Location G.

Vegetation#	Species	DBH (inches)	Height (Feet)	Prescription	Location	Figure	Private / public land	APN
G1	Common Deerweed plants		1.5	Contractor to remove if needed	At bell holes and 1,000 Sq. Ft. laydown & Staging Area	25	County of Monterey	#031101056000
G2	Ice plants		0.5	Contractor to remove if needed	At bell holes and 1,000 Sq. Ft. laydown & Staging Area	25	County of Monterey	#031101056000
G3	Coast live oak	6	20	TPZ	At 1,000 Sq. Ft. laydown & Staging Area	26, 27	County of Monterey	#031101056000
G4	Coast live oak	6	20	TPZ	At 1,000 Sq. Ft. laydown & Staging Area	26, 27	County of Monterey	#031101056000
G5	Coast live oak	6	20	TPZ	At 1,000 Sq. Ft. laydown & Staging Area	26, 27	County of Monterey	#031101056000
G6	Coast live oak	16	22	TPZ	At 1,000 Sq. Ft. laydown & Staging Area	26, 27	County of Monterey	#031101056000
G7	Coast live oak	6	15	TPZ	At 1,000 Sq. Ft. laydown & Staging Area	27	County of Monterey	#031101056000
G8	Poison oak	1	2	TPZ / Avoid	At 1,000 Sq. Ft. laydown & Staging Area	27	County of Monterey	#031101056000



There are two bell holes located at the valve yard called Permanent Barracks Meter Station (Figure 25). One 6'x12' bell hole is inside the valve yard and one 14'x22' bell hole that will be partly inside and partly outside the valve yard. Contractor can removed the Common Deerweed, *Acmispon glaber*, plants (G1) and Ice plants (G2) if needed to facilitate work and access to the bell holes.

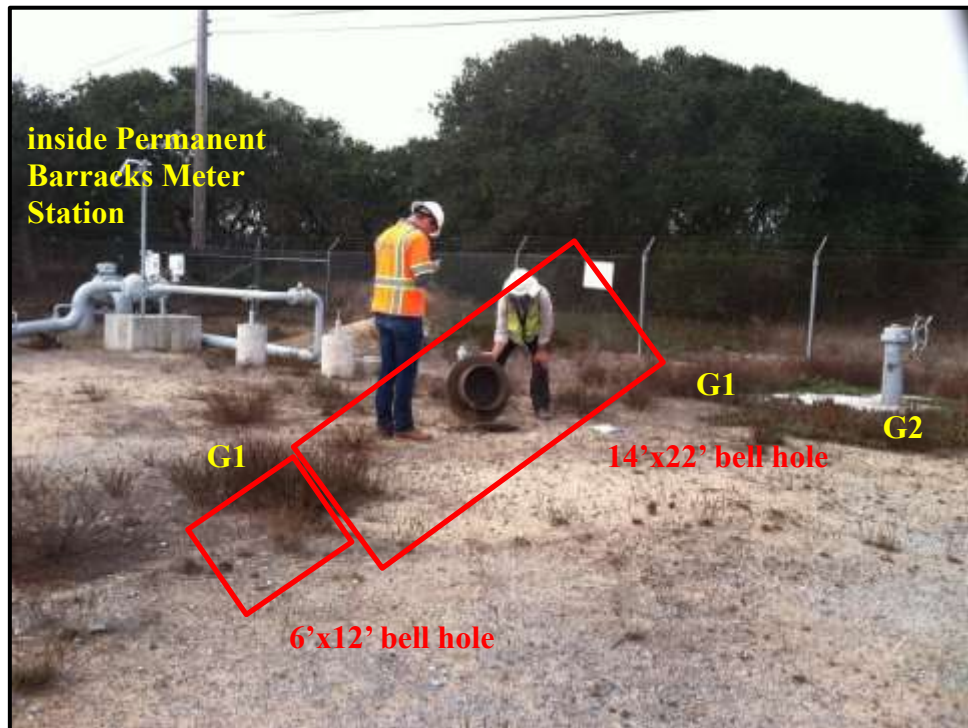


Figure 25. The two bell holes. Common Deerweed plants (G1) and Ice plants (G2).

Adjacent to the 14'x22' bell hole and the 1,000 Sq. Ft. Laydown and Staging Area, a few Coast live oak trees (G3, G4, G5, G6, and G7) and a clump of Poison oak plant (G8) will need TPZ fencing.

**Vegetation# G3** is a 6" DBH Coast live oak tree (Figures 26 and 27). TPZ will be installed 6' from the trunk of the tree.

**Vegetation# G4** is a 6" DBH Coast live oak tree (Figures 26 and 27). TPZ will be installed 6' from the trunk of the tree.

**Vegetation# G5** is a 6" DBH Coast live oak tree (Figures 26 and 27). TPZ will be installed 6' from the trunk of the tree.

**Vegetation# G6** is a 16" DBH multistem Coast live oak tree (Figures 26 and 27). TPZ will be installed 6' from the trunk of the tree.

**Vegetation# G7** is a 6" DBH Coast live oak tree (Figure 27). TPZ will be installed 6' from the trunk of the tree.

**Vegetation# G8** is a clump of Poison oak plant (Figure 27). Contractor will need to avoid and stay clear of the plants. TPZ will be installed 1' from edge of the plants.



Figure 26. The Coast live oak trees (G3, G4, G5, and G6) needing TPZ.



Figure 27. Coast live oak trees (G3 through G7) and Poison oak plants (G8) need TPZ.

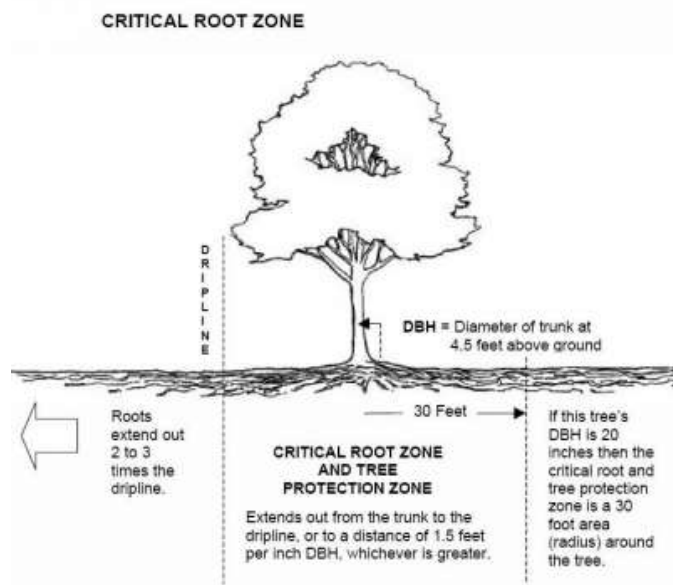
The 6,000 Sq. Ft. Laydown and Staging Area is located east of the valve yard and the bell holes (Figure 28). There is no vegetation at this area. Contractor will need to stay on gravel/dirt road and avoid driving over the Ice plants.



Figure 28. The 6,000 Sq. Ft. Laydown and Staging Area. Avoid Ice plants.

Hand Digging

Root damage from excavation can cause great harm to a tree, which may diminish tree health and/or structural stability. Whenever Construction Crews are excavating within the **Critical Root Zone (CRZ)** of a tree, they shall hand dig and have a PG&E designated **Arborist** present. Hand digging is the use of non-motorized hand tools such as shovels and picks. An exception is sometimes made at the discretion of the **Project Arborist** or their designee with careful use of other tools if practical. Whenever a root greater than 1 inch diameter is encountered during an excavation, the Project Arborist is to be notified. **Root Pruning** is required to help lessen severity of root rot and dieback. This work will be conducted by the Arborist performing the site monitoring or under their supervision.



Minimizing Disturbance within CRZ

No equipment, excavation debris or spoils can be stored or moved through the CRZs. **Tree Protection Zones (TPZ)** need to be established to clearly block off these areas, by installing orange exclusion fencing or other barriers a distance out from the tree trunk(s) as specified by the Project Arborist. This fencing may not be moved; the Project Arborist must be consulted if it proves necessary.

Traffic through CRZ shall be avoided. Storage of equipment within the CRZ is not allowed. If avoidance is not possible, soil compaction mitigation must be in place to help disperse the vehicular load and protect the roots. Laying 3/4-inch thick plywood, steel plates, or road mats over a 6" thick layer of wood chip mulch will be necessary. The smallest vehicle possible for excavation and transport is preferred.

Soil

An excavation site within a tree's CRZ must be practically returned to its original condition. Preferably, the original material excavated from the hole is stored for refilling. Under special

circumstances such that the soil is deemed hazardous material to be off hauled, or a Hydrovac is used, the backfill material must be a suitable planting soil of similar texture, friability, and nutrient content.

No slurry may be used within the CRZ as it is toxic to tree roots. If sand must be used for compaction around the pipe, the preferred method is to place dry sand around the pipe and then wet it for compaction. Any backfill materials including wetted sand shall not be delivered or poured back into the hole from a cement truck; nor shall other transport vehicles with cement particles be used to deliver the backfill materials. Trace chemicals from previous cement/slurry mixings are poisonous to trees.

#### Consideration for Tree Removal

If the excavation is necessary within a critical distance of the tree trunks, removal will need to be considered by the Project Arborist. Each tree is a case by case basis in which the Arborist takes into consideration multiple factors leading to the final decision. The **drip-line** method is often used to determine the CRZ; however, it is usually more complex. By industry standard, a calculation of 3 times the **Diameter at Breast Height (DBH)** of a tree's trunk is the minimum distance approach. The Arborist also weighs in other factors such as tree health, tree risk, site conditions, lean, slope, loss of  $\geq 25\%$  of tree roots, or possible structures the tree might impact should it fall, etc. in which case the minimum distance will have to be greater.

#### Tree Trimming

**Crown raising** or canopy raising may be required to allow equipment access to the site or to provide adequate work space. Construction crews must consult with the Project Arborist if additional clearance is needed and to schedule for tree trimming. Note that issues such as tree permitting, property owner notification and other land and environmental review can be required, in which case a longer lead time is needed.

#### Change in Design/Scope of Work

In the event of any changes to plans or misidentification of buried facility locations, the project will need to be re-evaluated by the Project Arborist. No vegetation work may be conducted prior to an Arborist's review. All tree pruning and removals must be performed by a Certified Arborist or PG&E's approved Tree Contractors, unless specified otherwise.

## **Definitions**

**Arborist:** professional who possesses the technical competence gained through experience and related training to provide for or supervise the management of trees and other woody plants in residential, commercial, and public landscapes.

**Critical Root Zone (CRZ):** area of soil around a tree where the minimum amount of roots considered critical to the structural stability or health of the tree are located. CRZ determination could be based on the **Drip-line** or a multiple of **DBH**, but because root growth can be asymmetric due to site conditions, on-site investigation may be required.

**Crown Raising:** in pruning, the selective removal of lower limbs from a tree crown to provide clearance.

**Diameter at Breast Height or DBH:** an arborist standard of measure for a tree. The trunk(s) diameter is measured at 4.5ft above natural grade. If there are multiple trunks, they are measured individually and added together.

**Drip-line:** imaginary line defined by the branch spread of a single tree or group of trees.

**Project Arborist:** PG&E assigned Arborist to the project. Duties may include but not limited to assessing and providing recommendations on tree issues, tree permitting with agencies, scheduling and overseeing tree work, site monitoring, spot checking, etc.

**Root Pruning:** in tree conservation and preservation, the process of cutting roots cleanly behind the line of a planned excavation to prevent tearing and splintering of remaining roots.

**Tree Protection Zone (TPZ):** defined area within which certain activities are prohibited or restricted to prevent or minimize potential injury to designated trees, especially during construction or development.

## Reference

Vegetation prescriptions and recommendations are based on:

- International Society of Arboriculture Best Management Practices for “Managing Trees During Construction.”
- ANSI A300 Standards (part 5) Management of Trees and Shrubs During Site Planning, Site Development, and Construction.
- ANSI A300 Standards (part 1) Standard Practices Pruning.
- Any work in reference to the gas line right-of-way is based on PG&E utility standard TD-4490S.

**\* Any work performed outside of these BMPs & Standards is solely the decision of construction management.**