Working Safely Near Underground Electricity Cables and Assets

Essential guidance for civil works, drilling and excavation

STOP. THINK. DIG SAFELY.

Underground electricity cables can cause serious injury, death, fire, equipment damage and outages if struck. Before excavation, drilling, piling, trenching or other ground works, identify and verify all underground electricity assets.

Call us on 0800 800 935
wel.co.nz

WEL Networks



Safety Zones

CAUTION ZONE - within 2 metres:

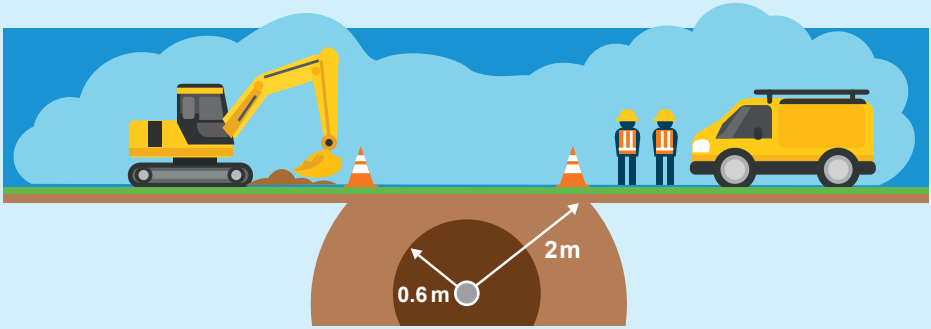
Close Approach Consent is required.

Treat work as high risk. Keep current plans and mark-ups onsite, brief workers, verify cable locations and apply any additional controls.

EXCLUSION ZONE - within 0.6 metres:

A WEL safety observer/standover is required, the first of which is usually free.

Do not use blind mechanical excavation. Positively identify the cable first. Hydrovac is preferred - otherwise use careful potholing and hand excavation. Stop work if there's any uncertainty.



The 5-Step Safe Digging Process

1. **PLAN** — Obtain BeforeUDig plans and separately request a **WEL cable location**. Review the scope of, and brief the crew on, electricity hazards.
   Note - WEL does not get notified of your BeforeUDig request and plans are approximations only.

2. **LOCATE** - A WEL Cable Locator marks the approximate cable position, reviews the proposed work and identifies hazards, constraints and required approvals.
   Note – Markings are approximations only.

3. **VERIFY** - Never rely on plans or paint alone. Before mechanical excavation, use hydrovac where practicable, or pothole and hand expose services to confirm position, depth and alignment.

4. **EXCAVATE** - Use competent operators, retain plans onsite, discuss hazards at pre-start, and ensure controls are understood. If the scope or conditions change, stop and reassess.

5. **STOP IF UNSURE** - Stop and contact WEL if cable location, depth, markings, ownership, clearances or the safe excavation method are uncertain.

Immediate Stop-Work Triggers



- **Unknown cable:** A cable is not shown on plans, an unexpected service is uncovered, or the asset cannot be positively identified.
- **Cable strike or damage:** This includes scratches, graze marks, dents, broken covers, penetrations or exposed conductors. Maintain a safe distance.
- **Machine contact:** Stay inside the machine if safe, keep others away, contact WEL immediately and do not exit until advised it is safe.
- **Any uncertainty:** Do not proceed until WEL provides clarification.

WEL Safety Observer/Standover and Close Approach Requirements

A WEL safety observer/standover is required for excavation within 0.6 metres of cables because there is elevated risk and cable-location reliability may be uncertain.

Other controls may include a Close Approach Consent, engineering assessment or asset-protection measures. Work must not proceed until all required controls are in place.

Quick Field Checklist

- ◯ Service plans obtained
- ◯ WEL cable location completed
- ◯ Cable position, depth and alignment verified
- ◯ 2m caution and 0.6m exclusion zones identified
- ◯ Hydrovac or potholing planned
- ◯ Hazards discussed
- ◯ Required consents, standover(s) arranged
- ◯ Onsite emergency contact identified
- ◯ Crew understands stop work requirements

Emergency Contact

STOP | MAKE SAFE | CALL WEL

Contact WEL immediately if:

» a cable is struck or unexpectedly exposed.

» other electricity assets are contacted or damaged.

» there is any uncertainty about safety.

WEL Networks Faults & Emergencies: 0800 800 935 (Option 2)

Remember:

» Outside 2 metres - plan and verify.

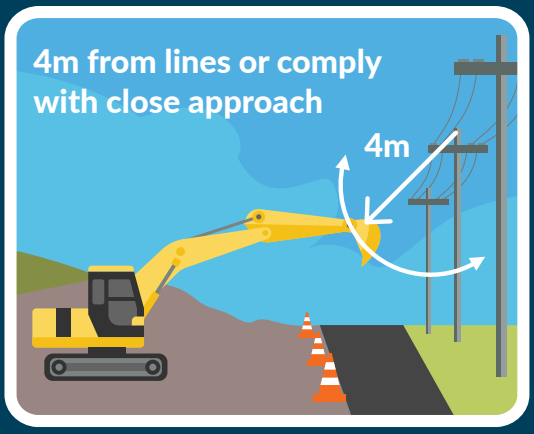
» Inside 2 metres - caution zone.

» Inside 0.6 metres - exclusion zone.

» Any uncertainty - stop and call WEL.

No excavation is so urgent that it cannot be done safely.

If Also Working Near Power Lines



Follow the 4 metre rule. All work activity near power lines must be at least 4 metres away from the nearest line/s. If you need to work closer that this, you must apply for a Close Approach Consent by calling us befeore commencing work activity.

For more information please read our building or working near power lines resource here.