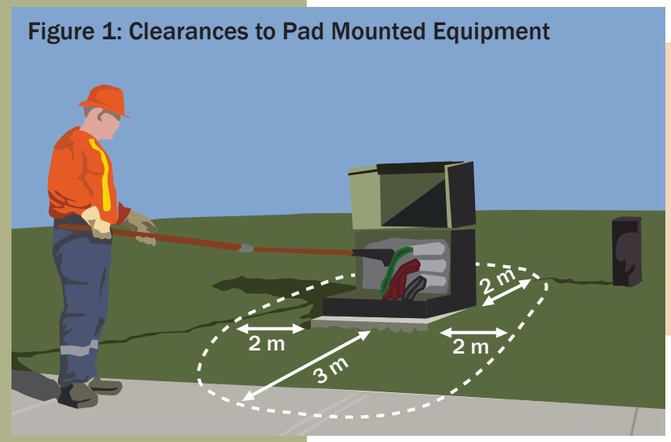
Figure 2: Pad Mount Clearance Concerns

Clearances to Underground Electrical Infrastructure

Clearances around underground (UG) electrical infrastructure as per NT Power's specifications and standards must be met by planners, architects, developers / contractors, municipalities, and property owners.

Electrical workers must be able to safely access equipment to operate, maintain or replace it, see **Figure 1**. The property owner will be responsible for any costs related to removing an obstruction, or if power restoration is delayed due to the obstruction.

Figure 1: Clearances to Pad Mounted Equipment



The following clearances around pad mounted electrical equipment mitigate all risks associated with working space and hazards related to the ground grid. This area must remain free of any structures, obstructions, or plantings:

3 m (10 ft) in front of all doors
2 m (6.5 ft) all sides without doors

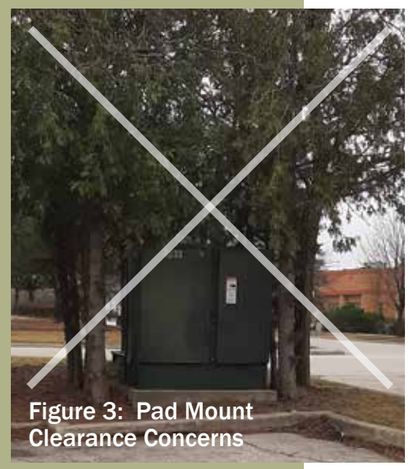


Figure 3: Pad Mount Clearance Concerns

Other UG Utilities

NT Power and all other UG utility stakeholder infrastructure including communications, water, wastewater, and gas facilities must meet the clearances to UG electrical infrastructure as per CSA C22.3 No.7 Underground Systems.

In order to meet these requirements, coordination of all facilities within proximity of other UG equipment is essential.

engineering@nmhydro.ca
https://www.ntpower.ca
Newmarket Phone: (905) 895-2309
Tay Phone: (705) 534-7281
Midland Phone: (705) 526-9361

Newmarket-Tay Power Distribution Ltd.

Municipalities & Property Owners

Above ground obstructions or hiding the electrical equipment is not permitted, **see Figures 2 and 3.** Municipalities and property owners must be aware of the clearances for the safety of its assets in proximity to UG electrical infrastructure, including but not limited to:

Municipalities: bus shelters, traffic signs

Property Owners: decks or patio blocks, retaining walls, pool equipment, hot tubs, storage sheds, metallic objects like mail-boxes, flag posts, outdoor patio seating (temporary and permanent)

Locates

It is important to know where UG electrical infrastructure and other utilities are located before work begins, regardless of the project size. Examples include but are not limited to:

Contractors: excavating for an addition, new building, sidewalks, or repairing buried infrastructure

Property Owners: planting a tree, landscaping, installing a fence, deck, driveway, or repairing buried infrastructure (pools, heated driveways, irrigation and sprinkler systems)

To protect the project from unnecessary damage, injuries, and financial penalties, contractors and property owners involved in the above activities must contact Ontario One Call at:

Request a locate
Ontario One Call or 1-800-400-2255
www.ontarioonecall.ca

The various utilities will mark the location of buried UG infrastructure so the dig can be done safely.

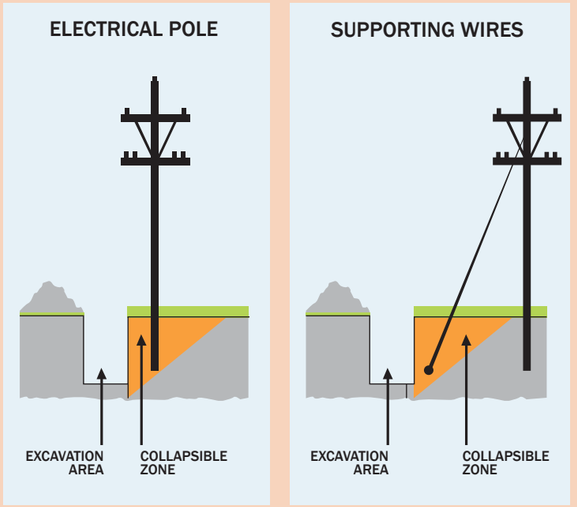


Figure 4: Excavation Near Electrical Equipment

Excavating & Digging

Extreme caution should be used when digging near the marked UG infrastructure or electrical pole (including guy wires, ground grid) **see Figures 4 and 5.** Contact with a sharp shovel or excavation equipment could easily damage electrical infrastructure and could result in harmful electrical current.

See ESA's "Guideline for Excavating in the Proximity of UG Distribution Lines" www.esasafe.com and contact NT Power for guidance before excavation in the proximity of electrical infrastructure.

Figure 5: Contractor Excavation Near Electrical Equipment