



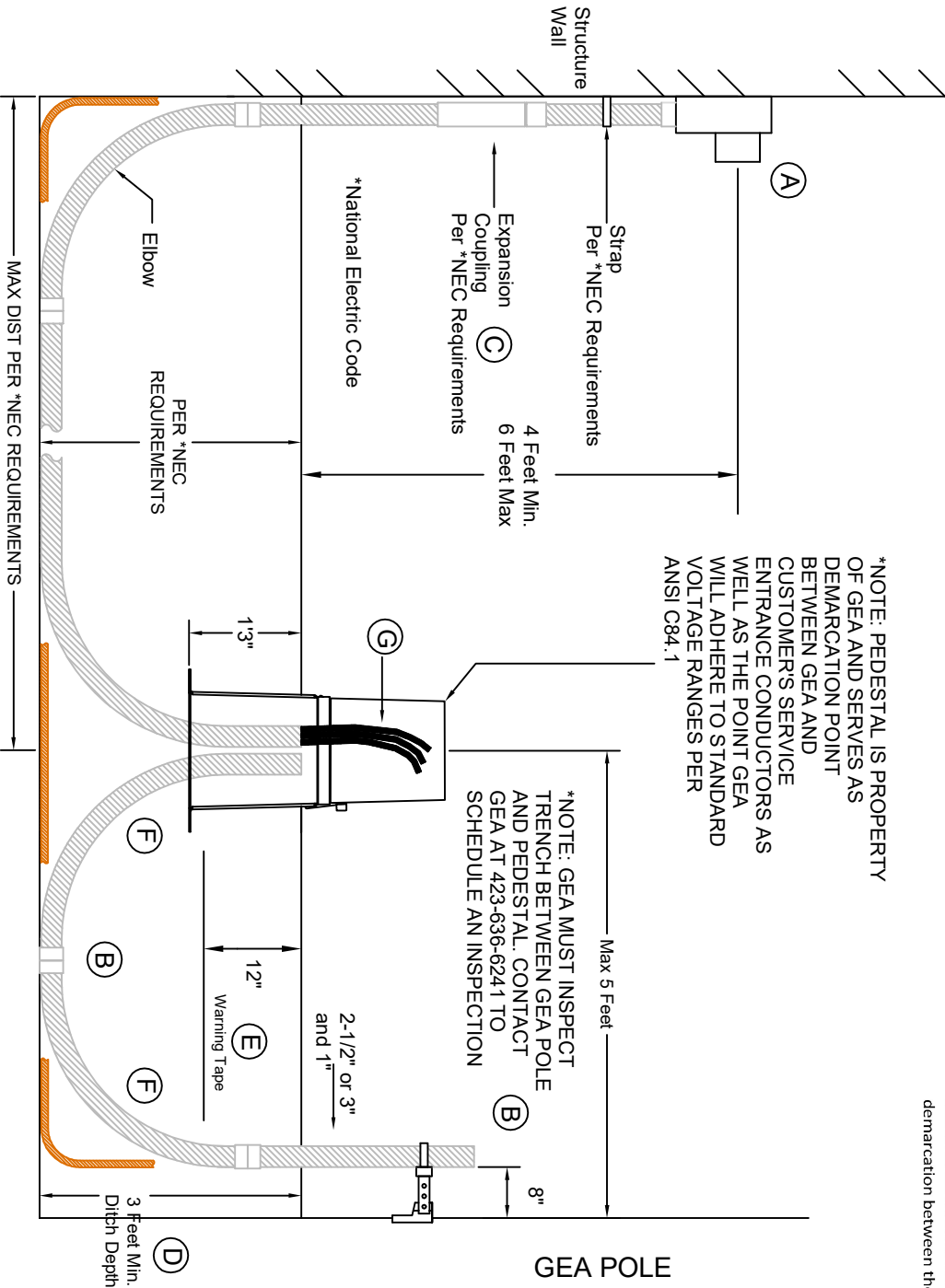
NON-STANDARD UNDERGROUND ELECTRIC SERVICE REQUIREMENTS TO A STRUCTURE

100-200 AMP 120/240 Volt Single Phase

THE REQUIREMENTS OF THIS SPECIFICATION ARE EFFECTIVE JANUARY 2, 2024 AND SUPERSEDE ALL PREVIOUS PUBLICATIONS

NOTE: BEFORE GEA INSTALLS ANY FACILITIES ON PRIVATE PROPERTY, AN EASEMENT WILL NEED TO BE OBTAINED.

NOTE: THE STATE ELECTRICAL INSPECTOR MUST INSPECT CONDUIT/CONDUCTORS INSTALLED IN TRENCH BETWEEN METER BASE AND PEDESTAL BEFORE TRENCH IS BACKFILLED. AN INSPECTION PERMIT WILL BE NEEDED. VISIT THE TN DEPARTMENT OF COMMERCE AND INSURANCE WEB SITE FOR PURCHASE INFORMATION



NOTE: PEDESTAL IS PROPERTY OF GEA AND SERVES AS DEMARCATION POINT BETWEEN GEA AND CUSTOMER'S SERVICE ENTRANCE CONDUCTORS AS WELL AS THE POINT GEA WILL ADHERE TO STANDARD VOLTAGE RANGES PER ANSI C84.1

NOTE: GEA MUST INSPECT TRENCH BETWEEN GEA POLE AND PEDESTAL. CONTACT GEA AT 423-636-6241 TO SCHEDULE AN INSPECTION

GEA POLE

Greeneville Energy Authority
423-636-6200
www.mygea.net

The purpose of this specification is to allow the customer an alternate method of installing an underground service if they so choose or in the case that an underground service does not meet the requirements of GEA's "STANDARD UNDERGROUND ELECTRIC SERVICE REQUIREMENTS TO A STRUCTURE".

*If a customer chooses to install an underground electric service as depicted in the drawing, the cost for the secondary pedestal that is installed by the customer is \$400, if delivered and installed by GEA, the cost is \$800.

*If the requirements of the "STANDARD UNDERGROUND ELECTRIC SERVICE REQUIREMENTS TO A STRUCTURE" are not met, the customer has the option of modifying the installed conduit system to accommodate the drawing depicted in this specification. In this case the cost the customer will need to pay before connecting is \$400 if the secondary pedestal is installed by the customer or \$800 if delivered and installed by GEA. If the customer wants GEA to modify the conduit system the cost the customer will need to pay before work begins is \$1,500.

**In either situation above, the customer will be responsible for installing and maintaining the service entrance conductors from the meter base to GEA's pedestal. The pedestal will be the point of demarcation between the customer's facilities and GEA facilities.

- A. **UG METER BASE:** Meter base must be mounted between 4 feet and 6 feet above finished grade. Meter base must be grounded per National Electric Code requirements.
- B. **CONDUIT:** All underground services maintained by GEA shall be installed in conduit regardless of soil conditions. **NO LB'S, LL'S OR LP'S ARE PERMITTED ON THE LINE SIDE OF METER BASE.**
 - Customer to furnish and install conduit from GEA pole to GEA pedestal (see drawing); if customer wants GEA to install, all costs are to be paid before any work begins. All joints to be glued.
 - 2-1/2 inch or 3 inch UL listed Schedule 40 PVC conduit is required for the electrical service. Customer must also furnish and install a 1 inch UL listed Schedule 40 PVC conduit for future communications/meter reading. The 1 inch conduit is to be installed in close proximity and preferably in contact with the electrical service conduit. **NOTE: THE 1 INCH CONDUIT CANNOT BE USED BY ANY OTHER ENTITY DUE TO ITS INSTALLED LOCATION. THE CONDUIT WILL NOT MEET NESC RULE 320B2C FOR MINIMUM SEPARATION REQUIREMENTS.**
- GEA WILL NOT ACCEPT HEATED CONDUIT REGARDLESS OF THE METHOD USED.
- Conduit at GEA pole to be installed in contact with GEA stand-off bracket; if GEA stand-off bracket is not present during installation, install conduit 8 inches away from surface of pole. Seal the end of all conduits that do not enter an enclosure.
- C. **EXPANSION COUPLING:** Per NEC requirements.
- D. **TRENCH 3 FEET DEEP MINIMUM:** Customer to open and close service trench from GEA pole to GEA pedestal unless customer wants GEA to install; all costs are to be paid before any work begins. Depth of trench to be a minimum of 3 feet. If rock is encountered and minimum depth cannot be achieved, conduit can be encased with 3 inches of concrete. Water lines can cross electric lines as long as a minimum of 12 inches of separation is maintained. Communication lines can be installed in the same trench as electric as long as a minimum of 12 inches of separation is maintained. Refer to GEA "TRENCH REQUIREMENTS" located at www.mygea.net or obtain a copy from GEA Engineering Department. Trench must be backfilled before GEA can energize service.
- E. **WARNING TAPE AND TRENCH INSPECTION:** Warning Tape must be installed and secured to all vertical elbows between GEA pole and secondary pedestal. The warning tape can be in the trench or on the ground beside the trench at time of inspection. GEA will not install facilities unless warning tape is present. To schedule a trench inspection, contact GEA Engineering Department at 423-636-6241.
- F. **ELBOW:** Must use at least 24 inch radius, 90-degree elbows at GEA pole and at pedestal. Install elbows back to back. For the communication conduit, use 5.75 inch radius (standard) elbows.
- G. **CUSTOMER SERVICE ENTRANCE CONDUCTORS:** Customer must furnish and install service entrance conductors from meter base to GEA pedestal. Refer to the NEC for correct size and type.

NOTE: 1 INCH COMMUNICATION DUCT NOT SHOWN IN ITS ENTIRETY FOR CLARITY