

## **Underground Cable Easement Approved Conditions**

Note: the points below are guidelines only and are not exhaustive and to be read in conjunction with our standards MDI 0044 and MCI 0006. **Written permission** must be sort for any activity within the easement area. Approval is subject to agreement in writing within 45 days to the following conditions:

- Before excavation activities commence onsite, current 'Before You Dig Aust.' (BYDA) underground services location plans, must be and studied. Use [Home | Before You Dig Australia \(BYDA\)](#) Note: Caution is required as BYDA plans may not be exhaustive in detail.
- All work within easements must be conducted with extreme caution. SafeWork NSW (formerly WorkCover) guidelines 'Working near Underground Assets' must be followed.
- See **Table B Matrix page 4 below**. When excavating in vicinity of our underground electrical assets.
- **All workers are to be notified of the existence of the underground cables and easement restrictions.**
- **For cable or pipe locations and their depths, contact an accredited underground asset locator before works commence.**
- The exact location of underground electrical assets likely to be affected, shall be confirmed by use of an electronic cable locator followed by careful NDD non-destructive digging / non-mechanical excavation to the level of conduits. Non-mechanical excavation (potholing using hydrovac or hand tools) must be used in advance of mechanical excavation to expose and locate all known conductors whilst adhering to the distances shown in **Table B** of the 'Work Near Underground Assets Guide.'
- **SURVEY:** A current Registered Survey or (ASP) Accredited Service Provider Survey of the existing underground easement must be obtained, indicating the route, length, and depth of the underground cable, and must be displayed. This must also include the existing depth prior to work, and the proposed depth of the cabling after all works performed. All works must comply with Endeavour Energy's Standards. See **EE's ASP Portal:** <https://www.endeavourenergy.com.au/aspPortal/webengine/au/com/ee/asp/login/Login>

*Any cutting or filling of the land is a safety concern and requires an assessment. The required coverage above the cabling maintained throughout the easement. Any additional fill can compromise the maximum current cable rating capacity.*

- For all electrical incidents, contact **131 003** Endeavour Energy Emergency Services immediately. Available 24/7
- If cable ducts or warning tape becomes exposed or damaged, **STOP WORK** immediately and call **131 003** for Endeavour Energy Emergency Services available 24/7. No work will recommence until a full inspection has taken place.

- No other service utility is allowed within the underground easement, including stormwater, drainage, water & tap pipes, or gas pipework, including temporary electrical supply etc. without written permission.
- All conditional approvals granted, are subject to any encroachment removal or relocation at the Owners expense should Endeavour Energy require this for cable maintenance, construction, or emergency service works.
- Unimpeded 24hour / 7day a week access must be available to our electricity assets.
- Concreting over the cable easement is acceptable if the ground cover is not reduced.
- If excavation is in need due to an unsuitable sub-base, then details of a safe work method statement (SWMS) must be provided and agreed to by Endeavour Energy prior to the excavation taking place.
- The planting of trees or the cultivation of shrubs with extensive root systems will not be permitted within the easement area. However, the planting of small shrubs and tilling of soil with a maximum root system <400mm deep may be considered in underground easements, except within 2 metres of joint bays, surface installations, cable marker plates and posts.
- The placing of garbage, timber or debris is not permitted within the easement area.
- The parking of vehicles within the easement area will normally be permitted provided that an adequate surface exists capable of supporting the vehicles weight likely to be parked, thus preventing the crushing of the cables, or affecting the current cable rating.
- Approval will normally be given for the operation of mobile plant and equipment within the easement area. This is provided if an adequate surface exists capable of supporting the plant or equipment thus preventing the crushing of the cables. If a suitable surface does not exist, approval may be given subject to the activity being supervised by Endeavour Energy at either the developer or operator's expense.
- Any driveway where it crosses the easement for underground cables is to be constructed with reinforced concrete of not less than 200mm thick and sustain a 30tonne truck.
- All digging / excavation work is to be conducted by hand or toothless bucket and will be considered on an individual basis.
- No mechanical compaction of the concrete over the easement is permitted. Any compaction should only use static rollers.
- The erection of structures spanning the easement is not permitted. Consideration is given, if no other practicable alternative site is available, the cables will be required to be installed in ducts and if deemed necessary, concrete encased. Spare ducts may also be required to meet future cable requirements. The above works would be at the applicant's expense.
- The placing of 'fill' within underground easements is not usually permitted. However, consideration will be given on an individual basis after an investigation by Endeavour Energy.
- Approval for reduction in ground cover over underground cable easements will only be considered if the depth of the cable / ducts exceeds minimum design requirements.

- Approval for concrete driveways is subject to the driveway being capable of supporting the heaviest vehicle likely to traverse it and cables are to be installed in ducts and, if deemed necessary, concrete encased. Spare ducts to be installed to meet future cable requirements with installation being at the owner's expense.
- All conductive fencing must be earthed in accordance with AS3000. The fence posts cannot encroach within the underground easement area. This also includes metallic bollards, Armco railing, star posts, signposts, flag poles, fixed ground clothes hoists, pipe work or RIO – reinforcement, metallic tap components and the like.
- Pools & Spas including pumps, skimmer boxes, coping etc., not permitted in the easement.
- Domestic recreation activities within vicinity of the easement, may be permitted.
- The storage of non-flammable materials may be considered provided that the landowner can demonstrate that removal of such material can be achieved in a reasonable timeframe.
- The construction of buildings over the underground easement area prohibited.
- Retaining walls within the easement area will not be permitted.
- The storage of flammable, combustible, explosive or corrosive materials within the easement area not permitted.
- Endeavour Energy maintains the rights of the easement to have any structure or thing removed at cost to the Owner, for electrical maintenance, upgrades, emergency purposes or for any WH&S work health and safety concerns.
- The concreting requirements for the hardstand and the driveway crossing over Endeavour Energy's Easements are:

**Residential:** 30mm sand base, one layer of F72 mesh on bar chairs, and 100mm of 20MPA concrete.

**Commercial:** 100mm road base, two layers F72 mesh on bar chairs, and 200mm of 32MPA concrete. *The base can be rolled out, but must not be compacted by mechanical devices, such as small plate compactors.*

***NOTE:*** Any concreting over Endeavour Energy's Underground Easement's must also contain a concrete cut (expansion joint) along the easement line for future removal, if required.

***Reminder,*** the information above is not exhaustive and subject to change. Information must be read in conjunction with Endeavour Energy's Easements and Property Tenure standard MDI 0044 and MCI 0006.

Please review the above conditions and include those relevant to your proposal with the requested SURVEY. Send to [easements@endeavourenergy.com.au](mailto:easements@endeavourenergy.com.au) for assessment.

## Answers to common questions about Easements.

<https://www.endeavourenergy.com.au/safety/building-near-electricity-infrastructure>

<b>Assets</b>	<b>Clearances</b>	<b>No Go Zone For Powered Excavation</b>	<b>Controls</b>	<b>Typical Depths</b>
High Pressure services, mains and pipelines	<b>300 mm</b> with hand tools and supervision from Network Authority	<b>1000 mm</b>	Powered excavation within 300 – 1000 mm is only permitted under supervision and with a Permit to Work from Asset Owner  Also see <b>Controls</b> for medium pressure mains immediately above	<b>750 – 1200 mm</b>
Low Voltage Electricity cables – voltages less than or equal to 1000V (1kV)	Close proximity with use of hand tools	<b>300 mm</b>	Must contact asset owner for specific conditions	<b>450 – 750 mm</b>
Electricity conductors from 11,000V (11kV) up to 33,000V (33kV)	Close proximity with use of hand tools	<b>600 mm</b>	Must contact asset owner for specific conditions	<b>900 mm</b>
Underground sub-transmission cables 33,000V up to 132,000V (132kV)	Must contact asset owner	Must contact asset owner	Must be carried out under the supervision of the asset owner	<b>900 mm</b>
High Voltage Electricity cables – voltages from 1000V (1kV) up to 33kV	Close proximity with use of hand tools	Must contact asset owner	Must contact asset owner for specific conditions	<b>600 – 1000 mm</b>
Extra High Voltage Electricity Transmission cables – voltages above (132kV) and 330,000V (330kV)	Must contact asset owner	Must contact asset owner	Work must be carried out under the supervision of the asset owner	<b>800 – 1200 mm</b>
Telecommunications cables	Contact asset owner for specific conditions	Contact asset owner for specific conditions	Must contact the asset owner for specific conditions	Typically <b>450 – 600 mm</b> , other assets to <b>1200 mm</b>
Water pipelines	N/A	<b>300 mm</b> (if pipeline is <b>200 mm</b> or greater in diameter)	Pot-hole to confirm location of asset	Min <b>450 mm</b>
Sewerage pipelines	N/A	<b>300 mm</b> (if pipeline is <b>200 mm</b> or greater in diameter)	Pot-hole to confirm location of asset	Between <b>600 mm</b> to <b>10 (ten)</b> metres