## **General Conduit Installation**

The following specifications shall be followed to ensure an acceptable installation:

- 1. Conduit shall be installed according to the design provided by the WCE. Revisions or field changes are not allowed unless prior, documented approval is given by the WCE.
- 2. Member/Contractor must contact the utility one-call system when trenching or digging.
- 3. Right-of-way and side property lines shall be marked or a GIS map provided to ensure proper installation of conduit and placement of WCE equipment, such as transformers, pedestals, and sectionalizers.
- 4. Conduit shall be installed within proper utility easements.
- 5. The Company must inspect and approve the conduit installation, including street crossings, before installing the electrical facilities. <u>Once requested, a WCE employee will inspect within one business day</u>. <u>Conduit trenches shall not be backfilled until approved by the WCE employee</u>.
- 6. The Member/Developer shall correct conduits or vaults that are improperly installed, which includes outside of easements, improper depth, street crossings relative to lot lines, etc.
- 7. If changes to the conduit system or service equipment locations are required due to replatting or other modifications in the property lines, it is the Member's/Developer's responsibility to make these changes before WCE will install any cable or equipment.
- 8. Plats must be recorded, the contract signed, and monies paid before the WCE will install any cable or equipment in the conduit system.
- 9. Any relocation or leveling of WCE facilities after they have been installed will be at the members'/developer's expense.
- 10. The WCE shall provide conduit, vaults, and service domes. The Member/Developer shall install all vaults, service domes, and conduit.

- 11. Conduit joints shall be spliced together with WCE approved mechanical couplers. Bands, clamps, glue, or other connecting devices are not allowed.
- 12. Conduits, including street crossings, shall be installed deep enough to allow a minimum of 41" of cover for primary conduits when measured from final grade(diagram #1). Secondary Conduits should be a minimum of 30"(diagram #2). Different depths may be required for switchgears, sectionalizers, etc.. Conduit should be installed when the grade is within 6" of the final grade.
- 13. In areas of solid rock or obstructions that make these trench depths impractical, the depth may be reduced to a minimum of 12", and 3" of red concrete is poured on top of the conduit.
- 14. Conduit at transformers, service pedestals, and sectionalizer locations shall turn up as shown on WCE service drawings using 36" radius bends.
- 15. Open ends of conduit shall be capped without PVC glue or covered with duct tape to prevent debris and wildlife from entering. Counduit shall be left 2' above grade.
- 16. Conduit shall be 2" for primary wire and 2.5-3" for service wire. Other utilities shall be laid a minimum of 2' from the WCE conduit.
- 17. Backfill shall be clean and adequately tamped to prevent future settling.
- 18. Care should be taken during backfilling not to damage the conduit or disturb the arrangement of vertical conduit that has been turned up at transformers, pedestals, or sectionalizer locations.
- 19. No pull tape or string shall be installed.
- 20. If WCE is unable to install cable in conduit due to plugged, broken, or otherwise damaged conduit after it has been inspected and backfilled, it is the developer's/Member's responsibility to make repairs.
- 21. The conduit shall be installed in a straight line if possible. Conduit runs are allowed no more than 3 bends total. Only two vertical 90° bends are allowed. If a horizontal turn is needed, one horizontal bend up to 90°.
- 22. Red danger tape may be installed 6" 12" below the final grade

- 23. If multiple WCE conduits are installed, they shall have no more than 4 inches of fill between conduits.
- 24. WCE shall supply the necessary transformer and service dome vaults. The vault must be level, 6"-8" below the final grade(diagram #3&4), tamped, and backfilled. Adequate provision must be made to prevent settling.
- 25. Transformers must be located so that it is accessible to the WCE crews at all times. Three-phase transformers must be within 20 feet of an all-weather road. No portion of the building shall extend over the transformer. Sectionalizing cabinets and transformers need 10 feet of clear, unobstructed working space directly in front of the sectionalizing cabinet (in the direction from which the sectionalizing cabinet is opened). Additionally, 3 feet of clearance is necessary around the sectionalizing cabinet in all other directions.





