

### **2019 CPS Energy Service Standards**

# **Site Ready [Underground]**

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## Underground Service – Site Ready Process

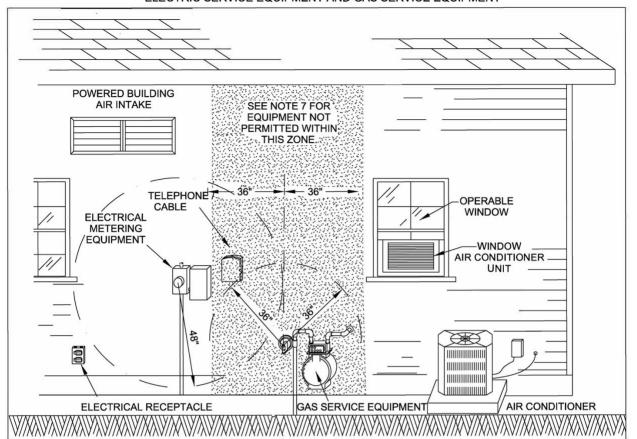
☐ Sign and return any required easements to CPS Energy.

# □ Install all equipment in compliance with the diagrams below. □ If you are digging your own trench, ensure it complies with Trench Design diagram below. □ Ensure the grade along the underground service route is within 6 inches of final grade. □ Securely mount electric meter loop and meter can on the structure's wall. □ Stub gas structure pipe out 26 inches above final grade. □ If you are installing gas service, ensure your home interior lines and appliances are ready for either your city's Gas Inspection or CPS Energy's Gas Rough-in Inspection, depending on your location. In addition to infrastructure preparation, ensure that you: □ Clear the service location of all water and drain lines, and underground facilities; including septic systems, culverts, irrigation systems, underground wiring, and other impediments. □ Clear all obstructions and/or debris from cable, gas, transformer, secondary enclosure, and meter location route.



### Underground Service - Site Ready Diagrams

# FIGURE 1800.21 CLEARANCE REQUIREMENTS ELECTRIC SERVICE EQUIPMENT AND GAS SERVICE EQUIPMENT

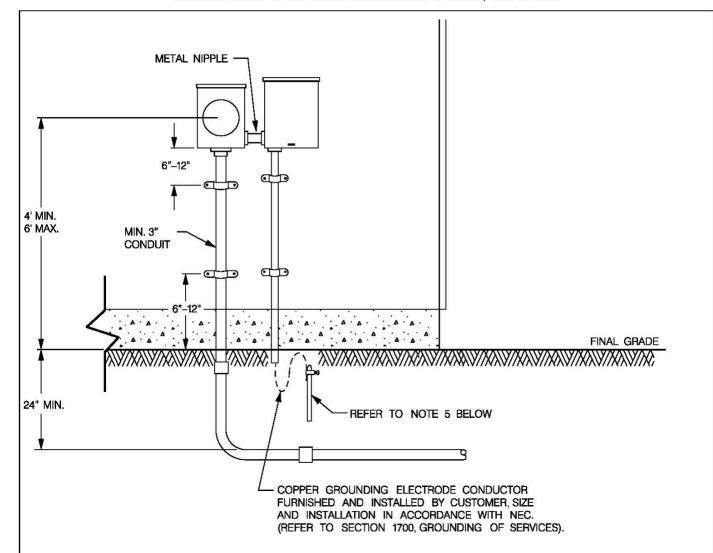


### NOTES

- 1. A MINIMUM OF 48" RADIAL DISTANCE SHALL BE MAINTAINED BETWEEN ELECTRIC METERS AND RECEPTACLES.
- A MINIMUM OF 36" RADIAL DISTANCE SHALL BE MAINTAINED BETWEEN THE GAS REGULATOR VENT AND ELECTRIC EQUIPMENT INCLUDING RECEPTACLES.
- 3. GAS METER, GAS REGULATOR, AND ASSOCIATED GAS SERVICE EQUIPMENT SHALL NOT BE LOCATED BENEATH ELECTRIC METER OR ELECTRIC SERVICE EQUIPMENT.
- 4. THE WORKING CLEARANCE IN FRONT OF THE SERVICE EQUIPMENT INCLUDING THE METERING EQUIPMENT SHALL NOT BE LESS THAN 3 FEET FOR SELF-CONTAINED METER SOCKETS AND NOT LESS THAN 4 FEET FOR TRANSFORMER RATED EQUIPMENT.
- 5. THE WIDTH OF THE WORKING SPACE IN FRONT OF THE ELECTRICAL EQUIPMENT SHALL BE THE WIDTH OF THE EQUIPMENT OR 30 INCHES WHICHEVER IS GREATER, IN ALL CASES THE SPACE SHALL PERMIT AT LEAST A 90 DEGREE OPENING OF EQUIPMENT DOORS OR HINGED PANELS.
- 6. THE WORK SPACE SHALL BE CLEAR AND EXTEND FROM THE GRADE , FLOOR , OR PLATFORM TO A HEIGHT OF 6 FEET 6 INCHES OR THE HEIGHT OF THE EQUIPMENT WHICHEVER IS GREATER.
- 7. COMBUSTION AIR INTAKES, EXHAUST FANS, VENT AND / OR OPERABLE WINDOWS AND DOORS SHALL MAINTAIN A 3 FOOT HORIZONTAL ZONE MEASURED FROM THE REGULATOR AND SUCH ZONE SHALL EXTEND VERTICALLY TO THE EAVE OF THE ROOF
- 8. THE GAS METER CANNOT BE LOCATED WITHIN 3 FEET OF ANY DOOR OR UNDER AND / OR WITHIN 3 FEET OF ANY WINDOW THAT OPENS.
- THE GAS METER CANNOT BE LOCATED WITHIN 10 FEET OF A MECHANICAL AIR INTAKE OR WINDOW INSTALLED AIR CONDITIONER.
- 10. IF LOCATED TO THE RIGHT OF A WINDOW, THE GAS SERVICE RISER MUST BE A MINIMUM OF 8 INCHES FROM WINDOW FRAME. IF TO THE LEFT OF THE WINDOW, THE CUSTOMER PIPING ENTERING THE STRUCTURE MUST BE A MINIMUM OF 8 INCHES TO THE LEFT OF THE WINDOW FRAME.



# FIGURE 700.1 UNDERGROUND RESIDENTIAL DISTRIBUTION SERVICE, ONE METER



### NOTES:

- 1. 200-AMPERE, SINGLE-PHASE METER SOCKET WITHOUT HUB FURNISHED BY AND INSTALLED BY CUSTOMER (REFER TO FIGURE 1800.1). CPS ENERGY MAKES CONNECTIONS IN METER SOCKET ONLY TO THE SERVICE LATERAL CONDUCTORS. CUSTOMER MAKES THE CONNECTIONS ON THE LOAD-SIDE OF SOCKET. (REFER TO FIGURE 1800.3).
- 2. SERVICE RACEWAY MUST BE MINIMUM 3 INCHES. IT MAY BE SCHEDULE 40 PVC CONDUIT, OR WHERE SUBJECT TO PHYSICAL DAMAGE, SCHEDULE 80 PVC CONDUIT SHALL BE USED. TWO 2-HOLE PIPE STRAPS MUST BE INSTALLED BY CUSTOMER TO MOUNT THE SERVICE RACEWAY TO THE STRUCTURE. SPACING WILL BE BETWEEN 6 AND 12 INCHES FROM BOTH THE METER SOCKET AND THE GROUND LEVEL. CUSTOMER SHALL PROVIDE A 2 12- INCH OR 3- INCH PVC MALE ADAPTER TO CONNECT SERVICE LATERAL CONDUIT TO EITHER A 200- AMPERE OR 320- AMPERE METER SOCKET RESPECTIVELY.
- 3. SERVICE EQUIPMENT SUITABLE FOR THE CONDITIONS FURNISHED AND INSTALLED BY CUSTOMER.
- 4. GROUNDING ELECTRODE SYSTEM INSTALLED AS PER NEC TO INCLUDE 5/8-IN X 8-FT GROUND ROD AS REQUIRED BY CPS ENERGY AT ALL CUSTOMER SERVICE LOCATIONS (REFER TO SECTION 1700).
- 5. CLEARANCES SHALL BE MAINTAINED FROM GAS METERS AND REGULATORS IN ACCORDANCE WITH SECTION 1800 AND FIGURE 1800.19..



DS-1
Gas & Electric Trench Joint with Other Utilities

