

Foundation and Embedment Design Guidelines

It is the owner's responsibility to design the pole foundation for anchor base poles. We recommend that the owner consult a public engineer (PE) familiar with the local environmental extremes and soil conditions of the installation site to design a suitable foundation for the pole. We can provide base reactions to assist the PE with their design, if necessary.

With regard to embedded poles, in many cases engineers and contractors who are familiar with local soil conditions will use "rules of thumb" for determining a pole's burial depth. This value ranges between 10% of pole length plus 2 feet. Material used for backfill can be native soil, crushed stone or low strength concrete, depending on loading and soil conditions.

In cases where the soil conditions are questionable or highly variable, a geotechnical engineer should be consulted and a soils report prepared based on soil borings at the site. The geotechnical engineer should determine the number of soil borings required. Once soil conditions have been determined, it may still be necessary for the geotechnical engineer to be on site during the construction to verify that the soils encountered during installation have been accurately represented by the soil borings.