PURCHASING DEPARTMENT
411 West Clay Street, Ukiah CA 95482
(707) 463-6233
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City of Ukiah

SPEC. 19-13
EL DORADO LIFT STATION REPLACEMENT

Addendum No. 1
July 29, 2019

The following is Addendum No. 1 to SPEC. NO. 19-13 – EL DORADO LIFT STATION REPLACEMENT.

This Addendum is hereby made part of the Contract Documents to the same extent as though it were originally included therein.

The following are questions asked, and their corresponding responses:

Q1: Can you provide the PG&E Engineering and installation schedule?
A1: Attached please find a PG&E provided construction sketch, as well as Spec 025055, from PG&E's Greenbook. The City is on PG&E's schedule for the work, but it is approximately 8-10 weeks out.

Q2: Can you reconsider the number of days to complete the work? Additionally, would you consider issuing two (2) Notice to Proceeds to work around the PG&E work scheduling?
A2: The City is revising the number of days to complete the work to twenty (20) working days, and is breaking the work into two (2) elements, that will be controlled by the issuing of two separate Notice to Proceeds. Please find revised pages 1, 24 and 43 from the Special Provisions. Deletions are shown by strike-thru text, additions by italicized text.

Q3: Has watering down of the road during construction been considered, in consideration of houses and vineyards near the construction site?
A3: Dust control is a must, and addressed in Section 13-03 of the Special Provisions.

Q4: Are there specifications for pole, meter panel, bypass ... etc.?
A4: Contractor to adhere to PG&E Spec 025055, Section 7 for wooden poles. Poles must be Class 3, 35 feet, and Douglas-Fir with Penta-A pressure treated. The meter will be provided by the Contractor, and sized based on the equipment requirements, and submitted for review by the City of Ukiah Electric Department. PAC is taking care of the bypass.

Q5: Who will be responsible for compaction testing?
A5: The Contractor will be responsible for the compaction testing.

Q6: Connecting pipe will be the responsible of the contractor, not the City?
A6: Correct.

Q7: Is it clear what scope is within Pac Machine's responsibility, and which is Contractor's, and which is City's.
A7: PAC Machine is providing system bypass only. Contractor replaces the system – power, controls, pumps, valves, etc. City assists in making temporary connections for bypass and available during construction. PG&E brings 3-phase power across to the river, to their pole, and make the connection from their pole to the customer pole.

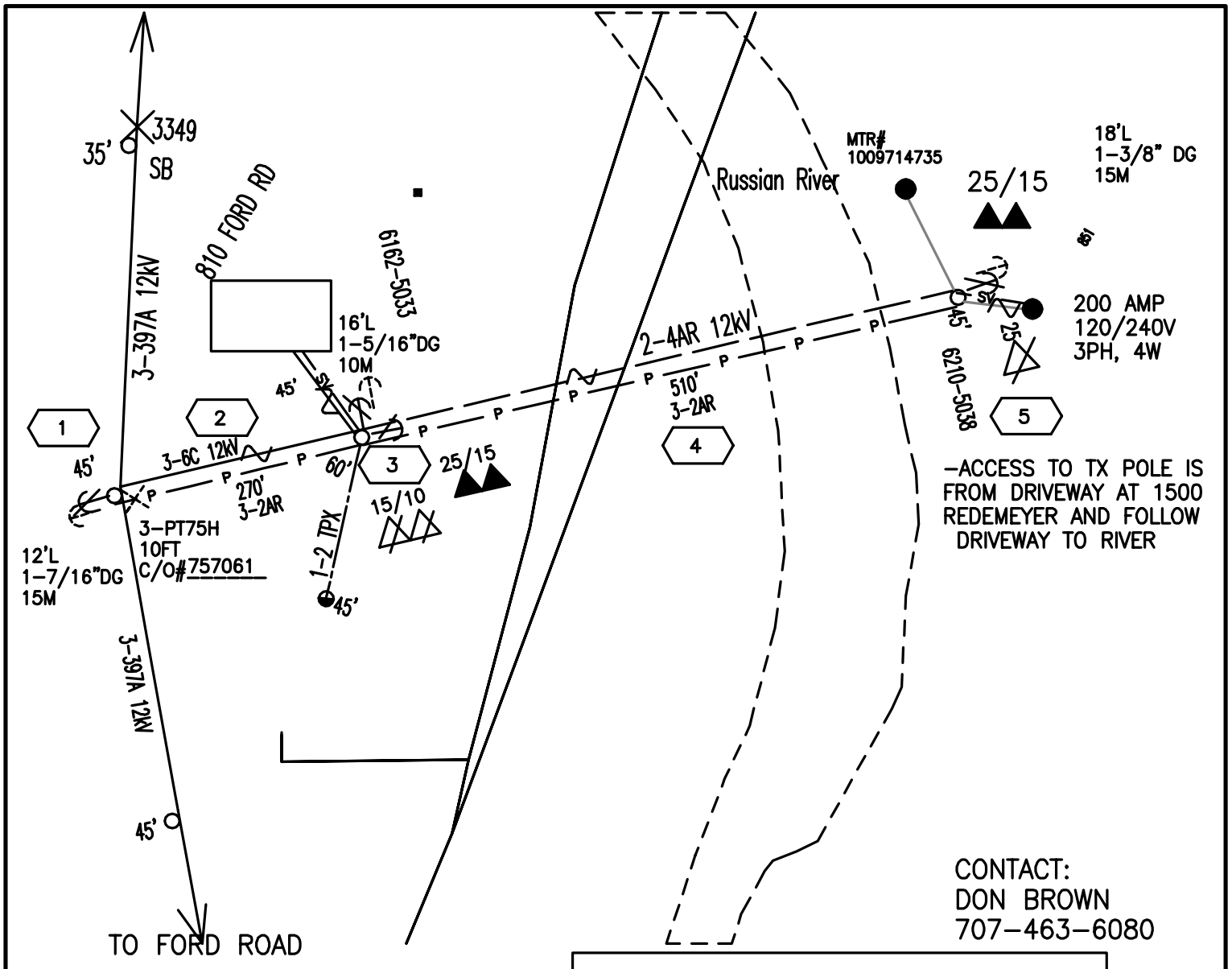
Q8: How large is the City's easement.
A8: 20 feet.

Q9: Are there any as-built drawings on the existing lift station?
A9: None were found.

Q10: Irrigation pipes to consider near the construction area?
A10: Potentially, yes. From field observations, it looks like there could be irrigation piping between the existing station and the river.

All other terms and conditions remain in full force and effect.

Mary Horger
Procurement Manager



-LOC 1-3: CONVERT 3-6C TO 3-2AR AS BETTERMENT DUE TO SPANS/GUYING
-LOC 3: REPLACE EXISTING OVERLOADED TX BANK AS BETTERMENT
-LOC 3-5: RULE 15 - CONVERT 1 PHASE TO 3 PHASE.
-LOC 5: INSTALL RULE 16 NON-RES TX BANK. 1/0 QPX AND METER

LOC 1: Replace DG/anchor with 15M and 1-7/16" DG.
-LOC 2: Remove 3-6C and Install 3-2AR 12KV
LOC 3: Replace Open Delta Bank with 25/15, PT75H; Replace OHS with 1/0 QPX. Remove DE DG/anchor Remove dg/anchor for Angle and install new.
-LOC 4: Remove 2-4AR and Install 3-2AR 12KV
- River Crossing -
-LOC 5: Remove 25KVA, Cutouts and OHS Install 25/15 Open Delta Bank, 35'-1/0 QPX and 3 phase meter. Remove existing DG/Anchor and Install new 3/8" DG and 15M anchor.

N

CONSTRUCTION SKETCH
CITY OF UKIAH
1500 REDEMEYER ROAD, UKIAH

PRIMARY VOLTAGE: 12 kV	VOLTAGE AREA: 2	EST: D.DAUER	707-468-3915
LATITUDE: S16-13	LONGTITUDE:	ADE: D.DAUER	707-468-3915
SOURCE SIDE DEVICE: 3349		SUPV: K.COX	707-468-3967
SUB & CIRCUIT: UKIAH 1115		REP: R.MEYER	707-468-3959
DSGN SAG:	RAPTOR ZONE: NO	PLNR:	
LOADING AREA: LIGHT	ARRESTER DIST: 2	JPA#:	SCALE: 1"=100'
CORROSION AREA: NON	INSULATION DIST: C	NOTIF: 114235418	DATE: 4/11/2018
EXEMPT EQUIP.INST.:	FIRE AREA:	PM: 31384468	SHEET: 1 OF 2 REV. 0

811 Know what's below. Call before you dig.

NO ENVIRONMENTAL ISSUES

PG&E

GAS CONFLICT:

NEAR LOC:

Prepared by: SXZO

REQUIREMENTS FOR CUSTOMER-OWNED POLES 025055

Asset Type:	Electric Distribution	**Function:**	Construction
Issued by:	D.Jantz (DWJ7)	**Date:**	07-31-15

Rev. #14: This document replaces PG&E Document 025055, Rev. #13. For a description of the changes, see Page 17.

This document is also included in the following manuals:

- *Electric and Gas Service Requirements Manual* (Greenbook)
- *Electric Meter Work Practices*

Purpose and Scope

Equipment installed on service poles as shown in this document will also meet the requirements of the California Building Standards Code - Electrical Regulations. These requirements have been established by the state of California in the interest of safety to the public and to workers, and are applicable to all customer-owned service poles. PG&E cannot establish service to poles that do not meet these minimum requirements. The maintenance of customer-owned service poles in conformity with these requirements is the sole responsibility of the customer.

Local ordinances may include wiring requirements in addition to those shown in this document. Consult local inspection authorities for these requirements and for city or county permits and inspections that may be required before service can be connected.

References	Location	Document
Dead-End Attachments for Service and Street Light Drop Cables	ELS	015009
Methods of Attaching Services to Customers Premises	OH: Services	025202
Dead-End and Angle Attachments for Aluminum Conductors - Distribution Lines	OH: Conductors	028851
Connectors for Aluminum Conductors on Distribution Lines	OH: Conductors	028852
Temporary Underground Electric Service Single-Phase, 120/240 Volt 100 Amps Maximum	UG-1: Services/Greenbook	036670
Conductors for Overhead Lines	OH: Conductors	059626
Overhead and Underground Panel Board Construction	OH Services/UG-1 Services/Greenbook	065374
Engineering Material Specification #57 "Preservative Treated Wood Poles, Stubs, and Anchor Logs for Overhead Lines"	TIL	EMS57
Utility Standard TD-2325S, "Wood Pole Inspection, Testing, and Maintenance"	TIL	TD-2325S

Temporary Service Pole Installation

1. The use of temporary service poles must be restricted to installations of a temporary nature, such as building construction, temporary sales locations, etc., where the period of service is estimated to be 1 year or less.
2. Temporary service poles must be furnished and installed by the customer and may be wooden or metallic. The minimum length must be 20 feet (set 4 feet in the ground). A longer pole may be necessary to provide the required clearance from the ground (see Note 9 on Page 4) or to supply the customer's overhead line (see Figure 3 on Page 8).
3. A temporary, wood service pole may be rectangular or circular in cross section and must be solid (not laminated). Rectangular poles must have a minimum cross section of 6" x 6" nominal; circular poles must meet the requirements for permanent service poles specified in Note 7 on Page 2 except that the minimum length may be 20 feet providing the required clearances are maintained.

4. The butt of the temporary, wood service pole must at least be painted with creosote or other approved preservative. However, it is recommended that these poles be full-length treated with a suitable preservative in order to obtain the maximum useful life of the pole and to provide increased safety to workers and to the public. The permanent service pole specified in Note 6 below is approved for temporary installations. It will usually be the more economical pole for repeated use.
5. A metal pole may be used for temporary service provided its strength is at least equivalent to the wood service poles specified in Note 3 on Page 1 and provided its base or foundation is designed to provide at least an equivalent resistance to overturning when set at the same depth. The use of 4-inch extra-strong steel pipe (Schedule 80), set in concrete to obtain equivalent bearing surface, or the use of a 5-inch standard steel pipe (Schedule 40), set directly in the ground, will meet these requirements.

Permanent Pole Installation

6. A permanent wood or metal service pole must be used when it is estimated that the installation will remain for a period longer than 1 year. Permanent wood service poles, as specified in Note 7, must be furnished and installed by the customer. PG&E will, however, furnish and install the pole (wood or metal) exclusive of wiring and service entrance equipment, at the customer's expense, if the customer is unable to have the pole installed by a private contractor.
7. Customer Owned Wood Poles:
   A. Customer-owned, permanent wood poles must meet all pertinent requirements of ANSI O5.1.2008, "Wood Poles – Specifications and Dimensions," and American Wood Protection Association Standards T1-10 and U1-10, as modified or described in Engineering Material Specification 57, "Preservative Treated Wood Poles and Stubs for Overhead Lines."
   B. Approved pole suppliers and treatments are shown in Table 1 and Table 2 of this document.
   C. For poles that will have a final height greater than 20 feet above ground level, the Federal Aviation Administration (FAA) may require the applicant to file a notice a minimum of 45 days prior to the installation of the pole. The FAA may issue a determination of hazard to air navigation and recommend actions to mitigate or eliminate that hazard. Please contact your PG&E project coordinator for additional information
   D. **Before** setting the pole(s), the customer/contractor must notify the local PG&E inspector who will look at the pole(s) to verify that they meet the requirements stated within this note (Note 7).
   E. Customer-owned, permanent wood poles must be of circular cross section, minimum Class 6, with a minimum length of 25 feet (4-1/2 feet in the ground). A longer pole may be necessary to obtain the required clearance from the ground. Consult PG&E before ordering. Exception: minimum length may be 20 feet providing the required clearances are maintained.
   F. The pole brand must remain visible at all times. The customer-owner shall not install the main service switch meter socket box, or conduit runs over the brand.
   G. Used poles may be installed provided they are inspected and accepted by PG&E **before** installation.
   H. Applicants must obtain a certificate of treatment or a letter from a supplier indicating that the pole was treated in accordance with the American Wood Protection Association (AWPA) and ANSI requirements. PG&E should receive a copy of this certificate before accepting the pole.
8. A metal pole may be used for permanent service provided its size and strength are at least equivalent to the wood pole described in Note 7,and provided its base or foundation is designed to provide at least equivalent resistance to overturning when set at the same depth. The following are some poles that will meet these requirements:
   A. An 11-gauge steel pole with 8-1/2-inch minimum diameter at ground line, set directly in the ground.
   B. A 7-gauge steel pole with 7-inch minimum diameter at ground line, set directly in the ground.
   C. A 5-inch extra-strong steel pipe (Schedule 80) set in concrete to obtain equivalent bearing surface.
   D. A 6-inch standard steel pipe (Schedule 40) set in concrete to obtain equivalent bearing surface.

   All steel permanent metal poles must be galvanized.

Table 1 Approved Suppliers for Permanent Wood Poles (Table 3, Item 2 on Page 7) [1]

Service Poles 35 Feet and Shorter:	
Koppers	Pacific Wood Treating of Oregon
McFarland Cascade	Thunderbolt Wood Treating
Nevada Wood Preserving	
Distribution Poles Taller than 35 Feet:	
McFarland Cascade (Tacoma, WA. or Eugene, OR. Yards only)	

1 Service poles are sold to lumberyard/hardware companies.

Table 2 Approved Service Pole Treatments [1]

Species	Treatment			
	Penta-A Pressure (Oil-Penta)	ACZA	Creosote	CCA
Western Red Cedar	X	X	X	X
Douglas-Fir	X	X	X	–

1 All poles must be full-length treated, except Western Red Cedar may be butt treated with oil pentachlorophenol.

Table 3 Pole Setting Depths

Pole Length (feet)	Setting Depth (feet)	
	Firm Soil	Rock
25	4-1/2	3
30	5	3
35	5	3-1/2
40	5-1/2	3-1/2
45	6	4

Table 4 Customer's Service Attachement Location [1, 2]

Panel Rating (amps)	Minimum Distance From Top of Pole (inches)	Service Attachment (type)
< = 225	16	Weatherhead
226-400 (1-Phase) [3]	32	3 Spool Extended Rack
226-400 (3-Phase) [3]	40	4 Spool Extended Rack

1 All open wire services require extended rack construction. See Figure 7 on Page 11 and Figure 4 on Page 9.
2 A longer pole may be necessary to obtain the required service clearances from the ground. See note 9D on Page 4.
3 See Note 26 on Page 6.

Vertical Clearance for Service Poles

9. Conductors to service poles must have a minimum ground clearance as follows:

   A. Over the center portion of the street, 18’ 0” minimum. For conductor height over trolleys, railroad tracks, telephone lines, etc., consult PG&E.

   B. At the curb or outer limits of possible vehicular traffic, 16’ 0” minimum.

   C. Over private driveways, lanes, or other areas accessible to vehicles used for industrial, commercial, or agricultural purposes, 16’ 0” minimum.

   D. **If required clearances cannot be obtained with a minimum-length service pole and the constructions illustrated on Pages 7 through 9, the required clearances should be obtained by using a longer pole**. The setting depth for a 25-foot and longer pole must be as specified in Table 3 on Page 3.

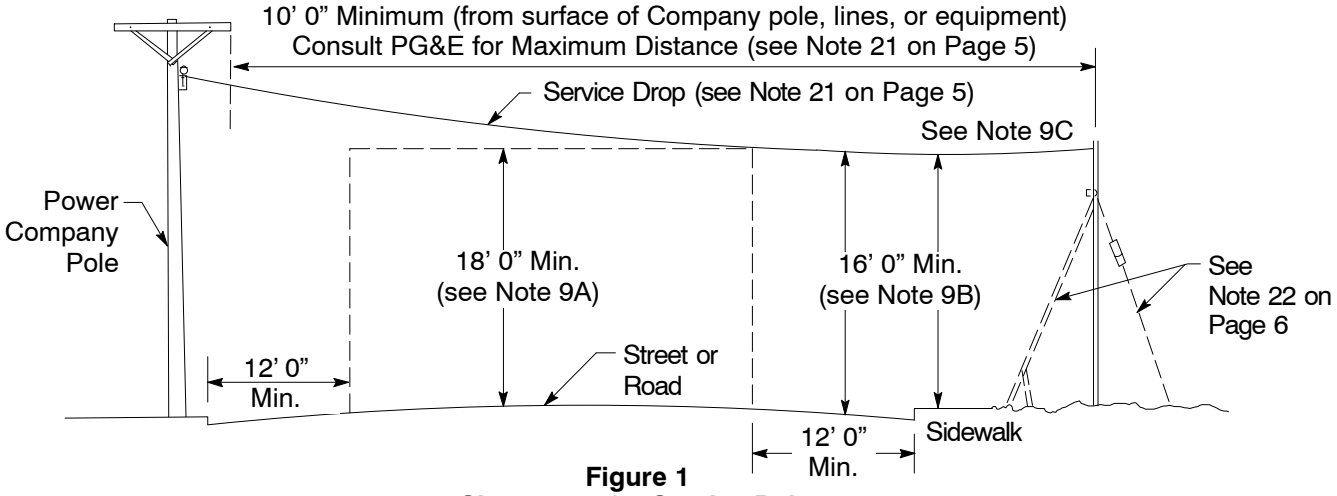


Figure 1
Clearances for Service Poles

Service Entrance Conductors

10. The customer must furnish, install, and maintain the service entrance wiring and service equipment beyond the point of attachment to PG&E’s service wires. The service entrance wires must be continuous and must be of a size and type that will provide not less than the minimum standard of safety as specified in local city and county ordinances or, where there is no local ordinance, as specified in the current issue of the National Electrical Code (NEC).
11. The neutral conductor of 2-wire, 120 V and 3-wire, 120/240 V (or 120/208 V) services must be securely connected to the neutral terminal of the meter socket and extended through to the neutral terminal of the service entrance switch. It must be continuous (without splice) from the service head to the service entrance switch.
12. At least 18 inches of service entrance conductors must be provided outside the service head.
13. Weatherproof wire is not permitted in conduit.

Service Entrance and Load Side Conduit and Conduit Covering

14. Service entrance and load side conduit and conduit covering requirements must comply with applicable codes and local requirements. *G.O. 95* requires that any conduit installed **below** the 8-foot level on the pole must be treated as a riser; in which case, the conduit must be either rigid galvanized steel or 2-inch minimum diameter Schedule 40 PVC.

    Exception: Conduit that enters the top of an enclosure is considered to be "protected" by the enclosure and need not be treated as a riser unless installed below the 6-foot level. Conduit installed above the 6-foot or 8-foot level (whichever height applies) must be either: (1) galvanized rigid steel conduit, (2) rigid aluminum conduit, (3) electrical metallic tubing, (4) IMC, or (5) PVC plastic conduit having a minimum wall thickness of 0.15 inches (Schedule 40 for 2-inch PVC conduit or larger, Schedule 80 for 1-1/2-inch or smaller). All fittings must be rain-tight. If PVC plastic conduit is used, it need not be covered. If rigid steel or other approved metallic conduit is used, it must be enclosed with PVC "U" shaped molding for a minimum distance of 8 feet below the lowest open service entrance conductor. The covering must be fastened to the pole at intervals not greater than 3 feet (see Page 11).

15. Wood Block:

    A. A wood block must be attached directly over the service head in the following situations:

        (1) On a service pole where electrical metallic tubing, rigid steel, or IMC is used.

        (2) On a wood pole with plastic conduit installation when the service head is metallic and the neutral service entrance conductor is not insulated.

    B. A wood block over the service head is not required in the following instances:

        (1) On a service pole with plastic conduit installation except as noted in Note 15, A. above.

        (2) On a metallic pole, provided the pole is effectively grounded and provided all metallic conduits are adequately bonded to the metal pole with approved clamps or connectors.

    C. Attach wood blocks as shown on Pages 8 through 10.

16. All conduit and fittings must be rain-tight.

17. Water pipe and fittings are not permitted for use as electrical conduit.

Service Entrance Switch

18. Main switch, receptacles, and other equipment on the load side of the meter must be of weatherproof design or protected by weatherproof enclosures. Such equipment must comply with local ordinances and must also comply with the California Building Standards Code - Electrical Regulations.

19. The switch cover must be locked if the enclosure contains exposed live parts.

Grounding

20. The customer must be responsible for bonding and grounding all exposed, non-current-carrying metal parts. Grounding must be in accordance with NEC and local ordinances, except that the grounding wire must be protected against mechanical damage by rigid steel conduit or armored copper ground wire (see Pages 8 and 10 for details).

Pole Location

21. Poles must be located so that the vertical clearances specified in Note 9 and Figure 1 on Page 4 can be obtained. A service pole must not be located less than 10 feet from the surface of the PG&E pole, or pole-mounted equipment, or within 10 feet of the vertical plane of a PG&E line.

    PG&E must be consulted for maximum span lengths, as they can vary depending on wire type and size, loading area, clearances, and suitable guying. The maximum span length of PG&E's service drop to a temporary pole must not exceed 100 feet, and if 4/0 conductor is necessary, not more than 80 feet. The maximum span length for a permanent type installation may vary from 80 feet to 150 feet upward depending on the variables mentioned.

    The pole must also be positioned so that the pole brand will not be hidden by the main service switch, meter socket box, or conduit runs.

Guying or Bracing

22. Where conductors cross a street or road, the customer's pole must be guyed or braced against the pull of conductors as follows:

    A. Temporary Poles: Anchor guy as shown in Figure 13 on Page 12, or with wood braces not smaller than 2" x 4" timber and securely bolted to the pole as per Figure 14 on Page 12. See Figure 2 on Page 8 for the correct placement of guy or brace.

    B. Permanent Service Poles: Anchor guy only as shown in Figure 13 on Page 12. See Figure 5 on Page 10 for the correct placement of guy.

    C. The guy strain insulator is to be located in a zone: 8 feet or more above the ground; and 8 feet or more below the level of the lowest supply conductor, or 6 feet or more from the surface of the pole and 1 foot or more below the level of the lowest supply conductor.

Metering Requirements

23. Meters must be furnished by PG&E.

24. For residential installations, meter sockets without test bypass facilities must be furnished, installed, and wired by the customer as shown on Page 12.

25. For commercial and industrial applications, meter sockets with PG&E-approved test bypass facilities must be furnished, installed, and wired by the customer. Excepted from this test-bypass requirement are single-phase installations with a standard delivery voltage less than 300 V and a meter switch rating 200 amps or smaller where short interruptions of service are acceptable to the customer for testing and maintenance of the meter by PG&E. This configuration is limited to temporary power and exclusively nighttime loads such as parking lots, tennis courts, etc.

26. Customer–owned poles for residential use are limited to only one meter panel rated at 320 amps (continuous) or less. Poles for non–residential applications are limited to only one meter panel rated at 200 amps or less. More than one meter panel or a meter panel with a greater ampacity must be installed on panelboard construction as shown in Document 065374.

Table 5 Materials to Be Furnished and Installed by the Customer

Item	Description
1	Pole, 6” x 6” Timber, Class 6 Round, or Equivalent Metal (length as required, see Note 2 on Page 1)
2	Pole, Wood, or Equivalent Metal (see Note 6, Note 7, and Note 8 on Page 2). (See Table 2 on Page 3 for approved list of wood pole suppliers.)
3	Meter Socket, Main Service Switch
4	Conduit, Service (see Note 14 on Page 5)
5	Conduit, Load Side (see Note 14 on Page 5)
6	Conduit Fitting, Threaded, With Cover and Gasket
7 [1]	Covering, PVC Conduit, or PVC Moulding (see Page 9)
8 [1]	Wood Block (4” x 4” x 6” or two 2” x 4” x 6” nailed together)
9	Service Head
10	Service Knob
11	Wire, Insulated (size as required) (18” minimum extension from service head)
12	Eyebolt, 5/8”, Length (as required), Galvanized
13	Washer, 2-1/4” Square for 5/8” Bolt Size, Galvanized
14	Padlock, for Main Service Switch
15	Guy Cable, 1/4” Minimum Galvanized Steel or Equivalent, With Guy Strain Insulator (10,000 lbs. minimum), Anchor and Fittings (see Page 12 for details of anchor and brace), and Guy Marker
16	Push Brace, 2” x 4” Minimum Timber (securely bolted to pole)
17	Grounding by Customer (see Pages 8 and 10)

[1] Omit conduit covering, Item 7, and wood block, Item 8, on a metal pole or on a wood pole with plastic conduit (see Note 15 on Page 5). **Exception**: The wood block is required for a wood pole with plastic conduit when the service head is metallic and the neutral service entrance conductor is uninsulated (see Note 15 on Page 5).

Table 6 Materials to Be Furnished and Installed by PG&E

Items	Description	Document
18	Meter, Watthour (as required)	–
19	Service Wire (as required)	059626
20	Insulator, for Service Wire (as required)	025202
21	Connectors, Service Sleeve (as required)	028852
22	Preformed Grip, Dead-End (as required)	028851
23	Rack, Extended	015187
24	Spool and Clevis	022439

Temporary Installations

Notes

1. Locate the guy in line with the service drop. The guy must be maintained taut.
2. Grounding, by the customer, must be in accordance with NEC and local ordinances, except that the grounding wire must be protected against mechanical damage by rigid steel conduit (or #8 AWG minimum armored copper ground wire may be used). The ground rod must be located no less than 12 inches from the pole surface.
3. Customer's equipment must not be installed in the climbing space or over the pole brand. See Note 20 on Page 5 for grounding requirements.
4. For customer-owned poles, span lengths are limited to 100 feet. The vertical separation between conductors in extended rack construction is 8 inches minimum.
5. If the poles are to be set in **firm** soil, use the setting depths from the "Firm Soil" column of Table 3 on Page 3. If the poles are to be set in rock, use the setting depths from "Rock" column of Table 3 on Page 3. If the poles are to be set in **soft** soil, the poles must be set deeper than the depths shown in Table 3. Consult the PG&E project coordinator for the other approved methods for **soft** soil.

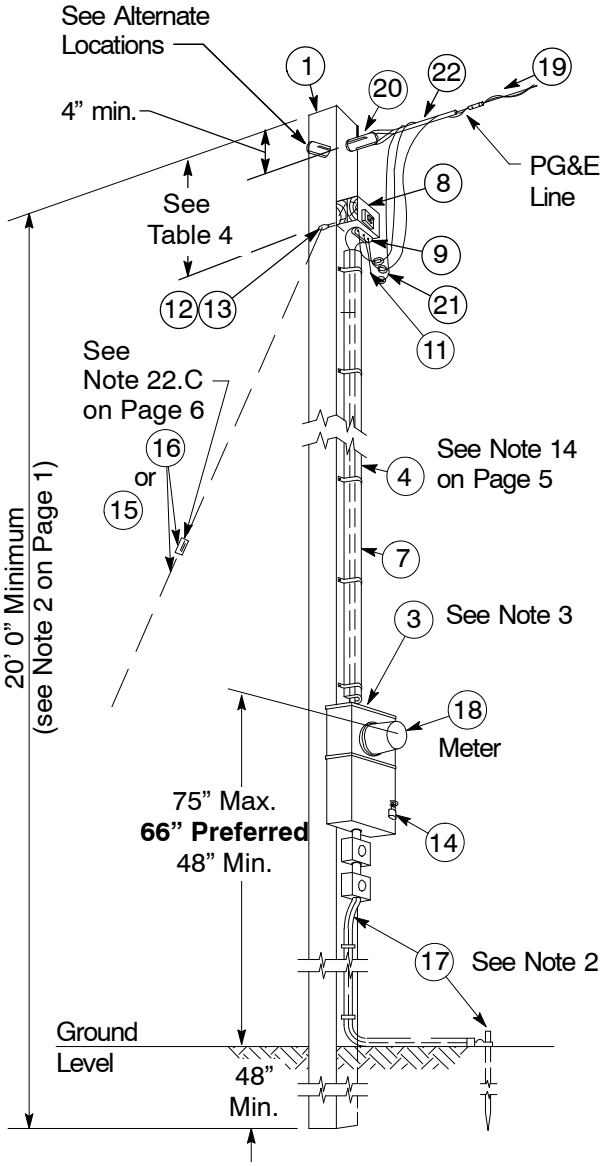


Figure 2
Service Drop Cable to Receptacles

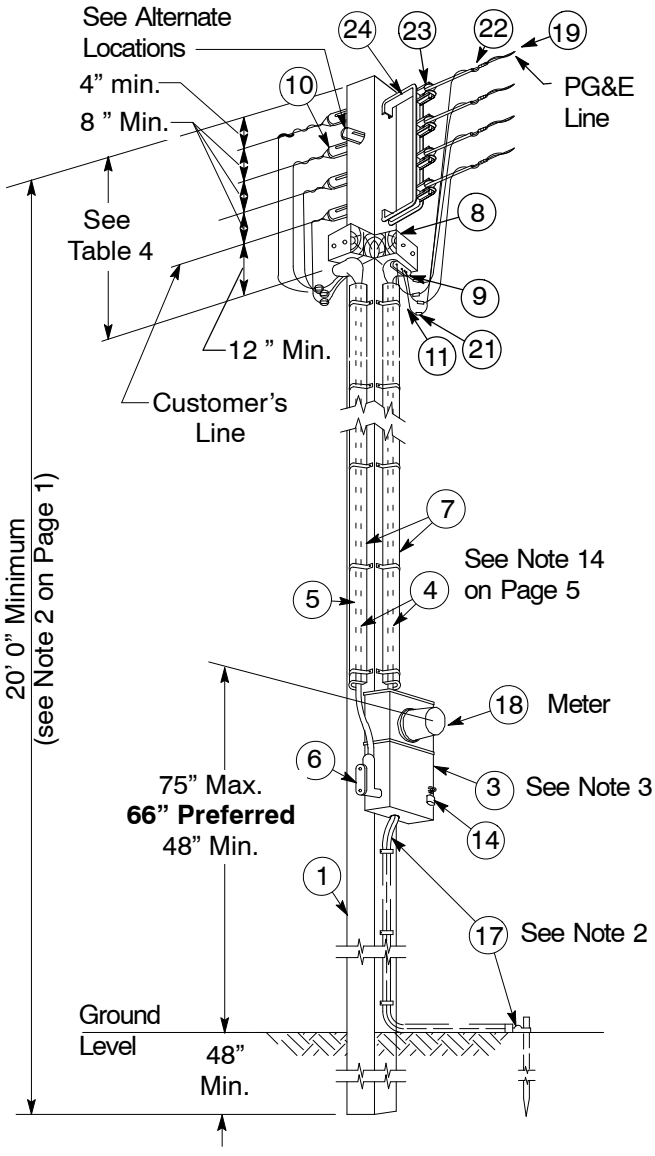


Figure 3
Service Drop Cable to Overhead Line

Temporary Installations (continued)

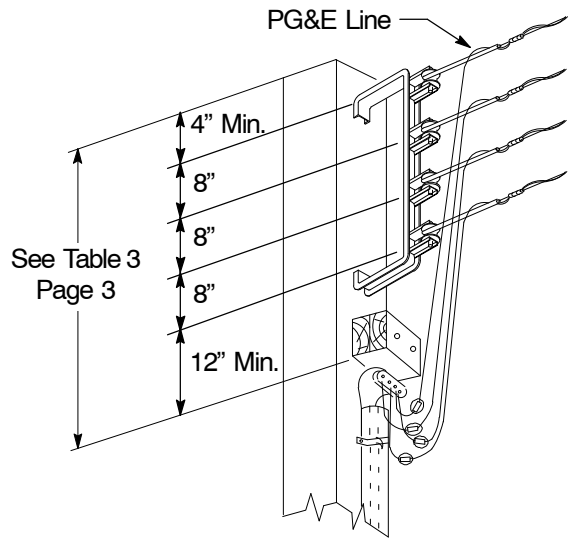
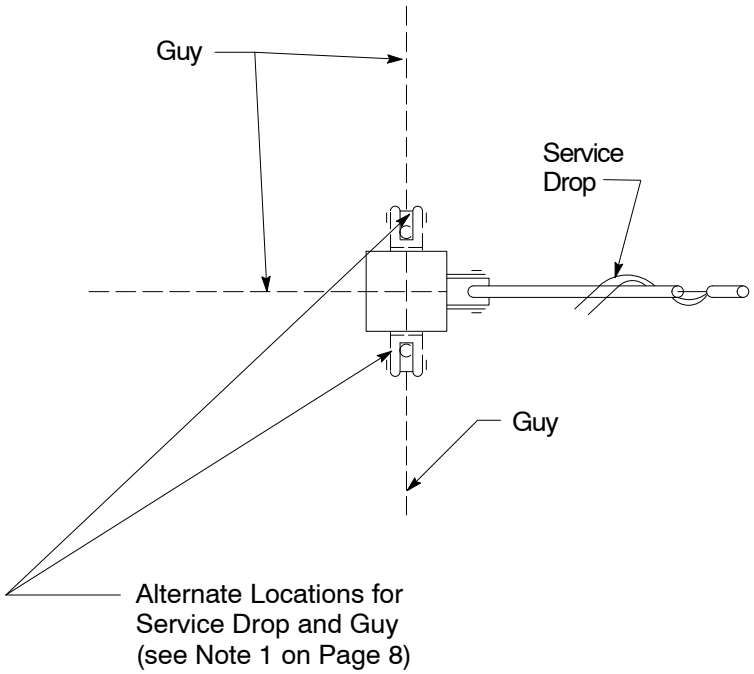


Figure 4
Open Wire Construction
(For use when the load requires a larger service drop conductor)



Detail A
See Figure 15 on Page 14

Permanent Installations

Notes

1. Locate the guy in line with the service drop. The guy must be maintained taut.
2. Grounding, by the customer, must be in accordance with NEC and local ordinances, except that the grounding wire must be protected against mechanical damage by rigid steel conduit (or #8 AWG minimum armored copper ground wire may be used). The ground rod must be located no less than 12 inches from the pole surface.
3. Customer's equipment must not be installed in the climbing space or over the pole brand. See Note 20 on Page 5 for grounding requirements.
4. For customer-owned poles, span lengths are limited to 150 feet. The vertical separation between conductors in extended rack construction is 8 inches minimum.
5. If the poles are to be set in **firm** soil, use the setting depths from the "Firm Soil" column of Table 3 on Page 3. If the poles are to be set in rock, use the setting depths from "Rock" column of Table 3 on Page 3. If the poles are to bes set in **soft** soil, the poles must be set deeper than the depths shown in Table 3. Consult the PG&E project coordinator for the other approved methods for **soft** soil.

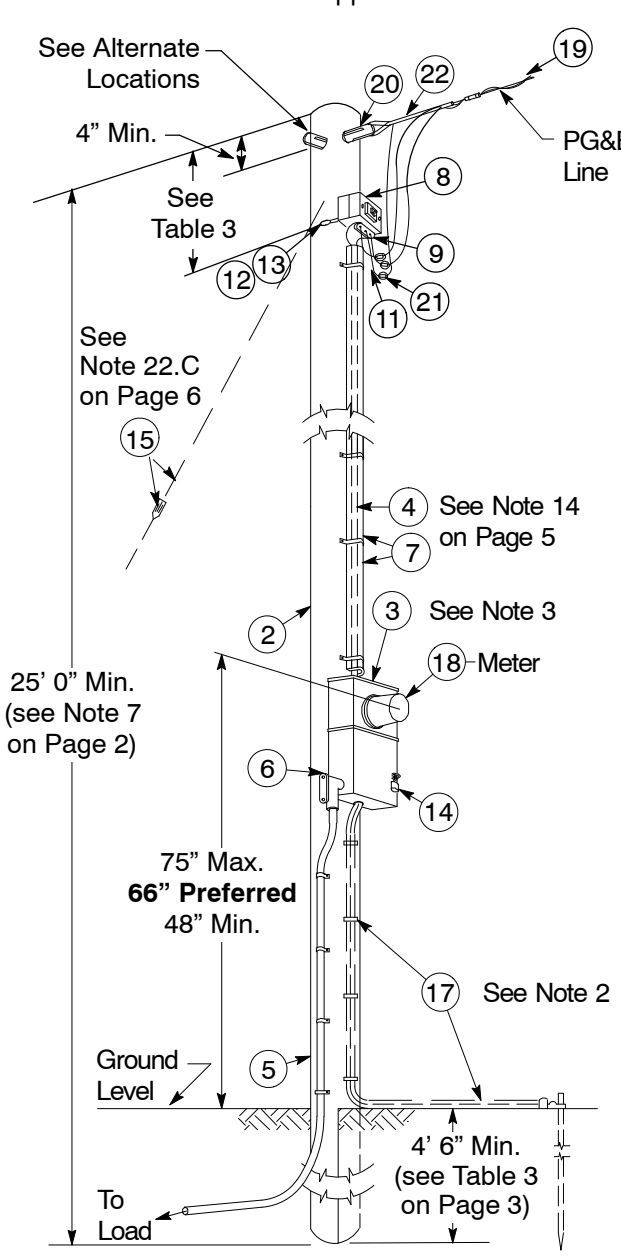


Figure 5
Service Drop Cable to Underground Line

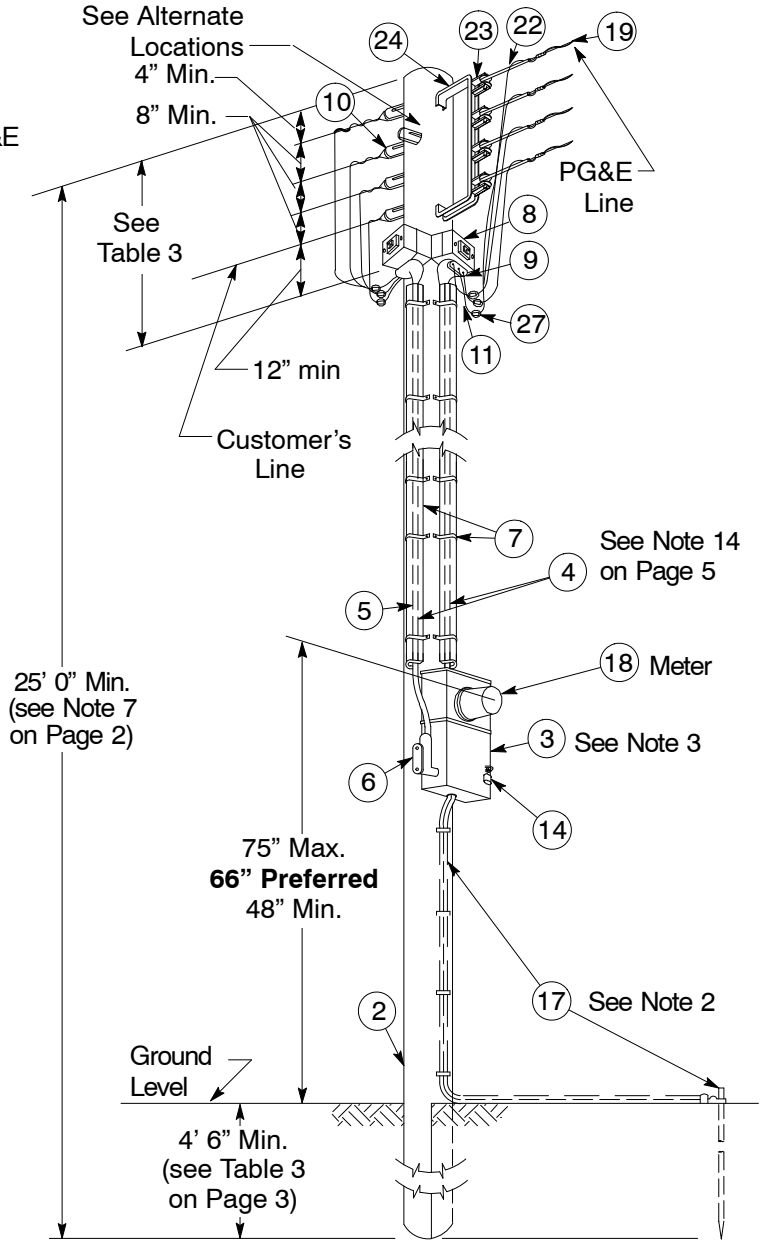
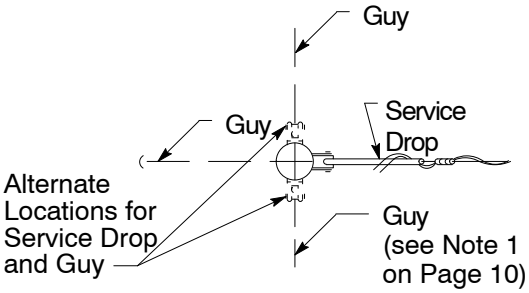


Figure 6
Service Drop Cable to Overhead Line

Permanent Installations (continued)



Detail B
See Figure 5 and Figure 6 on Page 10

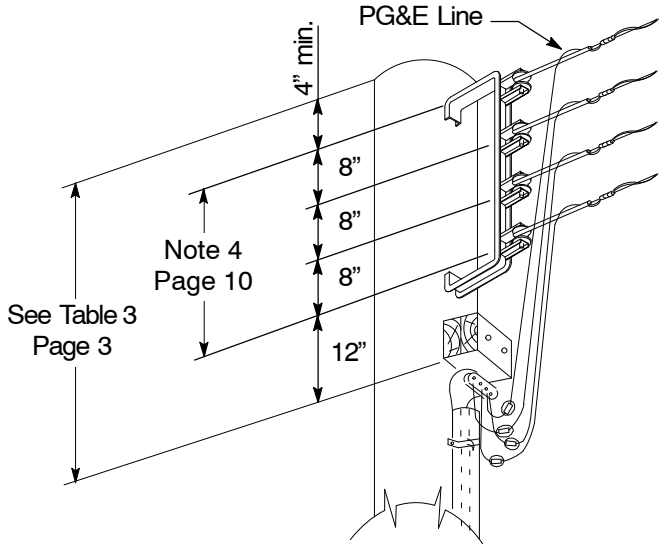


Figure 7
Open Wire Construction
(for use when the load requires a larger service drop conductor)

Method of Covering Metal Conduits and Attaching Coverings on Wood Poles

Notes

1. Strap PVC conduit to the pole with pipe straps or galvanized perforated plumber's tape spaced not more than 3 feet apart (see Figure 8).
2. Attach PVC molding to the poles with 1/4" x 2-1/2" galvanized washer-head lag screws.

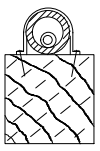


Figure 8
PVC Conduit
(see Note 1)

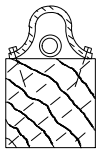


Figure 9
PVC Molding
(see Note 2)

Meter Connections

1. For test bypass facilities, see Note 25 on Page 6.
2. All wiring material on the load side of the meter socket must be in accordance with applicable electrical codes, city and county ordinances, and must comply with the California Building Standards Code – Electrical Regulations. Unless threaded connections are used, adequate bonding of all sections of the service equipment must be provided.

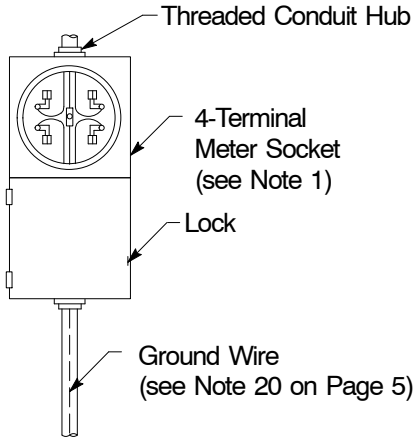


Figure 10
120/240 V, 3-Wire
With WHM, Service
Switch, and Receptacle in
Weatherproof Cabinet
(see Note 2)

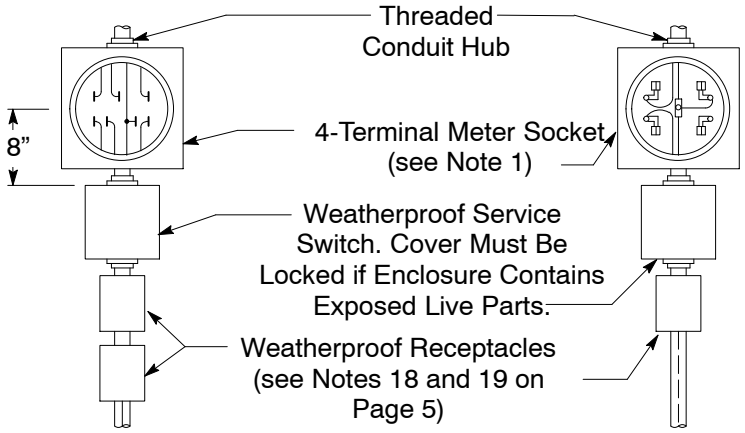


Figure 11
120/240 V, 4-Wire Delta
With Weatherproof Service
Switch and Receptacles
(see Note 2)

Figure 12
120 V, 2-Wire
With Weatherproof Service
Switch and Receptacles
(see Note 2)

Details of Anchors and Brace

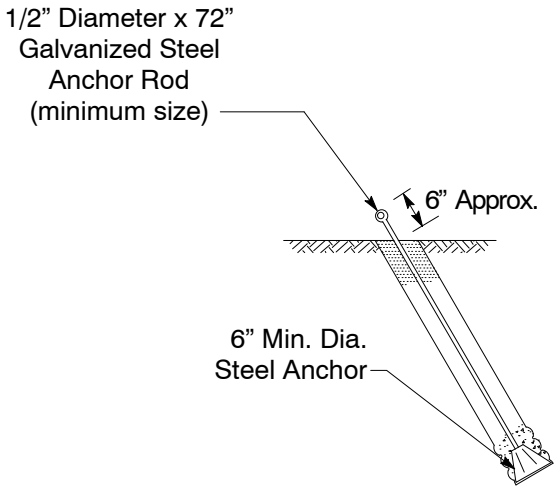


Figure 13
Steel Anchor

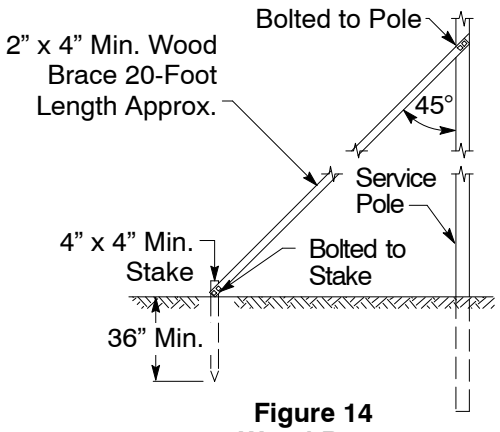


Figure 14
Wood Brace
(for use with temporary pole only)

Temporary Commercial Service to Non-Substantial Portable Structure

Notes

1. Temporary Service Attachment

   Temporary services will not be directly attached to any structure considered by PG&E to be of inadequate strength. The structure must, in all cases, be **substantial** (see Note 2) and capable of supporting the service span, as well as the force of the ladder and worker against the service mast.

2. Portable Buildings (Figure 15 on Page 14 and Figure 16 on Page 16)

   Portable buildings, such as small sheds, combined office/toilet structures, etc., are not considered to be **substantial** structures unless they are staked in place in the manner shown in Figure 16 on Page 16. Furthermore, periscopes must be installed and adequately braced in accordance with Figure 16 on Page 16 and the “Electric Service: Overhead” Section of the *Electric and Gas Service Requirements Manual* (Greenbook).

3. Temporary Poles (Figure 15 on Page 14)

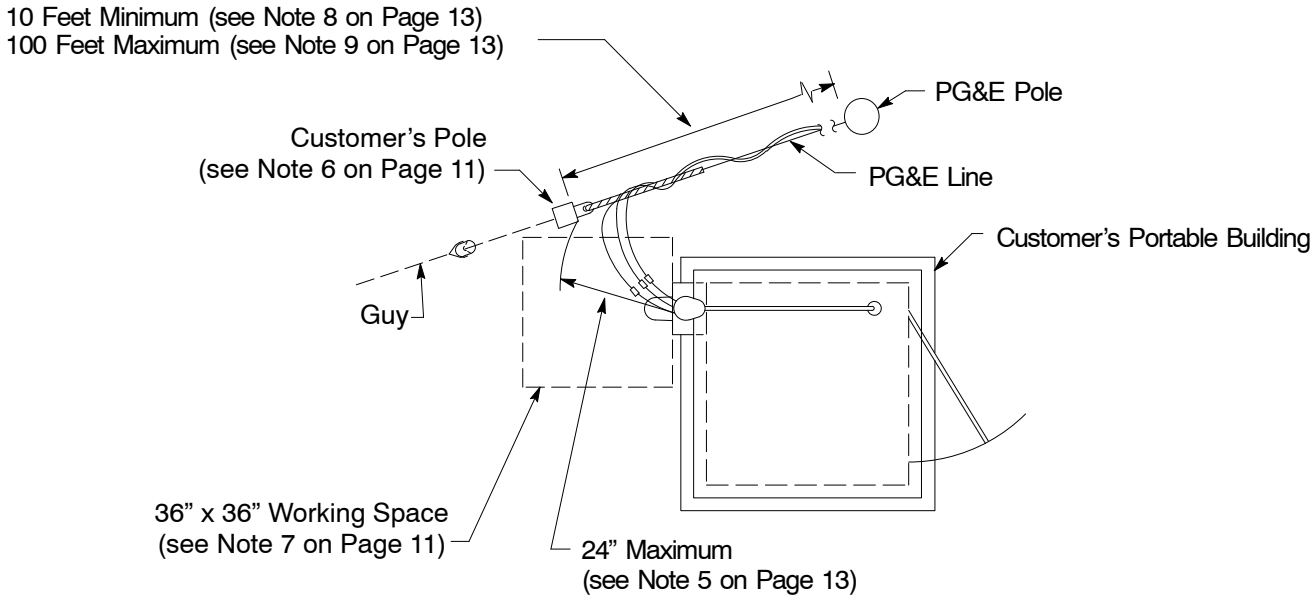
   Customer-owned temporary poles are required for support of PG&E’s overhead service wires if the temporary building to be served is considered by PG&E as **not substantial**.

4. Method of Serving

   Non-substantial structures that have been approved for the attachment of metering equipment and service periscopes may be served in the manner shown on Page 14. However, if desired, the metering equipment may be removed from the structure and placed on the temporary pole as shown in Figure 2 on Page 8.

5. The distance from the centerline of the periscope service mast to the pole face must not exceed 24 inches.
6. A portable structure must not obstruct the climbing space of a temporary pole.
7. The working space in front of the meter must not be obstructed.
8. The minimum distance from the surface of a PG&E pole to a customer’s pole is 10 feet.
9. The maximum permitted span to a PG&E pole is 100 feet and may be only 80 feet in some cases (see Note 21 on Page 5).

Temporary Commercial Service to Non-Substantial Portable Structure (continued)



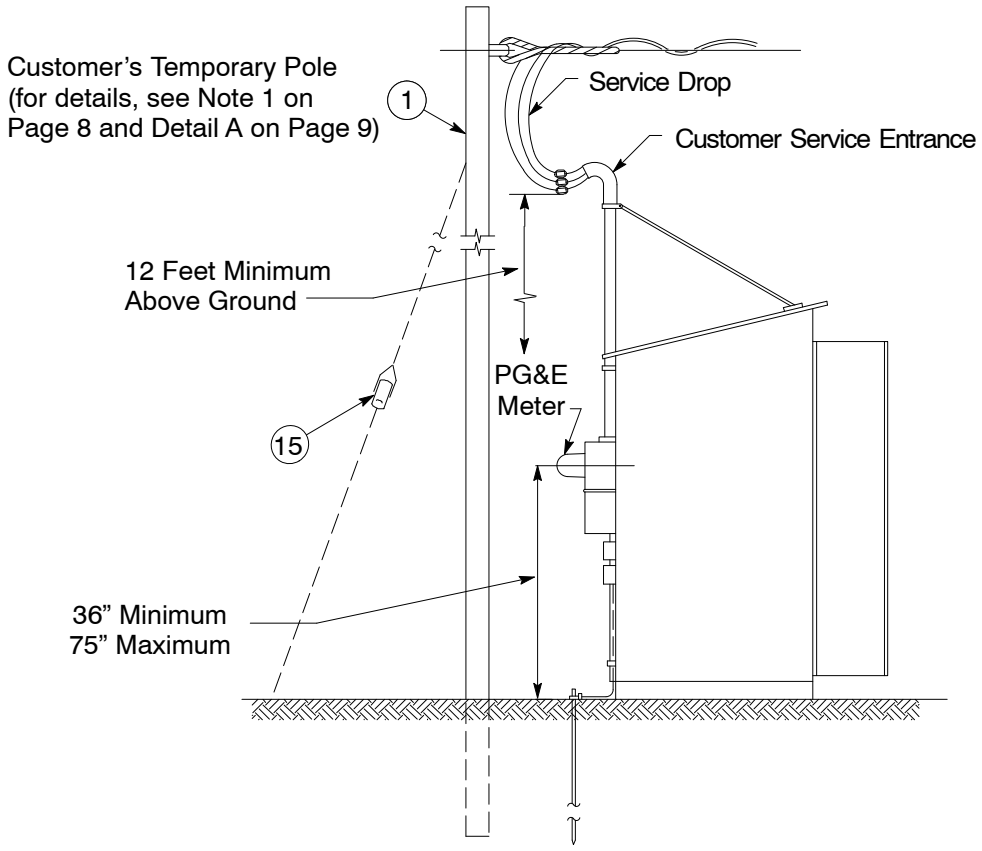


Figure 15
Portable Structure (non-substantial)
(see Note 2 on Page 11)

Temporary Commercial Service to Substantial Portable Structure

Notes

1. Substantial Building

   See Note 2 on Page 13 for an explanation of a “substantial” portable building.

2. Structure Anchoring

   To prevent overturning, the structure is required to be securely anchored in place using one of the following methods:

   A. Four 2” x 4” minimum wood stakes driven a minimum of 24 inches into the ground and attached to the framework of the structure using 1/4-inch minimum bolts or lag screws.

   B. Four steel stakes having strength equivalent to 3/4-inch rigid steel pipe driven a minimum of 24 inches into the ground and attached to the framework of the structure using 1/4-inch minimum bolts or lag screws.

   C. Four steel stakes having strength equivalent to a 3/4-inch rigid steel pipe driven a minimum of 24 inches into the ground with a cross member of each stake firmly contacting the upper surface of the timber used as a base or skid for the structure.

   Note: Methods 2A and 2B above describe the **preferred** methods of attaching the stakes to the structure framework. However, four 16d (8-gauge, 3-1/2-inch) common nails per stake may be used in lieu of the bolts or lag screws, providing the wood is in good enough condition to permit a secure attachment.

3. Periscope Mast Bracing

   Two galvanized steel braces, securely bolted or lagged to the structure’s framework with approximately a 90° spread, must be installed. Use 3/4-inch galvanized rigid steel pipe or 1-1/4” x 1-1/4” x 1/8” galvanized steel angle (minimum size).

4. Service Disconnection

   When initial service is disconnected, sufficient service drop cable should be left connected to the service entrance cable to permit the future splicing of service cable from the ground level. This practice will limit the need for placement of ladders against the periscope mast when the structure is moved to a new location.

5. The working space in front of the meter must not be obstructed.

6. For temporary underground commercial service to substantial portable structures, see Document 036670.

Temporary Commercial Service to Substantial Portable Structure (continued)

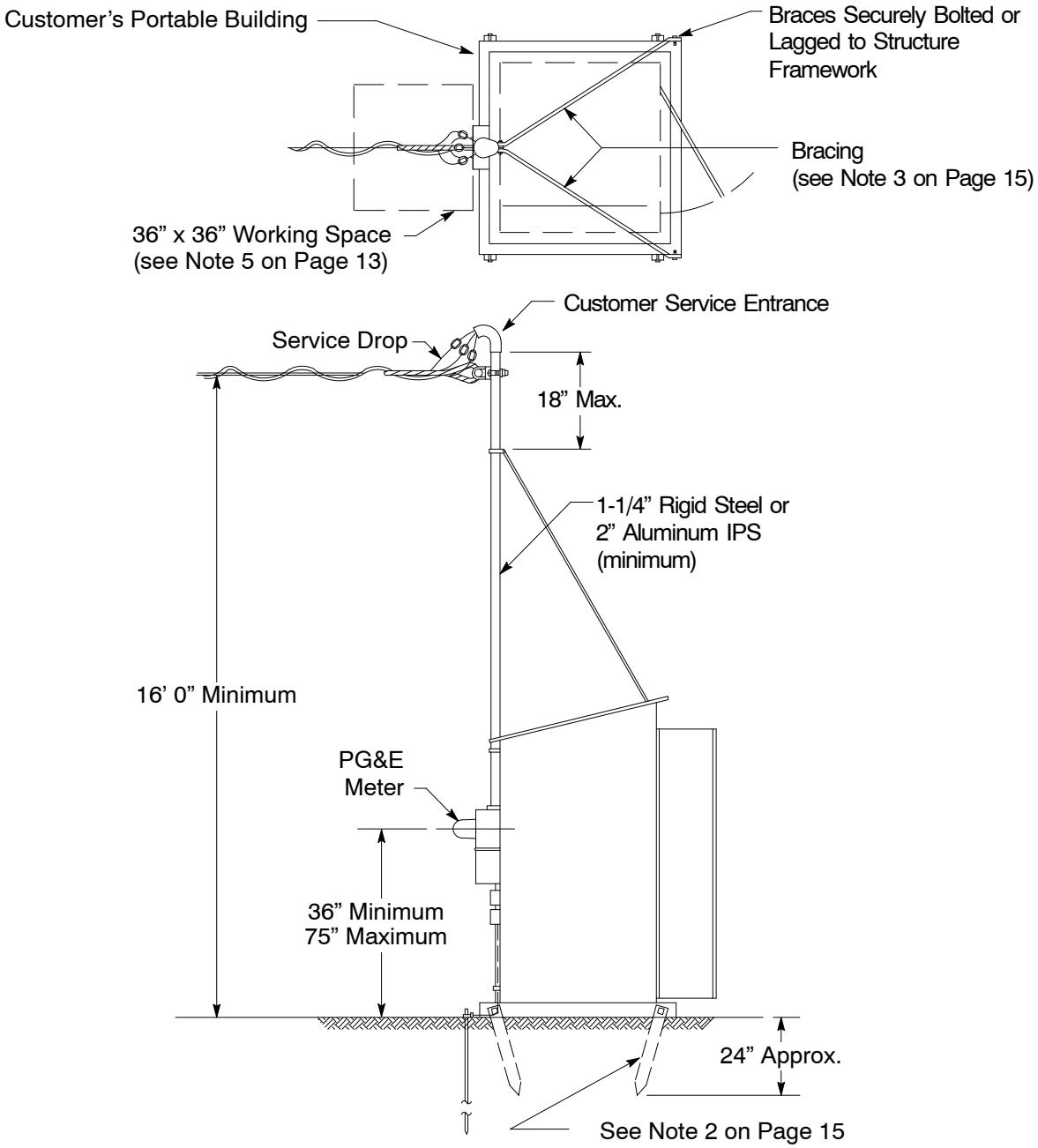


Figure 16
Portable Structure - Substantial
(see Note 2 on Page 13)

Revision Notes

Revision 14 has the following changes:

1. Added Note 7.C., on Page 2.
2. Revised Note 9D, on Page 4.
3. Revised Note 26, on Page 6.
4. Revised Table 4, added Footnotes 2 and 3, on Page 3.
5. Revised Title for Figure 4, on Page 9.
6. Revised Title for Figure 7, on Page 11.

INSTRUCTIONS TO BIDDERS

EL DORADO LIFT STATION REPLACEMENT shall be performed in accordance with the Plans and Special Provisions therefor adopted, to which special reference is hereby made.

Each bidder must supply all the information required by the bid documents and Special Provisions.

Minority business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color or national origin in consideration for an award of any contract entered into pursuant to this advertisement. Women will be afforded equal opportunity in all areas of employment. However, the employment of women shall not diminish the standards or requirements for the employment of minorities.

All proposals or bids shall be accompanied by a cashier's check or certified check payable to the order of the City of Ukiah amounting to 10 percent of the bid, or by a bond in said amount and signed by the bidder and a corporate surety, payable to said City. Said check shall be forfeited, or said bond shall become payable to said City in case the bidder depositing the same does not, within fifteen (15) days after written notice that the contract has been awarded to him: (a) enter into a contract with the City and (b) furnish certificates of insurance and endorsements, a bond of faithful performance and a payment bond as described in the Special Provisions.

No bidder shall withdraw his or her bid for a period of thirty (30) calendar days after the date set by the City for the opening thereof.

The Contractor and any subcontractors shall each possess a valid City of Ukiah Business License prior to the start of any work.

The Contractor shall furnish a project schedule to the Engineer prior to the start of any work and start work as scheduled.

The work is to be completed within ~~twelve (12) calendar~~ *twenty (20) working* days. The Contractor will pay to the City the sum of five hundred ($500.00) dollars per day for each and every calendar day's delay beyond the time prescribed. *A summary of contract time is divided as follows:*

- ***A. Power Element****: Notice to Proceed for the Power work shall be given after award of Contract. All work included in the Power work shall be completed within seven (7) working days. The scope of work for this element includes supplying and installing a new customer power pole, weatherhead, and meter.*
- ***B. Pump Station Element****: Notice to Proceed for the Pump Station work shall be issued at the completion of PG&E's power supply work. All work included with the Pump Station work shall be completed within thirteen (13) working days. The scope of work for this element includes demolition of existing pump station, and construct and installation of the new pump station.*

The staff shall notify a bidder by telephone, email or fax, if it intends to recommend the rejection of the bidder's bid. Any bid protest must be filed with the City Clerk not more than five calendar days following the bid opening, or 2 calendar days following notice that staff is recommending the rejection of a bid. If any such timely written protest is filed, all bidders shall be provided a copy of the protest within 2 calendar days of its receipt, which may be delivered to the bidders as an email attachment or by fax. All such bidders may file with the City Manager a written objection or other response to the protest.

All objections or responses filed not more than 5 days after receipt of the written protest will be presented to the City Council at its next regular meeting occurring not less than 12 calendar days following the bid opening. The City Council will resolve the bid protest at that meeting based on the written protest, any staff recommendation and all timely written objections and responses. In accordance with the Brown Act, any person may address the City Council on this item during the meeting. The City Council action on the protest shall represent a final decision by the City on the protest.

Examination of Site, Drawings, Etc.

A mandatory pre-bid conference will be held at 10 a.m., July 24, 2019. Because of the difficulty finding the project site location, all bidders are to meet City staff at 10:00 a.m. on July 24, 2019 at the parking lot east of the Starbucks which is located at 704 E. Perkins Street, Ukiah, California 95482. From there, a caravan will take place

TECHNICAL SPECIFICATIONS

SECTION 12. GENERAL INFORMATION

12-01. Location and Scope of Work. All of the work to be performed is within the jurisdiction of the Ukiah Valley Sanitation District (UVSD) and consists of excavating, removing, and replacing an existing sewer pump station with owner supplied equipment. The project site is located near 1500 Redemeyer Road, approximately 300 feet north of the intersection of Redemeyer Road and El Dorado Road, on private property along the Russian River. Refer to Appendix A for a site map.

Work shall be performed in two (2) elements. The first will be the Power Element, and will include supplying and installing a new customer power pole, weatherhead, and meter. This work must be complete prior to PG&E installed 3-phase power from across the river. The second will be the Pump Station Element, which includes the demolition of the existing pump station, and construction and installation of the new pump station. This work will begin after PG&E power is ready for use.

Contractor shall familiarize himself with Appendix B for the submittal provided by Xylem Water Solutions, Inc., dated August 23, 2018, and Appendix C for the Pump Station O&M Manual that are attached to this RFB. In lieu of Owner provided project plans, Contractor shall give special attention to the Scope of Supply and each Section, in the abovementioned submittal, as it pertains to the equipment material list, requirements for installation, and dimension for the Pump Station and Valve Vault installation.

The Contractor shall perform the following work:

- Ensure station bypass is installed and functioning prior to performing work. Contractor is not responsible for station bypass.
- Excavate, demo, and dispose of existing pump station, valve assembly, control panel, and other appurtenances. Safe-off all points of connection and prepare for new tie-in.
- Inspect all equipment for damage during storage and delivery prior to installation.
- Install Owner provided pump station, pump, and associated piping.
- Install Owner provided valve vault and valve assembly, and associated piping.
- Install Level Sensors
- Install new panel cabinet.
- Install new power pole, meter, and 480V/3PH power supply to new pump station control cabinet
- Connect new station to existing.

Assumptions and Exclusions:

- Pacific Gas and Electric (PG&E) to inspect all terminations to power equipment.
- Replacement of electrical services meter required.
- Station bypass during construction is provided by others and will adhere to the submittal by PAC Machine Company, refer to section 5 of the Xylem submittal attached.
- Contractor has a twenty-foot easement to perform work described above.
- Materials described in Scope of Supply will be provided by Owner. Refer to sheet 2 of submittal.
- The existing upstream SS piping is assumed to be 6” clay into the pump station, and existing downstream SS piping is assumed to be 6” ductile iron discharging out of the pump station.

The Contractor should familiarize himself with the local conditions of the project sites. Failure to do so will in no way relieve him of the responsibility for performing any of the work or operations required as a part of this contract. Further information regarding the work or these specifications can be obtained from Mary Horger at (707) 463-6233.

12-02. Arrangement of Technical Specifications. The Technical Specifications are arranged in sections covering the various phases of work as follows:

Section No.	Title
12	General Information
13	Construction Details
14	Exclusions from General Conditions
15	Amendments to General Conditions

CITY OF UKIAH
Mendocino County, California

AGREEMENT

FOR

EL DORADO LIFT STATION REPLACEMENT

Specification No. 19-13

THIS AGREEMENT, made this _____ day of _____, 20____, by and between the City of Ukiah, Mendocino County, California, hereinafter called the City and _____ hereinafter called the Contractor,

WITNESSETH:

WHEREAS, the City has caused to be prepared in accordance with law, specifications, drawings and other contract documents for the work herein described and shown and has approved and adopted these contract documents, specifications and drawings and has caused to be published in the manner and for the time required by law a notice to bidders inviting sealed proposals for doing the work in accordance with the terms of this contract and

WHEREAS, the Contractor, in response to the notice to bidders, has submitted to the City a sealed proposal accompanied by a proposal guaranty in an amount of not less than 10 percent of the bid price for the construction of the proposed work in accordance with the terms of this contract and

WHEREAS, the City, in the manner prescribed by law, has publicly opened, examined and canvassed the proposals submitted and as a result has determined and declared the Contractor to be the lowest and best regular responsible bidder for the work and for the sums named in the proposal,

NOW, THEREFORE, THIS AGREEMENT WITNESSETH:

Article 1. Work to be Done and Contract Days Allowed.

That the Contractor shall provide all necessary machinery, tools, apparatus and other means of construction; shall furnish all materials, superintendence, overhead, expenses, all labor and expenses of whatever nature necessary for completion of the work in conformity with the Special Provisions and other contract documents hereto attached and according to such instructions as may be given by the Engineer. The Contractor shall complete the work within ~~twelve (12) calendar~~ *twenty (20) working* days. Contract days shall be counted starting with the 10th day following receipt of notice that the contract has been executed by the City. Contractor, at his or her option, may begin work prior to start of counting contract days, however, in no event shall the Contractor start work without giving notification to the Engineer at least 72 hours prior to the start of work, without obtaining an encroachment permit from the City, or without having submitted certificates of insurance that have been accepted and approved by the Engineer.