DIRECT EMBEDMENT
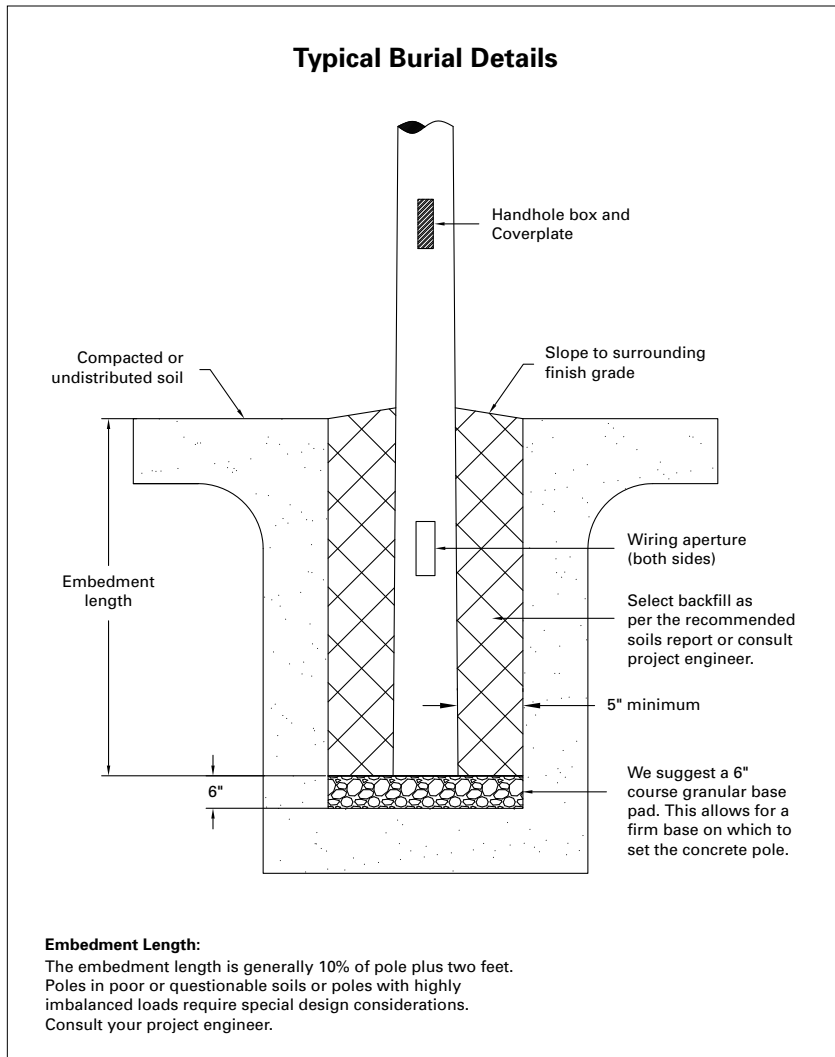
Simple and cost effective! The most common method and biggest advantage for installing a concrete pole is by direct embedment. The pole is placed into an augured hole lined with gravel then back filled with native soils, stone dust or cement. Depending on the soil conditions.

Advantages of direct embedment:

- **Monetary** – Eliminates the need for a costly anchor pole base footing.
- **Time Savings** – Faster installation, allowing more poles to be installed.
- **Simple** – No reliance on weather, form work, or pouring schedules.
- **Appearance** – No exposed base plates, or anchors bolts.
- **Engineered** – The pole and footing are continuous, forming a stronger structure.
- **Environmental** – Does not contaminate the soil, unlike direct buried wood poles which contain chemical treatments.
- **Landscaping** – Whether it be grass, concrete or asphalt, the surrounding ground is finished right up to the pole.
- **Maintenance free** – Can be placed into the ground without the fear of rust or rot.

Typical Burial Details

Handhole box and Coverplate

Slope to surrounding finish grade

Compacted or undistributed soil

Wiring aperture (both sides)

Select backfill as per the recommended soils report or consult project engineer.

Embedment length

5" minimum

6"

We suggest a 6" course granular base pad. This allows for a firm base on which to set the concrete pole.

Embedment Length:
The embedment length is generally 10% of pole plus two feet.
Poles in poor or questionable soils or poles with highly imbalanced loads require special design considerations.
Consult your project engineer.

Installation Guidelines

Calculating the Depth of the Pole

Poles are typically set into the ground: 10% of the overall height + 2 feet, except in questionable soil conditions.

Example: Overall pole height: 30 feet, the pole should be buried: 3 feet + 2 feet = 5 feet below grade, and 25 feet above grade.

Note: always consult an engineer and review the soils report.

Calculating the Diameter and the Length of the Hole

Auger hole minimum 10 inches larger than the butt diameter of the pole, and an extra 6 inches deeper then the depth requirement.

Example: Overall pole height is: 35 feet and butt diameter is 14 inches, auger the hole Min: 24 inches in diameter and the depth 6 feet.

Depth Calculation:
35 feet X 10% = 3 feet, 6 inches
plus 2 feet = 5 feet, 6 inches
plus 6 inches for GA base =
a total of 6 feet of augured depth

61 BONGARD AVENUE, OTTAWA, ONTARIO CANADA K2E 6V2
TEL: [613] 225-6398 • FAX: [613] 225-1681 • TOLL FREE: 1-800-267-6466
www.utilitystructures.com

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