



EXCAVATIONS NEAR OVERHEAD LINE APPARATUS INCLUDING POLES AND SUPPORTS

OVERVIEW

An incident occurred in January 2024, where a free-standing pole with a transformer attached fell down due to an open excavation at the base of the pole.

DETAIL

Overhead line (OHL) pole supports can be above or below ground, such as stays and block foundations etc.

Where excavation work is required next to a pole or support e.g., for the installation of a cable to a pole, it is essential that enough ground is left surrounding the pole or support to ensure that the stability of the pole is always maintained. For this reason, no excavation shall take place within one metre of a pole, unless the following criteria is met:

- Before excavation starts, the OHL support and ground conditions are assessed for safety, by an experienced person working for or on behalf of UK Power Networks.
- Hand digging only - No mechanical digging is allowed.
- A safe route for the trench is established (see Figure 1).
- Areas marked in red may contain supports such as blocks which are not visible and which must not be disturbed. In addition, any excavation in these red areas may affect the overall stability of the pole.
- All excavation work within one metre of an Overhead Line support or pole shall only be carried out by trained and competent persons.

WHAT YOU NEED TO DO

- Check the ground conditions and assess the effects any excavation may have on the pole.
- Only hand dig within 1m of a pole.
- Excavations within 0.5 metre of a pole must be backfilled immediately following the installation of cables or plant on the pole to make sure the pole is adequately supported.

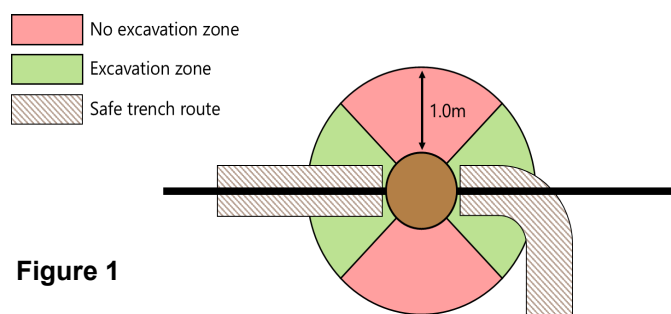


Figure 1

Primary communication via Line Manager complete by (X)	X	1 week		2 weeks		1 month
Additional communication (X)		Learning points	X	1 st 15		Team Brief slide
Line management must ensure appropriate employees understand the content of this document within the timescale shown. This document is subject to compliance audits after the communication deadline.						

Replacing free-standing poles

Figure 2 below details section 7.2 of *ECS 01-1004 the Overhead Line Manual – Pole Erection* information when erecting a replacement pole.

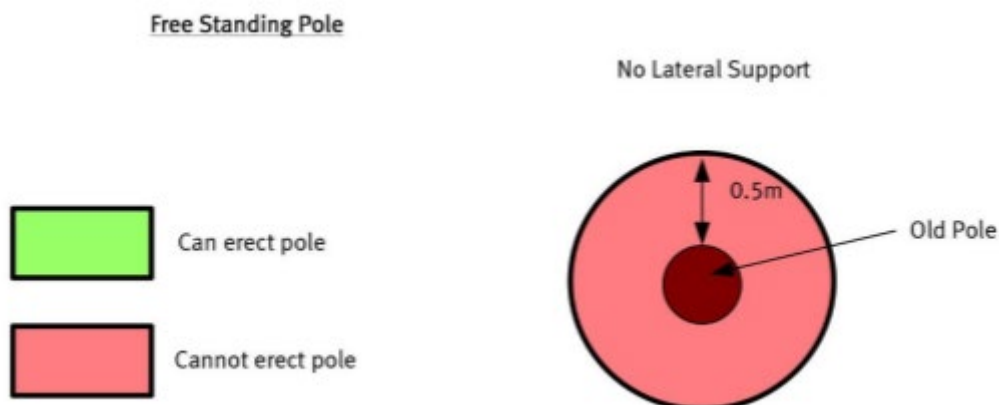


Figure 2

- Excavations within 0.5 metre of the pole or supports should be backfilled, and reinstated immediately following the installation of cables or equipment on the pole.
- When erecting a new pole within 1m of an existing pole, additional control measures shall be put in place to make sure the stability of the existing pole is not reduced.
- Where plant and equipment are attached to the pole additional precautions must be taken to ensure that the pole remains in a stable position, using guy lines and ground anchors whilst the temporary backfill remains unstable (dependant on ground conditions).
- Ensure network records are updated.