**Prepared by:** SXZO

# REQUIREMENTS FOR CUSTOMER-OWNED POLES 025055

| | | | |
|---|---|---|---|
| **Asset Type:** | Electric Distribution | **Function:** | Construction |
| **Issued by:** | Daniel Jantz (DWJ7) D. Jantz | **Date:** | 6/30/2023 |

**Rev. #**21: This document replaces PG&E Document 025055, Rev. #20. 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 |
|---|---|---|
| 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 200 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 |
| 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 sectional area equal to or greater than 36 inches squared when measured. With only one side measured to no less than 5.5 inches. 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 be installed in the ground, and 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 not be used for temporary service.

**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. When planning to install a new customer owned service pole prior to inspection by PG&E personnel see the section, Verifying Depth of Customer Owned Poles, on Page 6 and Figure 18, "Pole Depth Verification", on page 17.

      After setting the pole(s), with the butt (greater diameter and treated) of the wood service pole installed in the ground, 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 (See Setting Depths in Table 3 on Page 3). 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 and readable at all times. The customer–owner shall not install the disconnect switch or breaker enclosure, meter panel, panelboard, conduit runs, or other equipment 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.
   I. **Do not** notch, cut, chip, or damage the pole in any way. As this affects the integrity of the pole.
8. Do not install a metal pole. Customer metal poles typically do not have steps and would not be climbable.

**Table 1 Approved Suppliers for Permanent Wood Poles (Table 5, Item 2 on Page 7) [1]**

| Service Poles 35 Feet and Shorter | Distribution Poles Taller than 35 Feet |
|---|---|
| Koppers | Stella Jones – SJC / McFarland Cascade – MCF (Tacoma, WA. or Eugene, OR. Yards only) |
| Stella Jones – SJC / McFarland Cascade – MCF | |
| Thunderbolt Wood Treating | |

[1] Customer owned service poles are sold to lumberyard/hardware companies.

**Table 2 Approved Service Pole Treatments [1]**

| Species | Treatment | | | | |
|---|---|---|---|---|---|
| | Dichloro-Octyl-Isothia-zolin (DCOI or DA) | Penta-A Pressure (Oil-Penta) (PA) | Ammoniacal Copper Zinc Arsenate (ACZA or SZ) | Creosote (C) | Chromated Copper Arsenate (CCA or SK) |
| Western Red Cedar | X | X | X | X | X |
| Douglas-Fir | X | 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 [1] | 5-1/2 | 3 |
| 30 | 6 | 3 |
| 35 | 6–1/2 | 3-1/2 |
| 40 | 7 | 3-1/2 |
| 45 | 7–1/2 | 4 |

[1] Do not use a 25 foot pole when the service crosses a street, road, or traveled dirt thoroughfare in agricultural areas. Use a taller pole that allows the minimum clearances to be met.

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

| Panel Rating (amps) | Weatherhead Distance From Top of Pole (inches) | | PG&E Service Attachment (type) |
|---|---|---|---|
| | Minimum | Maximum | |
| < = 225 | 18 | 20 | Service Knob |
| 226-400 (1-Phase) [3] | 34 | 36 | 3 Spool & Clevis [4, 5, 6] |
| 226-400 (3-Phase) [3] | 42 | 44 | 4 Spool & Clevis [4, 5, 6] |

[1] All open wire services require vertical construction. See Figure 7 on Page 11 and Figure 4 on Page 9.

[2] A taller 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.

[4] See Figure 7 on Page 11. PG&E service must be insulated wire.

[5] The installation of extended rack brackets is not allowed. Use Vertical construction.

[6] A properly installed and PG&E approved crossarm may be allowed instead of spool and clevis attachments.

**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 (taller) pole**. The setting depth for a 25-foot and longer pole must be followed as specified in Table 3 on Page 3.

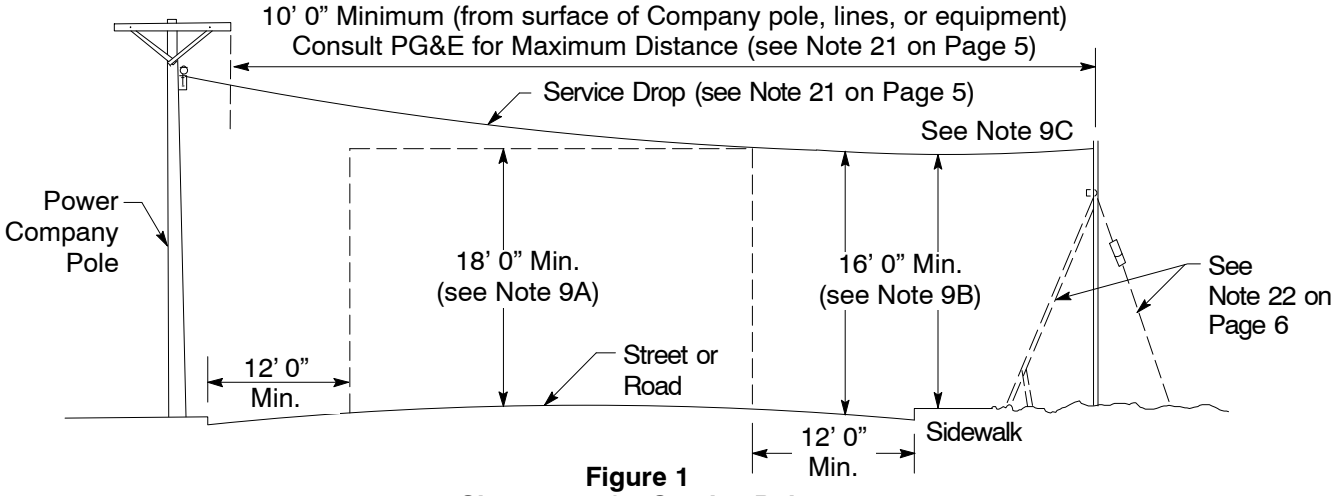



**Figure 1**
**Clearances for Service Poles**

**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 and bonding must be in accordance with NEC and local ordinances. PG&E prefers, but does not require, the grounding electrode conductor wire to be protected against physical damage by rigid steel conduit or armored cladding (see Pages 8 and 10 for additional 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.

    Poles must be located so that there is at least one quadrant of climbing space that is 36" x 36" from grade up to the top of the pole for PG&E personnel to access and climb the pole. The quadrant must be free of equipment and obstructions.

    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 disconnect switch or breaker enclosure, meter panel, panelboard, conduit runs or other equipment.

### Guying or Bracing

22. Where conductors cross, a public or private paved street or road, a traveled dirt thoroughfare in agricultural areas, or poles set in areas with soft soil, as determined by PG&E, 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. See Greenbook sections 5, 6, and 7 for meter panel and additional metering requirements.
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.
26. Customer–owned poles for residential use are limited to only one meter panel rated at 225 amps (continuous) or less. Poles for non–residential applications are limited to only one meter panel rated at 200 amps or less. Residential and Non–residential installations with more than one meter, or a meter panel with a greater ampacity must be installed on panelboard construction as shown in Document 065374.A main service disconnect or main breaker is required to be within 10' of the meter panel. See Greenbook Section 5.7.1. Main Service Disconnects.

### Verifying Depth of Customer Owned Poles

Applicants who plan to install a new customer–owned service pole prior to inspection by PG&E personnel can use following method for PG&E inspectors to verify the setting depth of newly installed poles that have already been set in the ground. See notes below and Figure 18, "Pole Depth Verification", on page 17. These installations will be approved at the discretion of the PG&E Electrical inspector.

27. Install 3/4–inch diameter PVC Schedule 40 conduit from the bottom of the pole to 12 inches above grade level.
28. Place a removable cap on the top of the conduit and a permanent cap on the bottom of the conduit.
29. Attach the conduit to the pole using three heavy duty pipe straps and 10D galvanized nails. Place one pipe strap towards the top of the conduit below the removable cap. Place the second strap in the middle of the conduit and the third strap at the bottom of the conduit just above the permanent cap.
30. Install a PG&E approved pole to, at least, the minimum required setting depth. Refer to Table 3 Pole Setting Depths on page 3.
31. Ensure the PVC conduit is not broken and remains free of soil, equipment, or other obstacles, throughout the conduit. The conduit will be used to verify the pole setting depth.
32. Backfill and compact the soil around the pole to 90% of maximum density. Determine the maximum density and the in–place density by the California Test Method No. 216–6, Parts I and II respectively, or by ASTM D–1556 and D–1557 respectively. A copy of the test results may be required by PG&E.
33. Call for inspection after the installation of the customer owned pole is complete.

**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 1 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 | Bolt, Machine, 5/8 or 3/4, (as required), Galvanized |
| 13 | Washer, Curved, 3” x 3” (for 5/8” Bolt) or 4” x 4” (for 3/4” Bolt), Galvanized |
| 14 | Guy Hook or Guy Pole Plate and Thimble Assembly |
| 15 | Guy Strand Cable, 7/32” or 1/4“ Minimum Galvanized Steel or Equivalent |
| 16 | Insulator, Guy Strain (10,000 lbs. minimum) |
| 17 | Guy Grip, Preform, (as required) |
| 18 | Anchor Rod, 5/8” x 6’ 0” Minimum, and Fittings (as required) |
| 19 | Anchor, 16” Cross Plate, or 8” Expanding |
| 20 | Guy Marker |
| 21 | Push Brace, 2” x 4” Minimum Timber (securely bolted to pole). See Figure 14 on Page 12. |
| 22 | 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 |
|---|---|---|
| 23 | Vertical Construction | – |
| 24 | Spool and Clevis | 022439 |
| 25 | Meter, Watthour (as required) | – |
| 26 | Service Wire (as required) | 059626 |
| 27 | Insulator, for Service Wire (as required) | 025202 |
| 28 | Connectors, Service Sleeve (as required) | 028852 |
| 29 | Preformed Grip, Dead-End (as required) | 028851 |

## *Temporary Installations*

**Notes**

1. Locate the guy in line with the service drop. The guy must be maintained taut.
2. Grounding and bonding, by the customer, must be in accordance with NEC and local ordinances, (see Note 20 on Page 5). 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 vertical 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.

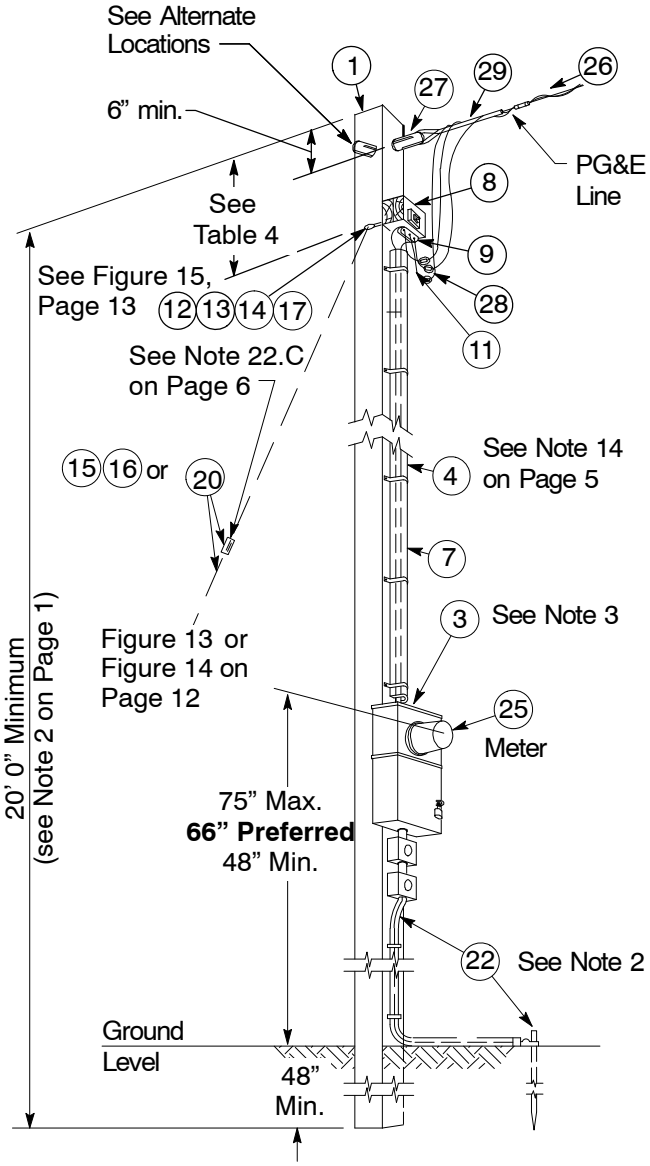



**Figure 2**
**Service Drop Cable to Receptacles**

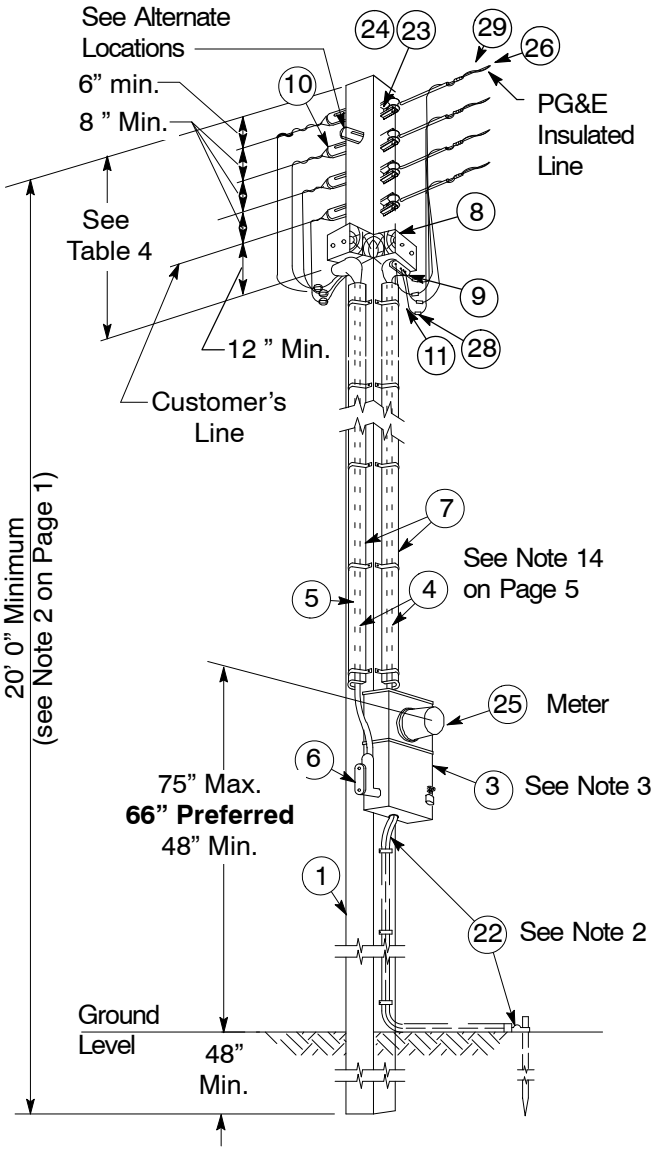



**Figure 3**
**Service Drop Cable to Overhead Line**

## *Temporary Installations (continued)*

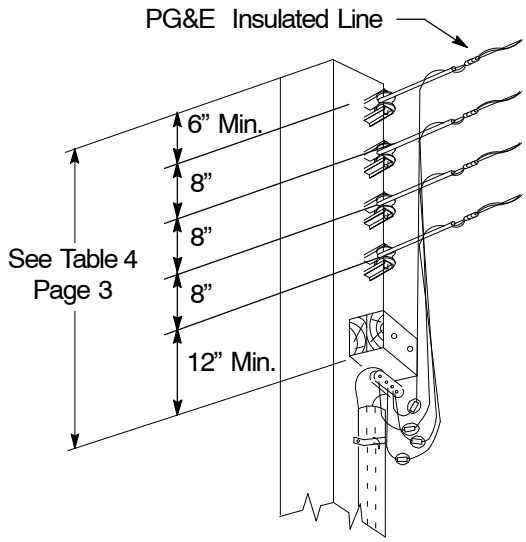
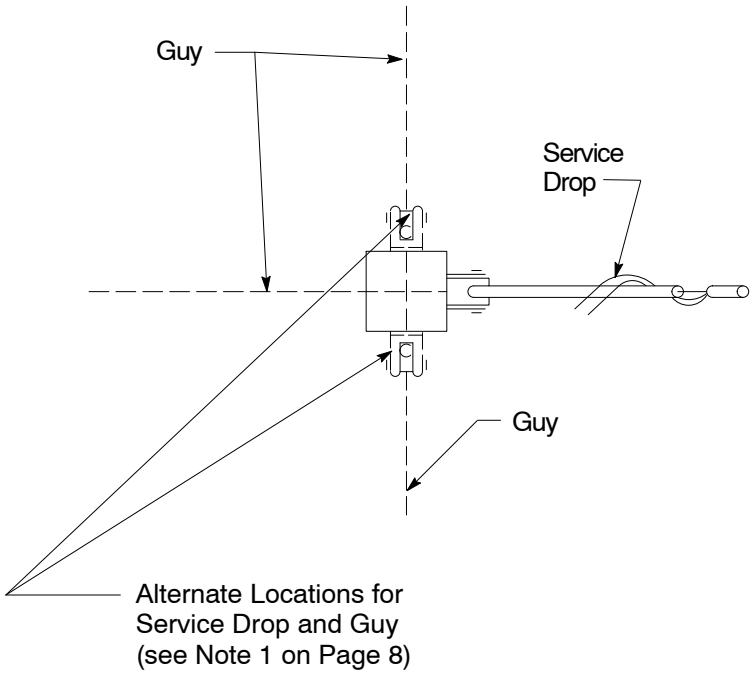



**Figure 4**
**Open Insulated Wire Construction**
(For use when the load requires a larger service drop conductor)




**Detail A**
**See Figure 16 on Page 14**

## *Permanent Installations*

**Notes**

1. Locate the guy in line with the service drop. The guy must be maintained taut.
2. Grounding and bonding, by the customer, must be in accordance with NEC and local ordinances (see Note 20 on Page 5), 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 vertical 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 on Page 3. Consult the PG&E project coordinator for the other approved methods for **soft** soil.

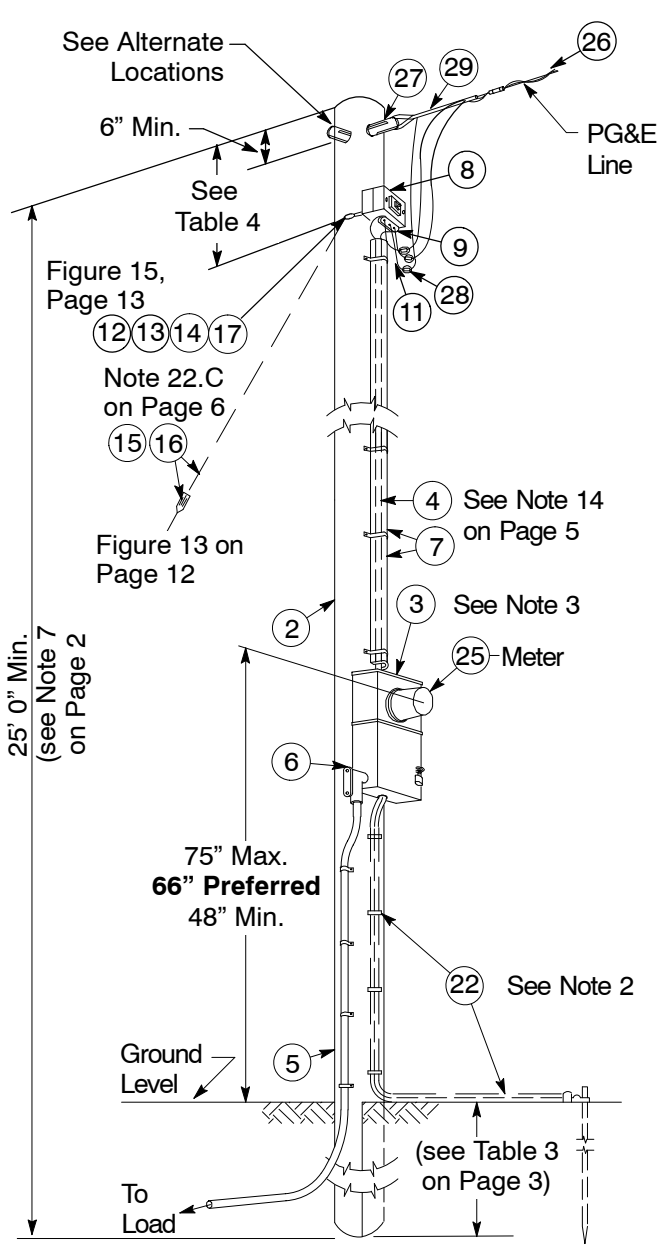



**Figure 5**
**Service Drop Cable to Underground Line**

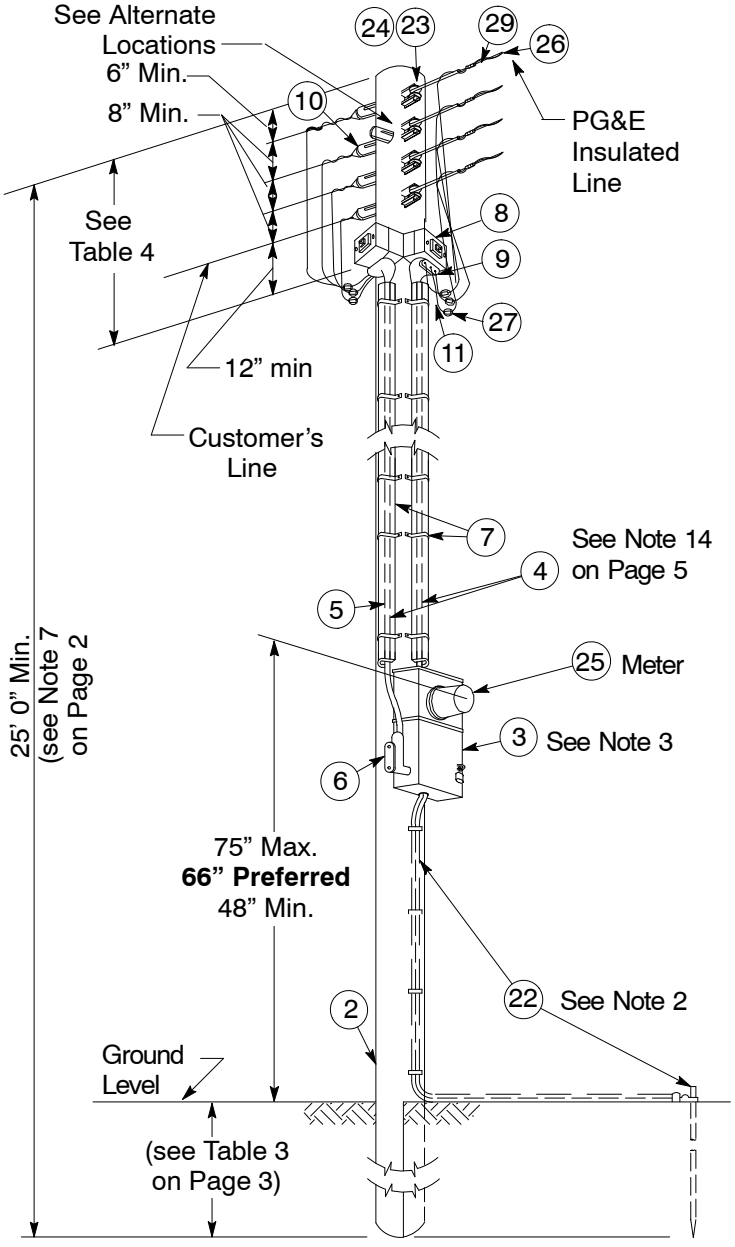
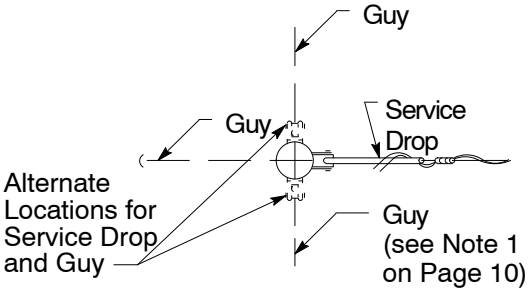



**Figure 6**
**Service Drop Cable to Overhead Line**

## *Permanent Installations (continued)*




**Detail B**
**See Figure 5 and Figure 6 on Page 10**

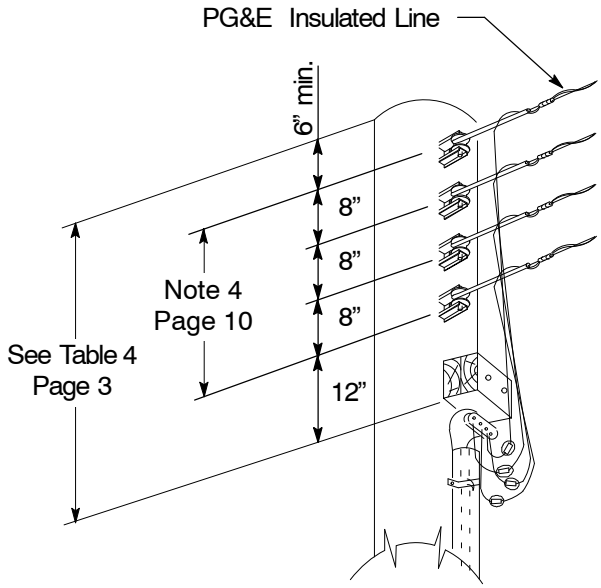



**Figure 7**
**Open Insulated Wire Construction**
(for use when the load requires a larger service drop conductor)

## *Method of Covering Metal Conduits and Attaching Coverings on Wood Poles*

**Notes**

1. Strap PVC conduit to the pole with 2–hole heavy duty 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.

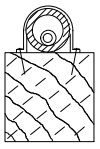


**Figure 8**
**PVC Conduit**
(see Note 1)

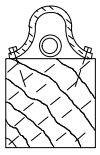


**Figure 9**
**PVC Molding**
(see Note 2)

## *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.

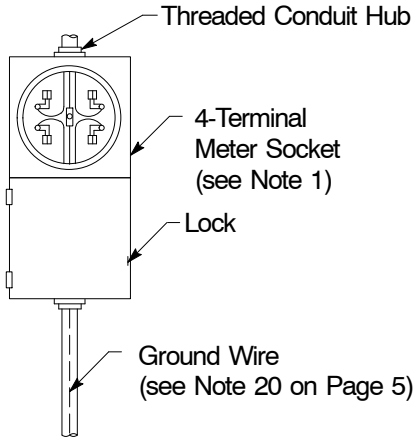



**Figure 10**
**120/240 V, 3-Wire**
**With WHM, Service Switch, and Receptacle in Weatherproof Cabinet**
(see Note 2)

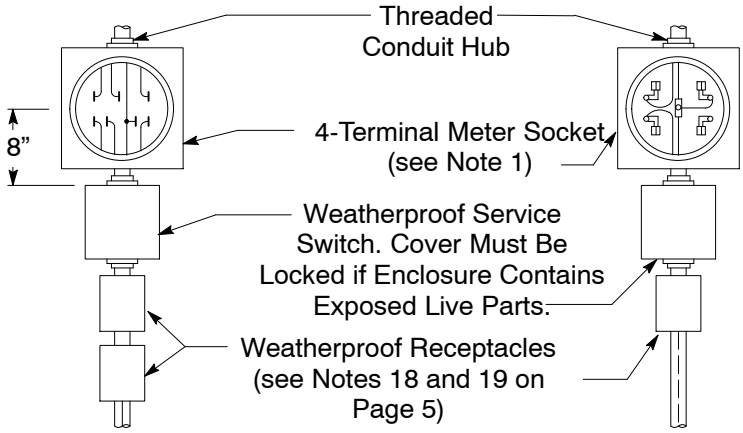



**Figure 11**
**120/240 V, 4-Wire Delta**
**With Weatherproof Service Switch and Receptacles**
(see Note 2)



**Figure 12**
**120/240 V, 3-Wire**
**With Weatherproof Service Switch and Receptacles**
(see Note 2)

## *Details of Anchors, Guying Materials, and Brace*

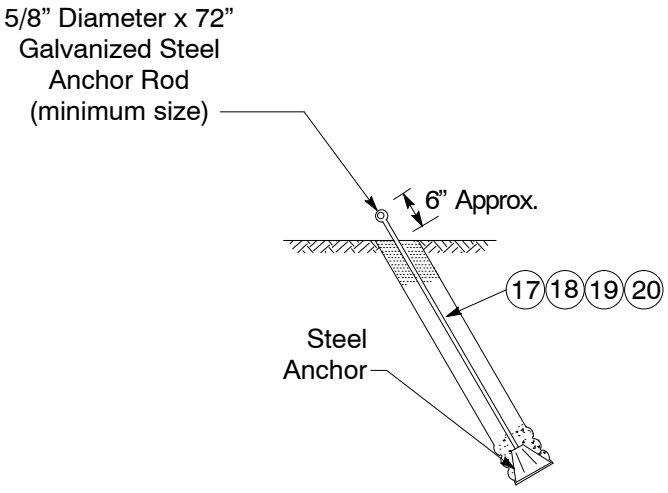



**Figure 13**
**Steel Anchor**

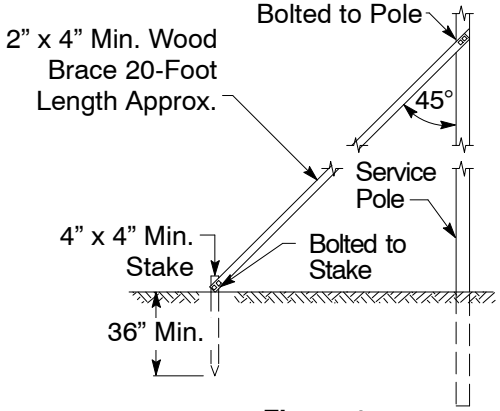



**Figure 14**
**Wood Brace**
(for use with temporary pole only)

**Note:** Use 1/2 Galvanized Machine Bolts, and 1" x 1" Diameter Curved Washers to attach wood brace to stake and pole.

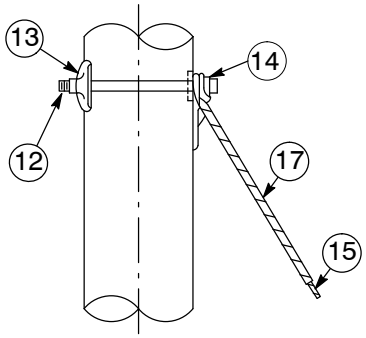



**Figure 15**
**Guying Materials**

## *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 16 on Page 14 and Figure 17 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 17 on Page 16. Furthermore, periscopes must be installed and adequately braced in accordance with Figure 17 on Page 16 and the “Electric Service: Overhead” Section of the *Electric and Gas Service Requirements Manual* (Greenbook).

3. Temporary Poles (Figure 16 on Page 14)

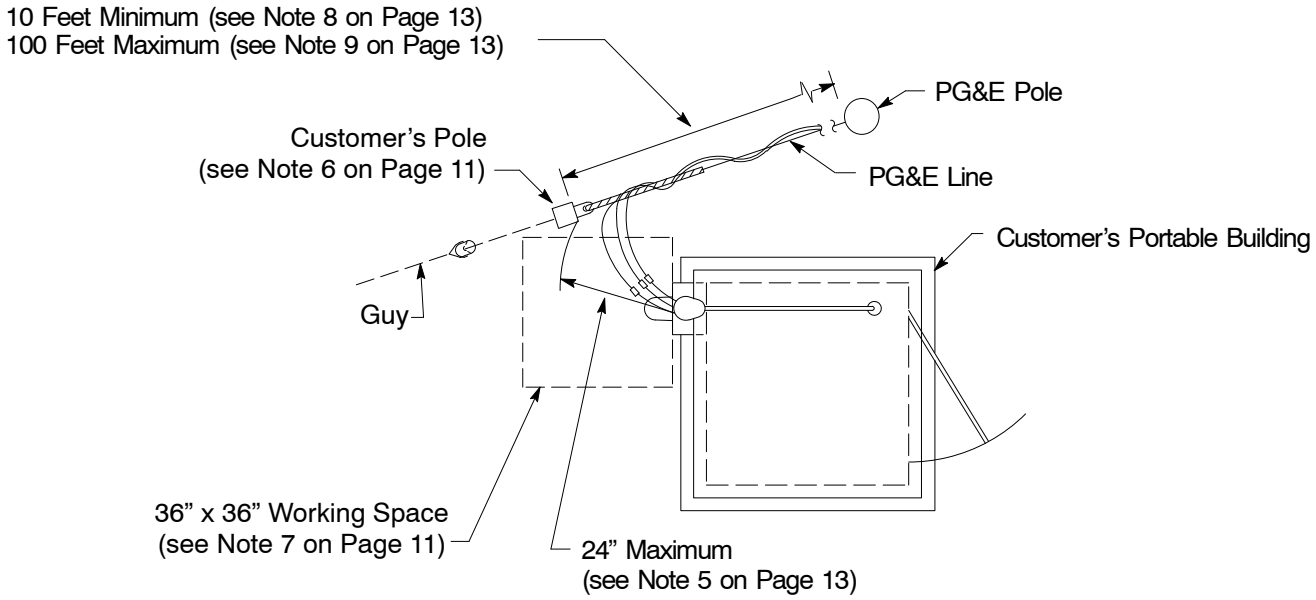
   Customer-owned temporary poles are required for support of PG&E’s overhead service wires if the temporary building to be served is considered by PG&E as **not substantial**.

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)*



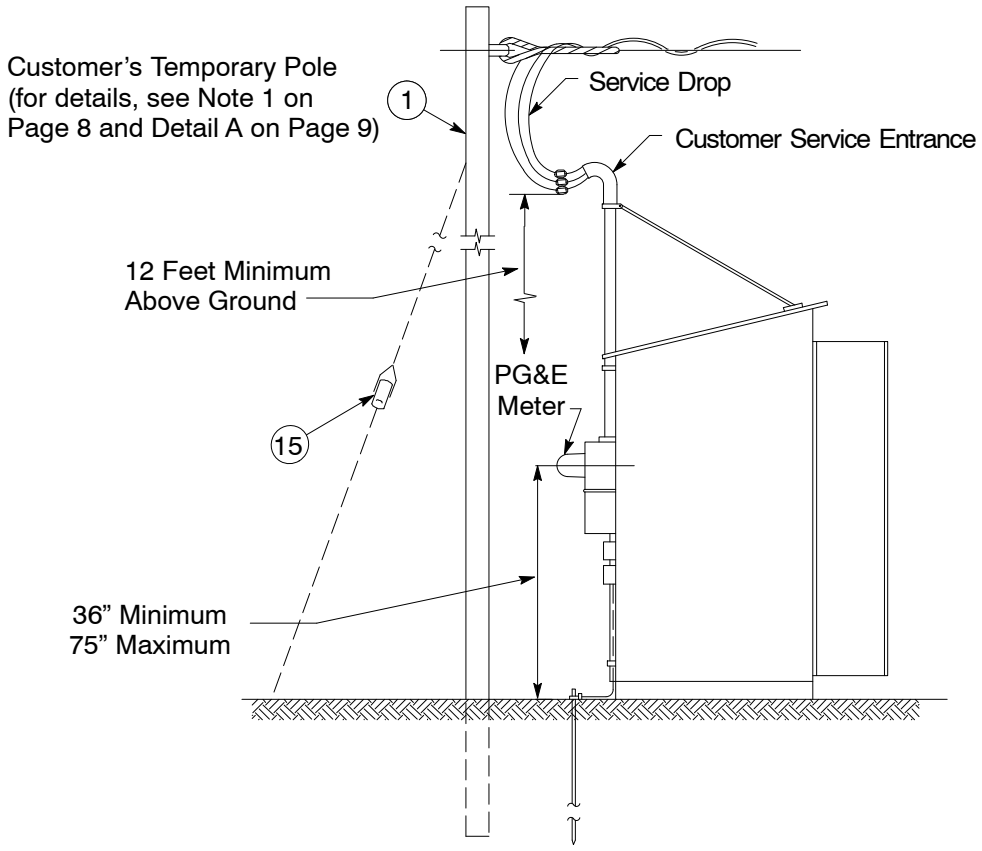




**Figure 16**
**Portable Structure (non-substantial)**
(see Note 2 on Page 11)

## *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)*

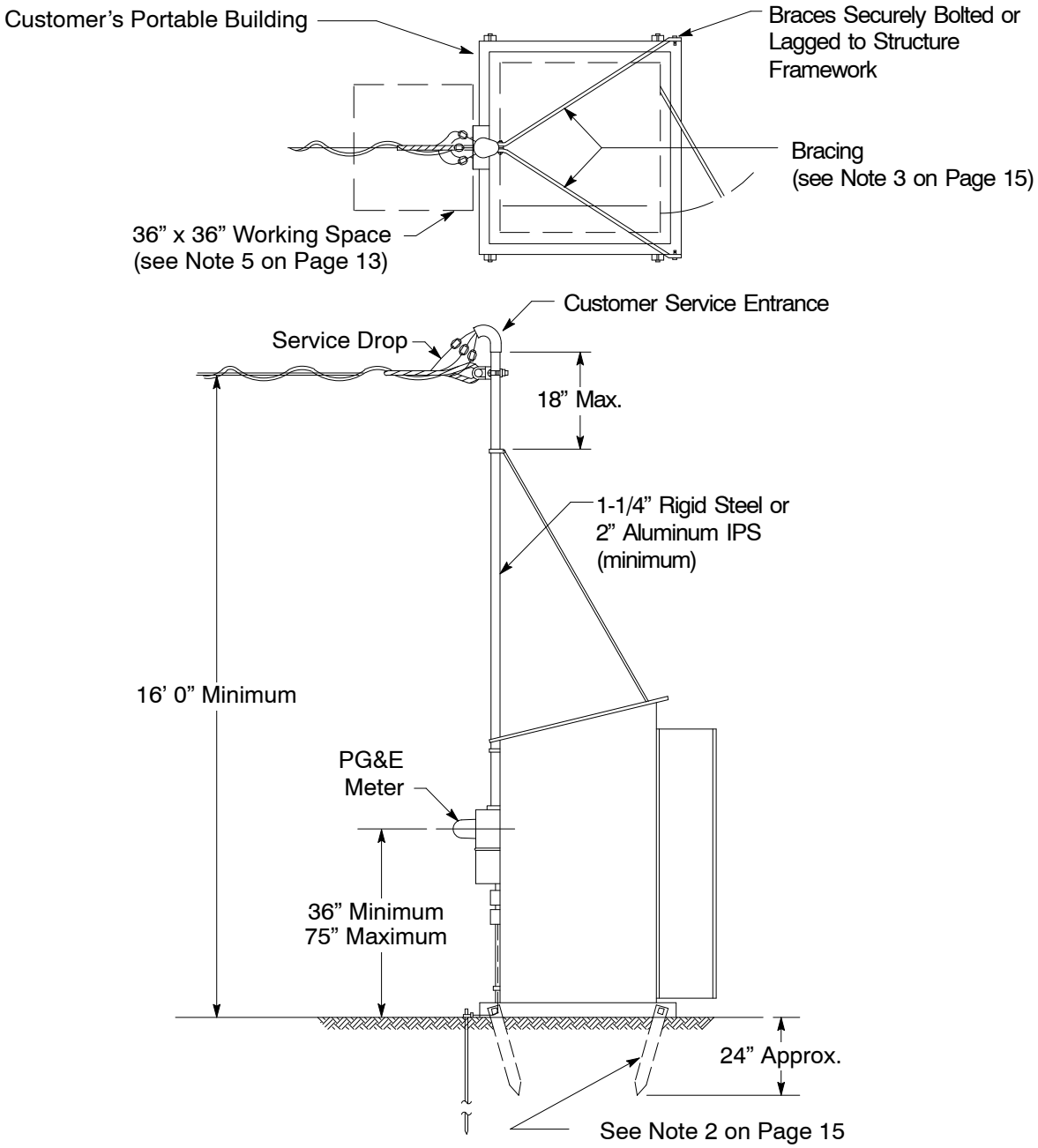



**Figure 17**
**Portable Structure - Substantial**
(see Note 2 on Page 13)

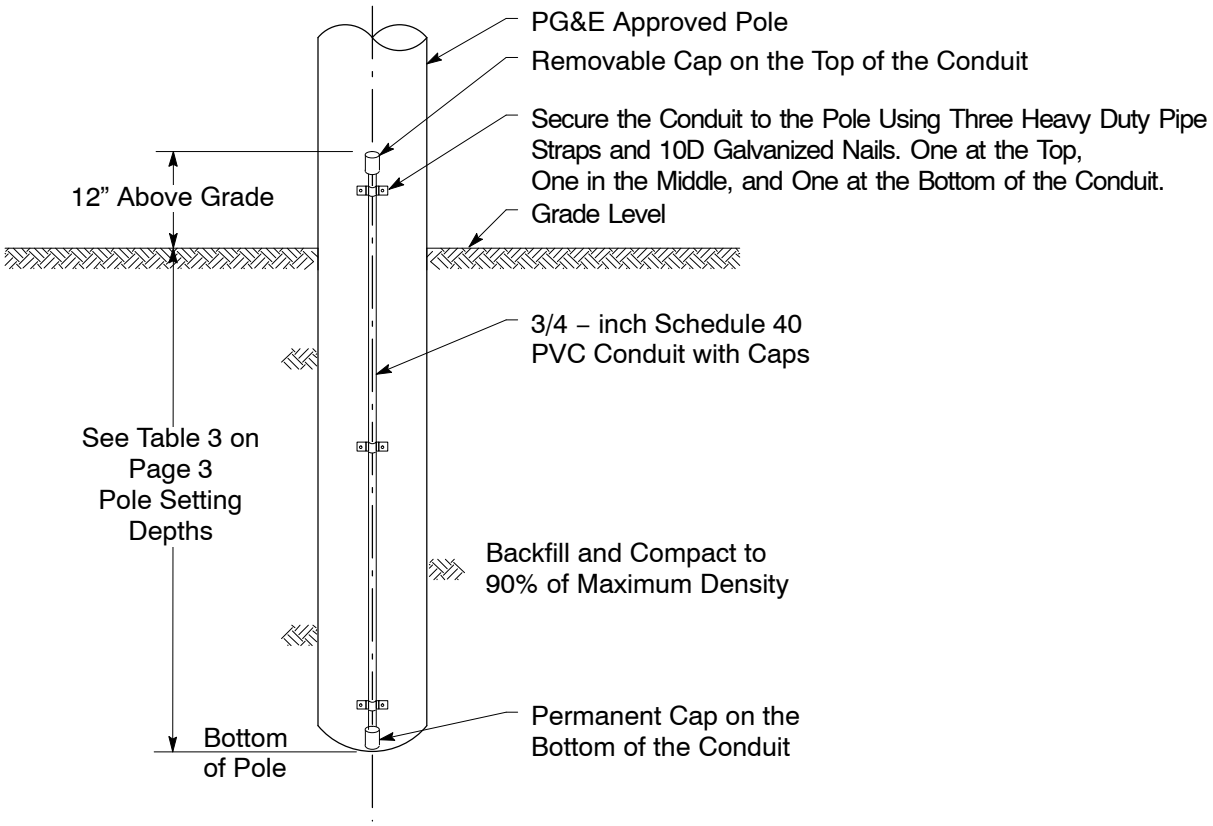



**Figure 18**
**Pole Depth Verification**

**Revision Notes**

Revision 21 has the following changes:

1. Updated Note 3 and Note 4 on Page 1.
2. Updated Note 5, Note 7.D. and Note 7.F., and Note 8 on Page 2.
3. Updated Table 1 and Footnote 1 on Page 3 regarding approved pole suppliers.
4. Revised Table 2 on Page 3 with new pole treatment and pole species.
5. Revised Footnote 2 in Table 4 on Page 3.
6. Revised Note 21 on Page 5.
7. Revised Note 26 on Page 6.
8. Corrected Figure 2 and Figure 3 on Page 8.
9. Corrected Figure 5 and Figure 6 on Page 10.