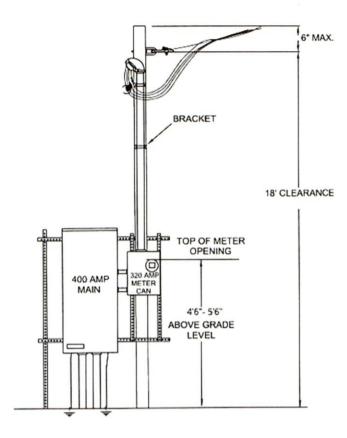
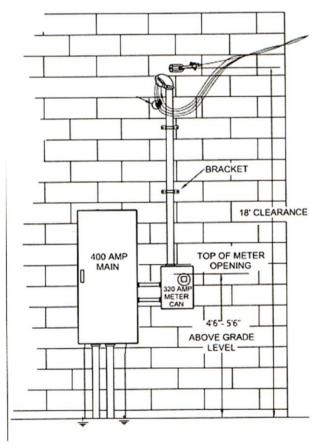
Columbus Electric Cooperative Inc.



Electric Service Requirements

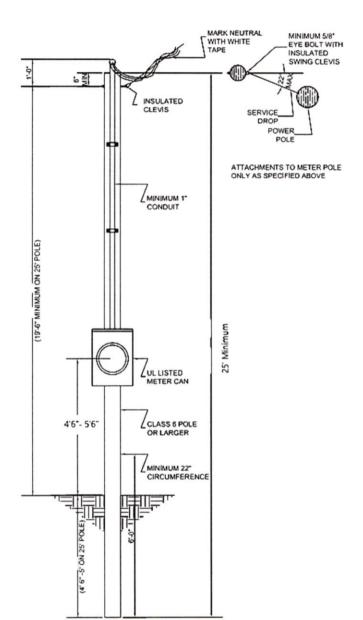




METER POLE SHALL NOT BE INSTALLED WITHIN 15' OF CENTERLINE OF CEC POWERLINE OR EQUIPMENT.

Notes

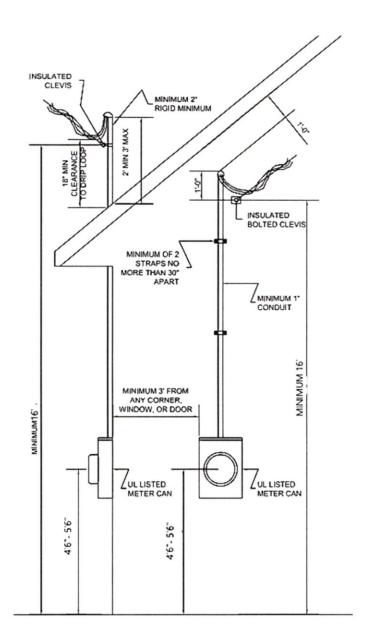
- CEC shall approve location of meter pole prior to Installation. CEC shall determine the maximum Service distance, which will depend on clearance, Conductor requirements and load.
- 2) Minimum pole length shall be 25'.
- 3) Pole circumference shall be a minimum of 24", measured 6' from the butt of the pole and 18" at the top and a CLASS 6 pole or larger.
- 4) Customer needs to provide a point of attachment at wall or frame rated for 300lbs pullout.
- Meter pole/meter loop installation shall pass state or local electrical inspection prior to connection.
- 6) If additional clearance is required a 30' pole shall be used CEC will notify if needed.
- 7) Minimum 24" lead from weatherhead.
- 8) At its sole discretion, CEC may elect to use instrument metering and install its own meter can as well as CT's when CEC decides such action will be beneficial the customer will be notified in which then the service will only need to have a fusible disconnect and a 320 amp meter can will not be required.
- For any clarification or questions regarding this standard contact CEC operations department



METER POLE SHALL NOT BE INSTALLED WITHING 15' OF CENTERLINE OF CEC POWER LINES OR EQUIPMENT

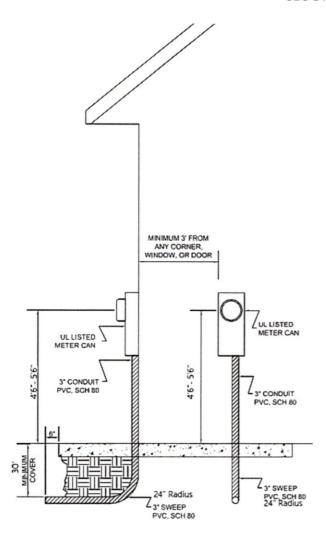
Notes

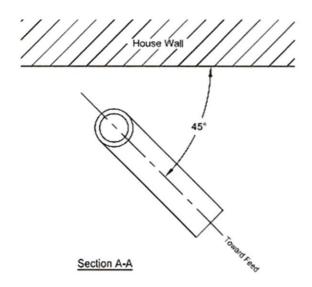
- CEC shall approve location of meter pole prior to Installation. CEC shall determine the maximum Service distance, which will depend on clearance, Conductor requirements and load.
- 2) Pole circumference shall be a minimum of 24", measured 6' from the butt of the pole and 18" at the top and a CLASS 6 pole or larger.
- The pole shall be set to depth shown in the drawing and shall not be brace in any manner except with CEC approved guy and anchors.
- 4) Meter pole/meter loop installation shall pass state or local electrical inspection prior to connection. Meter poles serving mobile homes will not be connected until the mobile home passes inspection by the state or local mobile home inspector.
- If additional clearance is required a 30' pole shall be used CEC will notify if needed.
- 6) Minimum 24" lead from weatherhead.
- 7) For any clarification or questions regarding this standard contact CEC operations department.



Notes

- CEC shall approve location of meter prior of installation.
 CEC shall determine the maximum service distance, which will depend on clearance, conductor requirements and load.
- 2) Riser must be securely attached to the wall of the building use toggle bolts for cinder block or plastic shields with appropriate crews for wood or brick. First supporting strap for the riser conduit shall be installed no more than three (3) feet from the top of the meter enclosure.
- 3) A wire holder and clamp or equivalent shall be installed if the service is terminated on the weather head.
- 4) In addition to NEC requirements CEC requires that point of attachments be 1' below the weather head and any point of attachments of 3' or more in height above the roof line or excess of 75' from CEC power line shall be guyed.
- Meter loop installation shall pass state or local electrical inspection prior to connection. Consumer facilities shall comply with NEC.
- 6) Minimum 24" lead from weatherhead.
- 7) For any clarification or questions regarding this standard contact CEC operations department.

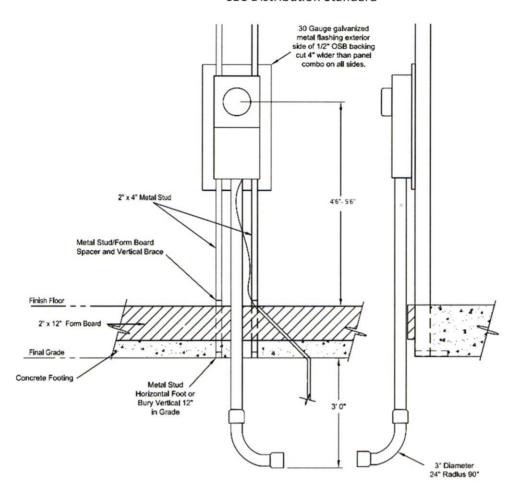




Notes

- CEC shall approve location of meter pedestal prior to intallation. CEC shall determine the maximum service distance, which depend on the conductor requirements and load.
- Meter shall be installed on the side nearest to CEC service connection point. The run shall be a straight line from service connection to the meter.
- 3) The riser from the duct to the meter shall be schedule 80 meeting all applicable requirements of the NEC. Riser conduit, 90 degrees elbows shall be shedule 80, Conduit between elbows shall be schedule 40.
- 4) Service conductor will be installed only in duct, unless specified otherwie by CEC. Minimum 3" schedule 40 shall be used with no bends between elbows. Duct being installed under roadways shall be a minimum of schedule 80.
- 5) Electrician shall run a minimum 200LB tested pull string in the duct and leave it for CEC.
- 6) No duct coupling allowed on duct riser above grade install bell end towards pedestal or transformer.
- 7) Meter pedestals installation shall pass state or local electrical inspection. Meter pedestals serving mobile homes will not be connected until the mobile home passes inspection by the state or local mobile home inspector.
- 8) For any clarification or questions regarding this standard conctact CEC operations department.

CEC Distribution Standard



METER FRAME SHALL NOT BE INSTALLED WITHING 15' OF CENTERLINE OF CEC POWER LINES OR EQUIPMENT

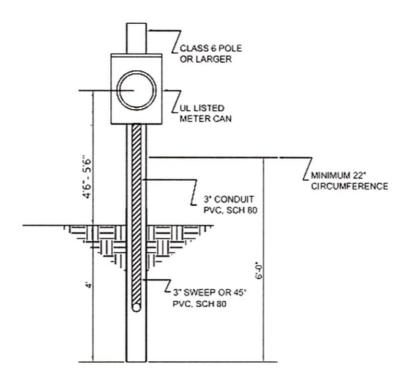
Notes

- CEC shall approve location of meter pedestal prior to intallation. CEC shall determine the maximum service distance, which depend on the conductor requirements and load.
- Meter shall be installed on the side nearest to CEC service connection point. The run shall be a straight line from service connection to the meter.
- 3) 90 degrees elbows shall be shedule 80,3" Conduit between elbows shall be schedule 40.
- 4) Service conductor will be installed only in duct, unless specified otherwie by CEC. Duct being installed under roadways shall be a minimum of schedule 80.
- Electrician shall run a minimum 200LB tested pull string in the duct and leave it for CEC.
- 6) Meter pedestals installation shall pass state or local electrical inspection. Meter pedestals serving mobile homes will not be connected until the mobile home passes inspection by the state or local mobile home inspector.
- For any clarification or questions regarding this standard conctact CEC operations department.

As of 9/01/2023 for ease of checking service without interruption CEC will no longer allow ring meter socket.

Permanent service Entrance

CEC Distribution Standard

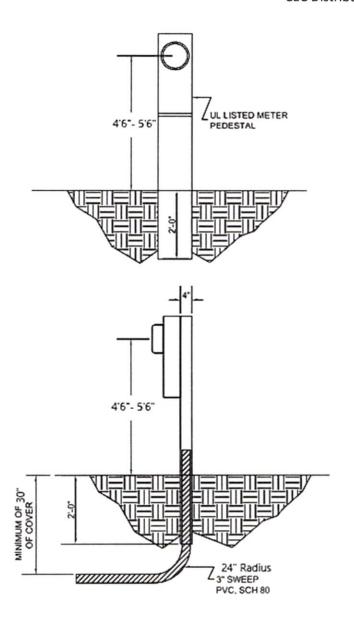


METER POLE SHALL NOT BE INSTALLED WITHING 15' OF CENTERLINE OF CEC POWER LINES OR EQUIPMENT Notes

- CEC shall approve location of meter pedestal prior to intallation. CEC shall determine the maximum service distance, which depend on the conductor requirements and load.
- Meter shall be installed on the side nearest to CEC service connection point. The run shall be a straight line from service connection to the meter.
- 90 degrees elbows shall be shedule 80,
 3" Conduit between elbows shall be schedule 40.
- Service conductor will be installed only in duct, unless specified otherwie by CEC. Duct being installed under roadways shall be a minimum of schedule 80.
- Electrician shall run a minimum 200LB tested pull string in the duct and leave it for CEC.
- 6) Meter pedestals installation shall pass state or local electrical inspection. Meter pedestals serving mobile homes will not be connected until the mobile home passes inspection by the state or local mobile home inspector.
- 7) Pole circumference shall be a minimum of 24", measured 6' from the butt of the pole and 18" at the top and a CLASS 6 pole or larger.
- 8) For any clarification or questions regarding this standard conctact CEC operations department.

As of 9/01/2023 for ease of checking service without Interruption CEC will no longer allow ring meter sockets.

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METER PEDESTAL SHALL NOT BE INSTALLED WITHING 15' OF CENTERLINE OF CEC POWER LINES OR EQUIPMENT

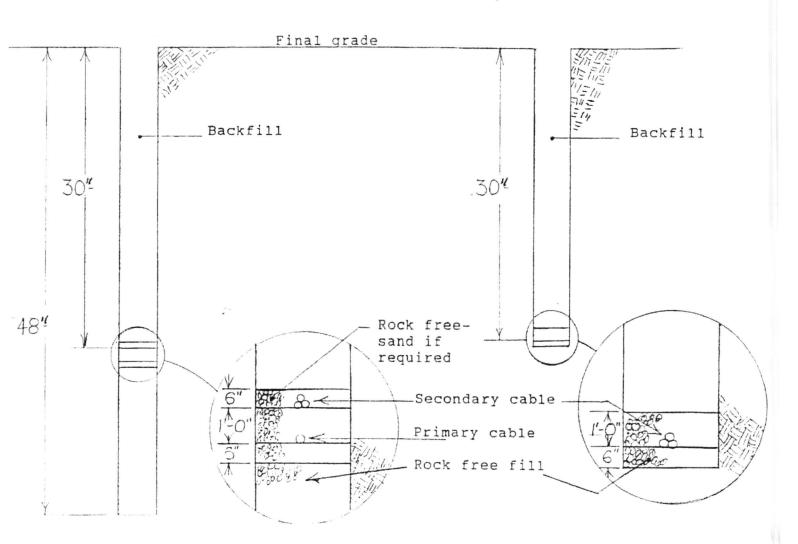
Notes

- CEC shall approve location of meter pedestal prior to intallation. CEC shall determine the maximum service distance, which depend on the conductor requirements and load.
- Meter shall be installed on the side nearest to CEC service connection point. The run shall be a straight line from service connection to the meter.
- 3) 90 degrees elbows shall be shedule 80, 3" Conduit between elbows shall be schedule 40.
- Service conductor will be installed only in duct, unless specified otherwie by CEC. Duct being installed under roadways shall be a minimum of schedule 80.
- Electrician shall run a minimum 200LB tested pull string in the duct and leave it for CEC.
- 6) Meter pedestals installation shall pass state or local electrical inspection. Meter pedestals serving mobile homes will not be connected until the mobile home passes inspection by the state or local mobile home inspector.
- 8) For any clarification or questions regarding this standard conctact CEC operations department.

COLUMBUS ELECTRIC COOPERATIVE STANDARD FOR

DITCH REQUIREMENTS FOR PRIMARY AND SECONDARY UNDERGROUND SERVICE

- 1. Consumer is required to furnish ditch and appropriate backfill. Sand is required if material excavated from trench is not suitable.
- 2. All meter loops and/or pedistals must have a state electrical permit, usually provided by a licensed electrical contractor..
- 3. Must have a driven ground rod.
- 4. No water or gas lines can be installed within five feet of the power line.
- 5. Telephone or cable television may be installed in the same trench as power, but must be separated from the power line by a minimum of 12 inches.
- 6. Primary power cable is to be installed in a 48 inch ditch; secondary or service cable in a 30 inch ditch.
- 7. In the event sand backfill is required, no rock will be acceptable, must be washed sand or equivalent.



COLUMBUS ELECTRIC COOPERATIVE, INC. Trenching & Conduit Installation

The applicant for an underground extension shall provide and install the conduit system at his expense, including the trenching, back filling (including any imported back fill required), compaction, repaving and earthwork for pull boxes or other preparation for electrical apparatus necessary for the installation of underground facilities, all in accordance with the specifications and schedules of the Cooperative.

The applicant is responsible for adhering to applicable underground locate regulations prior to commencement of construction. The applicant is also required to provide all necessary surveying which may be needed to assure that the underground facilities are placed properly within the easement with the correct offsets from property lines, roads proposed sidewalks, and other utility facilities. The preservation and/or replacement of any existing survey monuments, which may be disturbed during the course of construction of the conduit system is the responsibility of the applicant. The necessary permits which may be required by the applicable jurisdictional authority, and all work performed shall meet the applicable governmental compaction and restoration standards for road cuts and street repair.

Current OSHA trench safety requirements shall be strictly observed.

Note: In some applications the Cooperative may elect to install secondary cable and/or primary cable in duct, which could eliminate the need for the applicant to install a conduit system or reduce the amount of conduit required. Please contact the Cooperative to discuss the method and requirements for your particular installation.

Minimum depth of facilities from **FINAL** grade shall be **30"** for secondary (below 600 volt) conduits and **48"** for primary (above 600 volt) conduits.

Note: Trenching depths specified are minimums as measured from final grade to the top surface of the conduit. Minimum depth may be increased due to applicable jurisdictional authority.

The minimum specifications for conduit installation for use by the Cooperative shall be as follows:

<u>Single phase</u> primary and secondary facilities shall be - <u>Minimum</u> 3" Schedule 40 Electrical Grade PVC.

Minimum sweep size for Cooperative – owned primary facilities shall be 36" radius, 3" diameter Schedule 80 Electrical Grade PVC.

Minimum sweep size for Cooperative – owned secondary facilities shall be 24" radius, 3" diameter Schedule 40 Electrical Grade PVC.

When underground facilities are to be placed underneath public roadways the following requirements shall apply:

- 1. The conduit underneath the roadway shall be a minimum of schedule 80 Electrical Grade PVC.
- 2. If CIC (cable in conduit) is to be installed on a single phase crossing, a minimum of 4" schedule 80 Electrical Conduit shall be installed underneath the roadway.

The applicant shall comply with all Federal, State, County and Local requirements.

The Cooperative must approve variations from this minimum for special installations in writing prior to installation and acceptance of the conduit system.

All stubbed conduits shall have openings covered.

Minimum horizontal separation between conduits installed for electrical use and water, gas, and sewer utilities shall be 48"; at crossings, the minimum vertical separation shall be 12". Minimum separation in all directions between primary or secondary conduits and communications utilities is 12".

When applicable, primary conduits shall be installed on alley (or street) side of trench and secondary conduits shall be installed on lot side of trench.

The Cooperative shall provide specific excavation, <u>back fill and compaction</u> requirements for the electrical apparatus necessary for the installation of the facility.

Warning tape (supplied by the Cooperative) shall be installed in all primary and secondary trenches one (1) foot above the cable in duct or conduit.

Applicants shall install a pull string in all conduits.

The trench bottom in which conduit will be placed shall be smooth, flat and without surface irregularities and two (2) inches of bedding material shall be installed to provide the required bedding surface. The applicant shall provide and install four (4) inches of approved bedding material over all electrical conduits. The material used for bedding shall be 1" minus material. Sand is also acceptable. Natural material is acceptable provided it contains no rock larger than 1" in their greatest dimension.

Maximum change in the trench bottom elevation shall not exceed one foot over a ten-foot length. Bedding material as required may be used to meet this requirement.

The Cooperative shall be notified 24 hours prior to back filling to allow for inspection. Upon Cooperative inspection, any required changes shall be at the applicant's expense.

Please contact CEC for information regarding installation of three phase facilities.

Columbus Electric Cooperative, Inc.

P.O. BOX 631 * 900 NORTH GOLD * DEMING, NEW MEXICO 88031 * 505-546-8838

Concrete Transformer Pad Specifications

Transformer Pad Notes:

- 1. Concrete testing, 3000 lbs minimum per square inch; 4% to 6% entrained air, ¾ " maximum size aggregate.
- 2. Reinforcing steel, ATSM A615 grade 60, place approx. 6" O.C. each way and securely tied together.
- 3. Minimum concrete cover over reinforcing steel 2 inches unless noted.
- 4. Wood float finish, leaving no depressions.
- 5. Tool or chamfer exterior edges.
- 6. Twele (12) inches thick.
- 7. Locate top of pad 6" minimum above final grade.
- 8. Location of pad must be accessible by heavy equipment and the <u>front</u> of pad must have a minimum of 10 feet open clearance for operational access.