

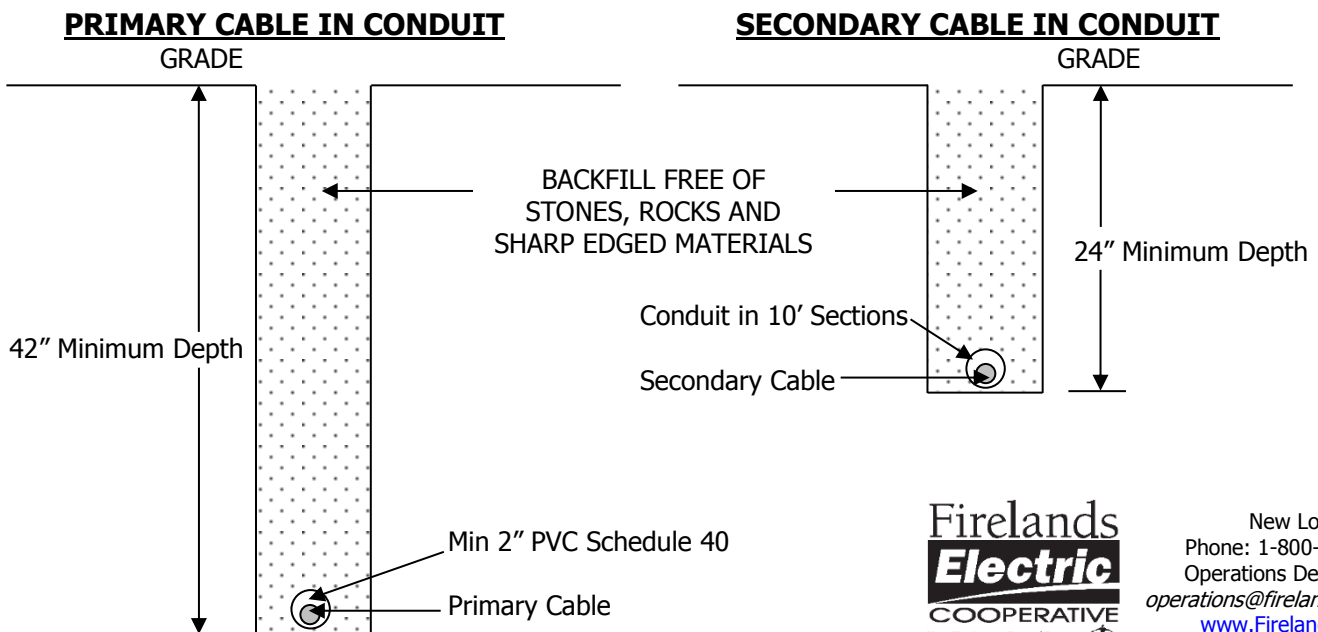
**FIRELANDS ELECTRIC COOPERATIVE, INC.**  
**TRENCHING GUIDELINES FOR UNDERGROUND SERVICES**

**PRIMARY UNDERGROUND 7200 VOLT CONDUCTORS:**

- 1) Depth of the trench shall be 42-inches minimum.
- 2) The trench shall be dug completely from the meter location to the underground source pole.
- 3) All other utilities lines are required to be off set from trenched cooperative lines.
- 4) The trench shall be straight and direct as far as practical. If trench is longer than 1000-feet direct burial method will be used.
- 5) Conduit should be sloped to drain. A 36-inch radius sweep "L" is required at all 90° points, such as pole or transformer locations. Check with your Co-op for further information.
- 6) The bottom of the trench receiving direct buried cable should be relatively smooth undisturbed and well tamped earth without stones, rocks, or sharp edged materials.
- 7) Direct burial of cable requires a minimum 2-inches of sand in bottom of trench, and backfill with minimum 4" of sand covering cable.
- 8) All backfill shall be free from stones, rocks and materials that may damage the cable.
- 9) Minimum 2-inch diameter Schedule 40 PVC or other approved corrosion resistant rigid metal conduit shall be installed under all driveways, sidewalks, paved surfaces and large tree roots. Size of conduit is based on specifications. Check with your cooperative for further information.
- 10) All costs associated with conduit and trenching are at the members' expense. Member is responsible to install pull string in conduit and install warning tape in the trench, which is provided by the cooperative.

**SECONDARY UNDERGROUND 120/240 VOLT CONDUCTORS:**

- 1) Depth of the trench shall be 24-inch minimum.
- 2) When the excavation is in rocky soils, the entire bottom of the trench shall be smooth and free of stones, rocks, and sharp edged materials before conduit is installed. Rigid galvanized metal conduit or rigid non-metallic conduit should be installed and sloped to drain.
- 3) The trench shall be straight and direct as far as practical, and dug completely from the meter location to the source pole or pad mount transformer.
- 6) Size of conduit is based on specifications, and all corners/bends require 18-inch wide sweep elbows.
- 7) All costs associated with conduit and trenching are at the consumer's expense. Member is responsible to install pull string in conduit and install warning tape in the trench. Warning tape is provided by the cooperative.



**\*\*ALL OTHER UTILITIES SHOULD BE OFFSET.**