



General Restrictions for Overhead Power Lines

Endeavour Energy wishes to provide the following list of 'General Restrictions' applicable to the 'Easement Area'. It should be noted that these are indicative guidelines only and that this information should be administered in conjunction with the requirements of the Work Health and Safety (WH&S) Act and SafeWork NSW (formerly WorkCover) legislation.

Endeavour Energy recommends a policy of '**prudent avoidance**' be adopted in relation to the use of the easement area for ongoing staff activities or work areas. Additionally, WH&S and SafeWork NSW legislation should be consulted in relation to this matter.

As existing ground levels throughout the easement are unknown, it is assumed that minimum design clearances exist within the easement area. As such, references to permissible heights on any activity may alter from that stated within this document. **Written approval** must be sought for any activity within the easement area. For such approval, detailed plans drawn to scale, and fully dimensioned showing property boundaries and other relevant information should be forwarded to Endeavour Energy.

Approval to encroach into the easement area will not be granted where an alternate site clear of the easement area exists. All approvals granted are subject to the encroachments being removed or relocated; at the owner's expense should Endeavour Energy require this for cable maintenance, or construction or emergency works.

Should any earthing be disturbed during works, all work should immediately cease, and Endeavour Energy notified so that the earthing can be reinstated.

1. Construction of habitable buildings (permanent or temporary) e.g., Houses, site-sheds with sleeping quarters, shipping containers, other substantial structures, or parts thereof, includes eaves, guttering and footings, shall not be erected within the easement area.
- 1a. Non-habitable buildings will be considered if no other sites available. They must be earthed as per Endeavour Energy's 069575 dwg. The building cannot have electrical power connected, or store corrosives, explosives, combustibles, or flammables. The building cannot exceed 2.5m height and comply to maintain appropriate power line clearances see 086232 dwg.
2. No encroachment into an overhead Transmission easement will be permitted within 10 metres of the closest steel structure and 5 metres of the closest pole.
- 2a. No encroachment into an overhead Distribution easement will be permitted within 5 metres of the closest pole.
3. Changes to ground levels within the easement area are not permitted without the prior written approval of Endeavour Energy. Applications are to be supported by a geo-technical report prepared by a civil engineer.
4. **Statutory clearances to the conductors must be kept always.**

It should be noted that power lines are designed to allow for sag and sideways swing.

Subsequently, allowance for this needs to be considered always. The statutory clearance from 0 kV to 132 kV conductors is minimum 3 metres, in all directions, always. This clearance also applies but not limited to; persons, vehicles, hand tools, equipment, cranes, lifting gear, plant, and load.

Consideration needs to be given and the clearances increased where there is the likelihood of any inadvertent movement or swinging of the plant, crane, load or lifting gear towards the power lines.



5. Construction of roads, car and truck parking areas, and subdivisions will only be considered for approval if access to the structures is maintained and the layout is such that; sufficient building area is left clear of the easement, it will not create numerous utility crossings or later requests for encroachments.

6. **Further information that maybe required:**

With all overhead (OH) and underground (UG) enquiries where an Endeavour Energy’s (EE) asset or Easement is impacted by the developers work, the developer must engage a Level 3 ASP to provide certification that the proposed development meets EE’s standards. A copy of the certification and associated plans are to be sent to EE’s Easement Officers to provide a signoff of the proposed works. If the Level 3 ASP does not confirm compliance with EE standards, the applicant must lodge an application through EE’s Customer Network Solutions (CNS) branch for approval.

7. A second survey may be required upon completion of work to confirm compliance.

8. Vehicles with elevating or extending components such as earth moving vehicles, concrete pumping vehicles, loaders, forklift trucks, tip trucks, cranes, including Derrick style cranes and hoists, Hiabs, Palfingers including others, and are not to proceed under the conductors until such components are returned to the travelling position.

Note: Concrete pumping vehicles are not permitted to operate within an easement for electricity purposes.

9. Vehicles, plant, or equipment having a height when fully extended that exceeds 4 metres shall not be brought onto an easement area without the prior written approval of Endeavour Energy.

10. The area within the easement is not to be used for the loading or unloading of trucks.

11. No soil or other material is to be stored, loaded, or unloaded within the easement area.

12. The area within the easement is not to be used for storage or stacking of goods or materials, especially flammable or explosive material.

13. Erection of flagpoles, CTV cameras, security lighting, weathervanes, illuminated signs will not be approved within the easement.

MINIMUM APPROACH DISTANCES OF PLANT AND LOADS TO LIVE ELECTRICAL APPARATUS (FOR NON-AUTHORISED PERSONS)

NOMINAL VOLTAGE	MINIMUM APPROACH DISTANCE
Not exceeding 132,000V	3 metres
Above 132,000V but not exceeding 330,000V	6 metres
Above 330,000V	8 metres

Caution: The operator of the plant must be able to identify the voltage level of the apparatus that they are approaching with the plant or assume 8 metres as a minimum.



14. Extreme caution is to be observed when working within easements and around any structures, poles or wires including overhead or underground.
15. Dial Before You Dig service plans are required to check for underground utilities prior to any excavations works. Contact 1100 for assistance.
16. All personnel are to be advised of the hazards of working near high voltage overhead or underground wires.
17. All machinery or plant within an electricity easement is to be operated by adequately trained and accredited persons.
18. Endeavour Energy recommends the use of a suitably trained safety observer when work is being carried out within the easement area.
19. A hazard identification and risk assessment should be carried out within the easement area. A safe work method statement should be provided for any work carried out within the easement area. All staff should be briefed regularly, or when there are any changes, as to the contents of the risk assessment and safe work method statement.
20. For the attention of staff and visitors to the site and to ensure constant vigilance, Endeavour Energy recommends that clearly visible safety signs be erected, in accordance with the relevant safety standards, alerting attention to the transmission lines and associated hazards.
21. Flammable, combustible, corrosive, or explosive materials, including gas bottles, are not permitted within the easement area. Flammable liquid carriers shall not be placed within the easement area.
22. Garbage or building refuse or fallen timber are not permitted within the easement area. Burning off is not permitted within the easement area without the prior written approval of Endeavour Energy.
23. Any metallic fencing within the easement shall require earthing and isolating in accordance with the Australian Standards as per AS3000.
24. Structures such as detached garages, sheds, stables, carports, unroofed veranda's, shipping containers, water tanks, fixed plant, and equipment, will only be considered for approval if no other practicable alternative site is available clear of the easement area.
- 24a. No approvals will be granted for any of the above where they are proposed within the minimum clearances.
- 24b. Access to Endeavour Energy's assets is NOT to be restricted whilst always maintaining safe clearances.
- 24c. Furthermore, any proposed structures must not exceed 2.5 metres in height if climbable and 4.3m if not climbable.

Please Note: - Due to effects of induction and possible lightning/line fault step and touch potential, requests for pools, spas, open water features and open water tanks inside the easement will not be approved.

25. Installation of utility services, such as power, telephone, gas, water, and sewerage (overhead, underground, or on the surface) may be considered for approval by Endeavour Energy's Overhead and Underground Mains Manager. Proposed site dimensions in relation to assets are required.
26. Trees, plants, or shrubs with a *mature height* that do not exceed 3m may be planted within the easement area provided they are no closer than 5m from the nearest structure (i.e., pole or tower). Mature trees must



be a min.3m from the vertical projection of the nearest conductor (i.e., overhead power line). No plants are permitted in an area where they may obstruct access.

27. Dogs and livestock shall not be kept within the easement area if they are likely to create a dangerous situation for Endeavour Energy staff and thus restrict access
28. Normal agricultural pursuits are permitted; however, care should be taken when ploughing or operating mobile machinery near structures or supporting guys. Earthing systems are particularly prone to damage from such activities. It is imperative that access to the easement area and structures be available always. Whilst reasonable care will be taken, Endeavour Energy will not be responsible for any damage to crops caused whilst accessing and working within the easement area. The restrictions applying to the heights of mobile plant and equipment must be observed.
29. 24-hour 7 day a week access is required to the easement for emergency and maintenance purposes. Any locked gates are to have an Endeavour Energy lock incorporated in the locking system. Please contact *Integrity Locking 1300 366 488* for details.

Further to the above, additional fencing restrictions are provided for your information. Written approval must be sought prior to the commencement of any work.

- A. Brick, masonry walls or other substantial structures or parts thereof shall not be erected within the easement area.
- B. All other types of fencing erected within the easement area are subject to a height limitation of 2.5 metres.
- C. Fences must not encroach 5m of any asset without written permission.
- D. The erection of any fencing is not permitted in a location that could create an unsafe working condition for Endeavour Energy staff.
- E. Conductive fences are required to be earthed and isolated in accordance with Endeavour Energy's specifications or Australian Standards AS3000.
- F. Gates (4.2m wide) are normally required in boundary fences to facilitate longitudinal access to the easement area and associated structures for our trucks. All access gates are to include Endeavour Energy locks in the locking system. Please refer to the above point 29.
- G. For all electrical incidents, contact **Endeavour Energy's Emergency Services on 131 003** available 24/7.

H. **Answers to common questions about Easements.**

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

Finally, if you have any questions or concerns regarding the detail above, please do not hesitate to contact Endeavour Energy's Easement Management Officers at easements@endeavourenergy.com.au for assistance. Thank you.