

The General Manager
Liverpool City Council

11 October 2019

ATTENTION: George Nehme

I refer to the below email of 2 October 2019 from NSW Planning, Industry & Environment regarding NSW Government concurrence and referral request CNR-1924 for Liverpool City Council's development application DA-585/2019 at 40-46 SCOTT STREET LIVERPOOL 2170 (Lot 1 DP 514817; Lots 1, 2 & 3 DP 229979; Lot 17 DP 81842; Lot 11 DP 522284; Lot 201 DP 1224084; Lot 100 DP 877435; Lot 12 DP 657056; Lot 1 DP 507070; Lots 22 & 23 DP 441010) for 'Concept development application pursuant to section 4.22 of the Environmental Planning & Assessment Act for a new mixed use precinct known as Liverpool Civic Place'. Submissions need to be made to Council by 23 October 2019.

Please find below a copy of a previous submission made to Council on 11 April 2017 regarding Development Application DA-1259/2016 at 52 SCOTT STREET, LIVERPOOL NSW 2170 (LOT 17 DP 81842, LOTS 1, 2 & 3 DP 229979, LOTS 22 & 23 DP 441010, LOT 1 DP 507070, LOT 1 DP 514817, LOT 5 DP 219669) for:

'Staged development application pursuant to Section 83B of the Environmental Planning & Assessment Act for the Liverpool Civic Place Development consisting of a new four storey library building, eleven storey commercial office building containing Council administration offices, teaching and learning space for the University of Wollongong, two x thirty one (31) storey mixed use towers, basement and above ground parking, site links and public open space. This application is for Stage 1 and seeks master plan approval for site layout, location of future buildings, creation of a new Civic Square and public domain, vehicular access from Terminus Street, maximum building envelopes including setbacks and height, maximum gross floor area (GFA) across the site, landscape concept, and location and maximum number of car spaces'.

As shown in the below updated site plan from Endeavour Energy's G/Net master facility model (and extract from Google Maps Street View) there is now an additional easement and restriction over the site for padmount substation no. 33223 (indicated by the symbol ) located on Lot 201 DP 1224084 with frontage to Macquarie Street.

Please note the location, extent and type of any electricity infrastructure, boundaries etc. shown on the plan is indicative only. Generally (depending on the scale and/or features selected), low voltage (normally not exceeding 1,000 volts) is indicated by blue lines and high voltage (normally exceeding 1,000 volts but for Endeavour Energy's network not exceeding 132,000 volts / 132 kV) by red lines (these lines can appear as solid or dashed and where there are multiple lines / cables only the higher voltage may be shown). This plan only shows the Endeavour Energy network and does not show electricity infrastructure belonging to other authorities or customers owned electrical equipment beyond the customer connection point / point of supply to the property. This plan is not a 'Dial Before You Dig' plan under the provisions of Part 5E 'Protection of underground electricity power lines' of the Electricity Supply Act 1995 (NSW).

Notwithstanding the withdrawal of Concept Development Application DA-1259/2016 for the Liverpool Civic Place Project on the smaller site and the now inclusion of the additional three eastern lots (Lot 11 DP 522284, Lot 100 DP 877435 and Lot 12 DP 657056) the recommendations and comments previously provided remain valid.

Subject to the foregoing and the following additional recommendations and comments Endeavour Energy has no objection to the Development Application.

- Network Capacity Connection

Endeavour Energy has noted that the Statement of Environmental Effects does not appear to address the suitability of the site for the development in regard to whether electricity services are available and adequate for the development.

Endeavour Energy is urging applicants /customers to engage with an Electrical Consultant prior to submitting plans to Council in order to assess and incorporate any required electricity infrastructure. Consideration also needs to be given to its impact on the other aspects of the proposed development. For this reason it is important that whenever possible all the plans show any proposed substation location (easement and restrictions) as well as any associated conductors.

Endeavour Energy's Asset Strategy & Planning Branch whilst not having undertaken a detailed analysis of the Development Application have provided the following additional advice:

Asset Strategy & Planning Branch responded to a Technical Review Request (Endeavour Energy reference ENL3434) received from Endeavour Energy's Network Connections Branch on 14 June 2019.

From the estimated load assessment the site will require 5 x 1000 kilovolt amperes (kVA) padmount substations or a combination of two indoor substations with 2 x 1000 kVA transformers each plus a standalone 1000 kVA padmount substation if more able to accommodate this way. All the substations may have to be indoor substations if no space for the padmount substation easement and fire restriction area is allowed.

In regard to the existing electrical assets:

- *Padmount substation no. 33223 located on Lot 201 DP 1224084 with frontage to Macquarie Street is to be retained and is in addition to the above requirements.*
- *Padmount substation no. 27206 and the associated underground cables are to be relocated and has been addressed in the advice included in ENL3434.*

- Easement Management / Network Access

Please find attached a copy of Endeavour Energy's 'Guide to Fencing, Retaining Walls and Maintenance Around Padmount Substations'.

- Earthing

The construction of any building or structure (including fencing, signage, flag poles, hoardings etc.) whether temporary or permanent that is connected to or in close proximity to Endeavour Energy's electrical network is required to comply with Australian/New Zealand Standard AS/NZS 3000:2018 'Electrical installations' as updated from time to time. This Standard sets out requirements for the design, construction and verification of electrical installations, including ensuring there is adequate connection to the earth. Inadequate connection to the earth to allow a leaking/fault current to flow into the grounding system and be properly dissipated places persons, equipment connected to the network and the electricity network itself at risk from electric shock, fire and physical injury.

- Prudent Avoidance

The electricity network is operational 24/7/365 ie. all day, every day of the year. The electricity industry has adopted a policy of prudent avoidance by doing what can be done without undue inconvenience and at modest expense to avert the possible risk to health from exposure to emissions from electricity infrastructure such as electric and magnetic fields (EMF) and noise which generally increase the higher the voltage ie. Endeavour Energy's network ranges from low voltage (normally not exceeding 1,000 volts) to high voltage (normally exceeding 1,000 volts but not exceeding 132,000 volts / 132 kV). In practical terms this means that when designing new transmission and distribution facilities, consideration is given to locating them where exposure to the more sensitive uses is reduced and increasing separation distances.

Endeavour Energy believes that likewise applicants (and Council) should also adopt a policy of prudent avoidance by the siting of more sensitive uses away from any electricity infrastructure – including any possible future electricity infrastructure required to facilitate the proposed development. Where development is proposed in the vicinity of electricity infrastructure, Endeavour Energy is not responsible for any amelioration measures for such emissions that may impact on the nearby proposed development.

Even with less sensitive non-residential development, Endeavour Energy believes that a policy of prudent avoidance should be considered eg. those parts of the site regularly occupied by people such as office components of a building, away from any electricity infrastructure.

Please find attached a copy of Energy Networks Association's 'Electric & Magnetic Fields – What We Know' which can also be accessed via their website at <https://www.energynetworks.com.au/electric-and-magnetic-fields> and provides the following advice:

Electric fields are strongest closest to their source, and their strength diminishes rapidly as we move away from the source.

The level of a magnetic field depends on the amount of the current (measured in amps), and decreases rapidly once we move away from the source.

Typical magnetic field measurements associated with Endeavour Energy's activities and assets given the required easement widths, safety clearances etc. and having a maximum voltage of 132,000 volt / 132 kV, will with the observance of these separation distances not exceed the recommended magnetic field public exposure limits.

- Removal of Electricity Supply

Approval for the permanent disconnection and removal of supply must be obtained from Endeavour Energy's Network Connections Branch (contact via Head Office enquiries on telephone: 133 718 or (02) 9853 6666 from 8am - 5:30pm) by Accredited Service Providers (ASP) with the relevant class of Authorisation for the type of work being carried out. The work could involve:

- The disconnection and removal of an underground service cable or overhead service line,
- Removal of metering equipment.

The written request must be submitted to Endeavour Energy using Form FPJ4603 'Permission to Remove Service / Metering by Authorised Level 2 Accredited Service Provider' which must be accompanied by Notification of Service Works (NOSW) forms provided as a result of service work activity performed by a Level 2 ASP. The retailer must also provide written agreement for the permanent removal of supply.

The ASP scheme is administered by NSW Planning, Industry & Environment and details are available on their website via the following link or telephone 13 77 88:

<https://energysaver.nsw.gov.au/households/you-and-energy-providers/installing-or-altering-your-electricity-service> .

- Public Safety

If the applicant has any concerns over the proposed works in proximity of the Endeavour Energy's electricity infrastructure to the road verge / roadway, as part of a public safety initiative Endeavour Energy has set up an email account that is accessible by a range of stakeholders across the company in order to provide more effective lines of communication with the general public who may be undertaking construction activities in proximity of electricity infrastructure such as builders, construction industry workers etc. The email address is Construction.Works@endeavourenergy.com.au.

I appreciate that not all the foregoing issues may be directly or immediately relevant or significant to the Development Application. However, Endeavour Energy's preference is to alert proponents / applicants of the potential matters that may arise should development within closer proximity of the existing and/or required electricity infrastructure needed to facilitate the proposed development on or in the vicinity of the site occur.

Could you please pass on a copy of this submission and the attached resources to the applicant? Should you wish to discuss this matter, or have any questions, please do not hesitate to contact me or the contacts identified above in relation to the various matters. Due to the high number of development application / planning proposal notifications submitted to Endeavour Energy, to ensure a response contact by email to property.development@endeavourenergy.com.au is preferred.

Yours faithfully

Cornelis Duba

Development Application Specialist

Network Environment & Assessment

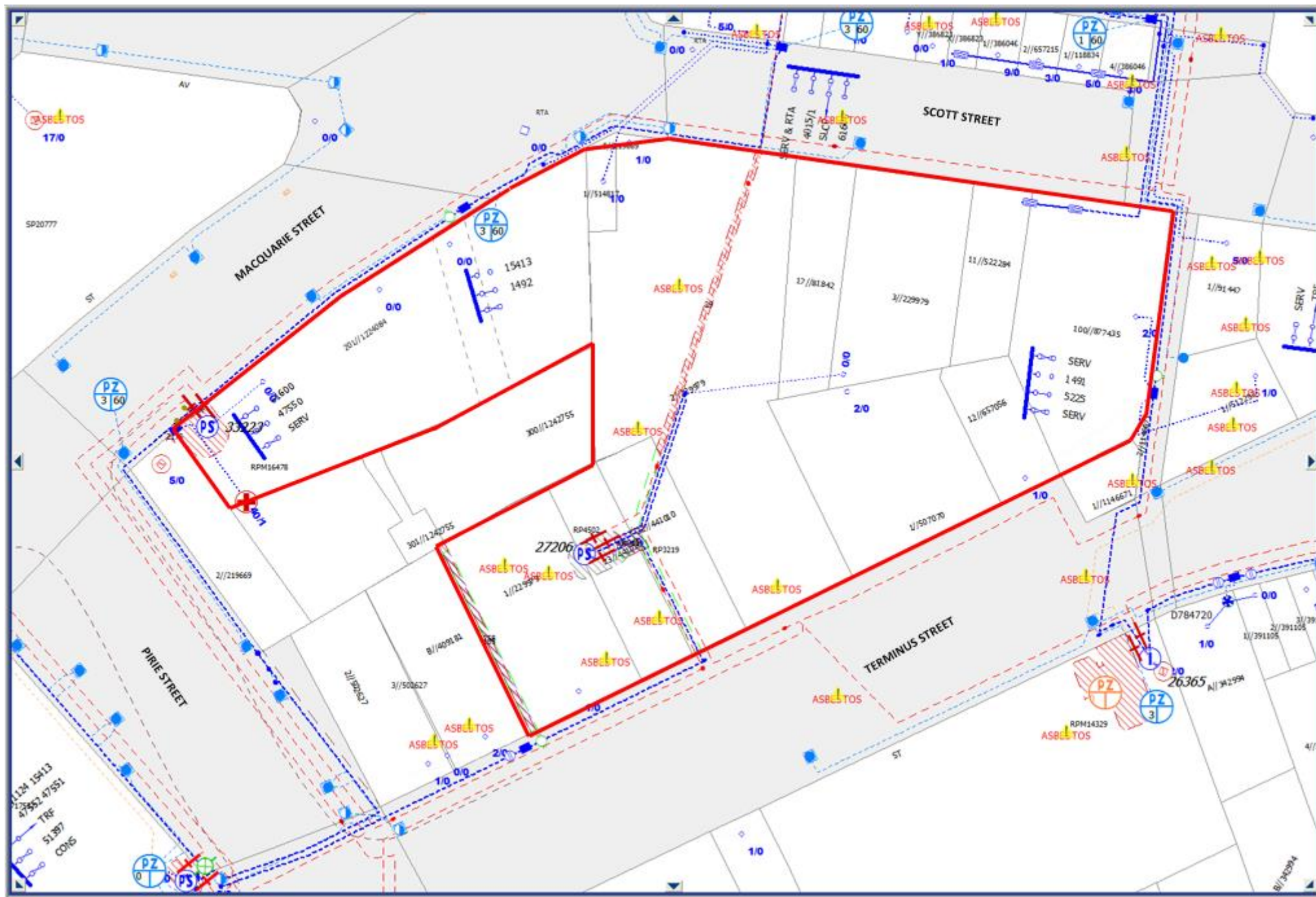
T: 9853 7896

E: cornelis.duba@endeavourenergy.com.au

51 Huntingwood Drive, Huntingwood NSW 2148

www.endeavourenergy.com.au







Padmount substation no. 33223 located on Lot 201 DP 1224084 with frontage to Macquarie Street

From: NSW Planning <planning.apps@planning.nsw.gov.au>

Sent: Wednesday, 2 October 2019 11:10 AM

To: Property Development <Property.Development@endeavourenergy.com.au>

Subject: NSW Government concurrence and referral request CNR-1917(SHOALHAVEN CITY COUNCIL)

○ **Concurrence and referral request**



A request for NSW Government agency consideration of an application DA19/1940 at 13 PRINCE ALFRED STREET BERRY 2535 was submitted to your agency on 02 October 2019 .

Pre-assessment of this application is required.

Please log into the [NSW Planning Portal](#) to progress your assessment of the request, reference number CNR-1917.

You can find general information about the online concurrence and referral system [here](#) or call our help line on 1300 305 695.

This email has been automatically sent through the NSW Planning Portal. Please do not reply to this message. If you have received this email in error, please contact us at epanning@planning.nsw.gov.au.

From: Cornelis Duba
Sent: Tuesday, 11 April 2017 7:44 AM
To: 'lcc@liverpool.nsw.gov.au'
Cc: 'n.samadie@liverpool.nsw.gov.au'; Philip Wilson
Subject: LIVERPOOL CITY COUNCIL DEVELOPMENT APPLICATION DA-1259/2016 RE 52 SCOTT STREET, LIVERPOOL NSW 2170

The General Manager
Liverpool City Council

ATTENTION: Nabila Samadie, Acting Coordinator DEVELOPMENT ASSESSMENT

Dear Sir or Madam

I refer to Council's letter of 7 February 2017 regarding Development Application DA-1259/2016 at 52 SCOTT STREET, LIVERPOOL NSW 2170 (LOT 17 DP 81842, LOTS 1, 2 & 3 DP 229979, LOTS 22 & 23 DP 441010, LOT 1 DP 507070, LOT 1 DP 514817, LOT 5 DP 219669) for:

'Staged development application pursuant to Section 83B of the Environmental Planning & Assessment Act for the Liverpool Civic Place Development consisting of a new four storey library building, eleven storey commercial office building containing Council administration offices, teaching and learning space for the University of Wollongong, two x thirty one (31) storey mixed use towers, basement and above ground parking, site links and public open space. This application is for Stage 1 and seeks master plan approval for site layout, location of future buildings, creation of a new Civic Square and public domain, vehicular access from Terminus Street, maximum building envelopes including setbacks and height, maximum gross floor area (GFA) across the site, landscape concept, and location and maximum number of car spaces'.

Submissions needed to be made to Council by 28 February 2017. From Council's 'ePlanning' portal I note the application is 'Status: Application Under Assessment'. I apologise for the late submission but trust that Endeavour Energy's recommendations and comments will still be considered.

As shown in the below site plan from Endeavour Energy's G/Net master facility model:

- There are easements over the site benefitting Endeavour Energy (indicated by red hatching) including for:
 - 11,000 volt / 11 kV high voltage underground cables.
 - Padmount substation and associated cabling.
 - Retired easement to the western side boundary of Lot 1 DP 229979 to Lot 100 DP 1143458.
- Low voltage and 11,000 volt / 11 kV high voltage underground cables to both the Scott Street and Terminus Street road verge / roadway.
- Low voltage underground service conductor to Lot 1 DP 514817.

Please note the location, extent and type of any electricity infrastructure, boundaries etc. shown on the plan is indicative only. Generally (depending on the scale and/or features selected), low voltage is indicated by blue dashed lines and high voltage by red dashed lines. This plan is not a 'Dial Before You Dig' plan under the provisions of Part 5E 'Protection of underground electricity power lines' of the Electricity Supply Act 1995 (NSW).

Subject to the following recommendations and comments, Endeavour Energy has no objections to the Development Application:

- Network Capacity / Connection

In due course the applicant for the future proposed development of the site will need to submit an application for connection of load via Endeavour Energy's Network Connections Branch to carry out the final load assessment and the method of supply will be determined. Depending on the outcome of the assessment, any required padmount will need to be located within the property (in a suitable and accessible location) and be protected (including any associated cabling) by an easement and associated restrictions benefiting and gifted to Endeavour Energy. Please refer to Endeavour Energy's Mains Design Instruction MDI 0044 'Easements and Property Tenure Rights'. Further details are available by contacting Endeavour Energy's Network Connections Branch via Head Office enquiries on telephone: 133 718 or (02) 9853 6666 from 8am - 5:30pm or on Endeavour Energy's website under 'Home > Residential and business > Connecting to our network' via the following link:

<http://www.endeavourenergy.com.au/>

Advice on the electricity infrastructure required to facilitate the proposed development (including asset relocations) can be obtained by submitting a Technical Review Request to Endeavour Energy's Network Connections Branch, the form for which FPJ6007 is attached and further details (including the applicable charges) are available from Endeavour Energy's website under 'Our connection services'. The response to these enquiries is based upon a desktop review of corporate information systems, and as such does not involve the engagement of various internal stakeholders in order to develop a 'Connection Offer'. It does provide details of preliminary connection requirements which can be considered by the applicant prior to lodging a formal application for connection of load.

Alternatively the applicant should engage a Level 3 Accredited Service Provider (ASP) approved to design distribution network assets, including underground or overhead. The ASP scheme is administered by NSW Trade & Investment and details are available on their website via the following link or telephone 13 77 88:

<http://www.resourcesandenergy.nsw.gov.au/energy-supply-industry/pipelines-electricity-gas-networks/network-connections/contestable-works>

Endeavour Energy's Capacity Planning Section, whilst not having undertaken a detailed assessment of the proposed development, have provided the following advice:

- Considering the size of the proposed development, it is anticipated that a padmount or indoor / chamber substation will be required to service each of the buildings / towers but this will not be certain until the final load assessment is completed.
- The proposed development does not appear to make any provision within the 'Indicative Ground Level Plan' for the provision of any padmount or indoor / chamber substation on the site or within the buildings.

Due to the need to relocate the existing electricity assets on the site, in accordance with Endeavour Energy's Mains Design Instruction MDI 0044 'Easements and Property Tenure Rights' the following section is also relevant:

5.9 Easement release

Easements may be released if the need arises and the easement has no / limited benefit to Endeavour Energy. Easements releases must be managed in accordance with Company Policy 9.2.4.

As part of the application for connection of load the developer / designer will be made aware of Endeavour Energy's requirements for the release of easement. However the certification of the design does not constitute an agreement to release the easement and no works should be undertaken to decommission the existing infrastructure within the easement until release of the easement has been resolved and approved by Endeavour Energy. Easements may be released if the need arises and the easement has no / limited benefit to Endeavour Energy. Each request for an easement release is assessed by Endeavour Energy to identify and manage the risks to the network, commercial interests and public reputation.

- Easement Management / Network Access

The following is a summary of the usual / main terms of Endeavour Energy's electrical easements requiring that the land owner:

- o Not install or permit to be installed any services or structures within the easement site.
- o Not alter the surface level of the easement site.
- o Not do or permit to be done anything that restricts access to the easement site without the prior written permission of Endeavour Energy and in accordance with such conditions as Endeavour Energy may reasonably impose.

It is imperative that the access to the existing electrical infrastructure adjacent and on the site is maintained at all times. To ensure that supply electricity is available to the community, access to the electrical assets may be required at any time. If the proposed works (other than those approved / certified by Endeavour Energy's Network Connections Branch as part of an enquiry / application for load) will encroach/affect Endeavour Energy's easements / protected works, contact must first be made with the Endeavour Energy's Easements Officer, Philip Wilson, on direct telephone 9853 7110 or alternately by email Philip.Wilson@endeavourenergy.com.au.

- Vegetation Management

The planting of large trees in the vicinity of electricity infrastructure is not supported by Endeavour Energy. Suitable planting needs to be undertaken in proximity of electricity infrastructure. Only low growing shrubs not exceeding 3.0 metres in full grown height, ground covers and smaller shrubs, with non-invasive root systems are the best plants to use. Larger trees should be planted well away from electricity infrastructure and even with underground cables, be installed with a root barrier around the root ball of the plant. Landscaping that interferes with electricity infrastructure may become subject to Endeavour Energy's Vegetation Management program and/or the provisions of the Electricity Supply Act 1995 (NSW) Section 48 'Interference with electricity works by trees' by which under certain circumstances the cost of carrying out such work may be recovered.

- Dial before You Dig

Before commencing any underground activity the applicant is required to obtain advice from the ***Dial before You Dig 1100*** service in accordance with the requirements of the *Electricity Supply Act 1995* (NSW) and associated Regulations. This should be obtained by the applicant not only to identify the location of any underground electrical and other utility infrastructure across the site, but also to identify them as a hazard and to properly assess the risk.

- Demolition

Demolition work is to be carried out in accordance with Australian Standard AS2601: The demolition of structures (AS 2601). All electric cables or apparatus which are liable to be a source of danger, other than a cable or apparatus used for the demolition works shall be disconnected ie. the existing customer service lines will need to be isolated and/or removed during demolition. Appropriate care must be taken to not otherwise interfere with any electrical infrastructure on or in the vicinity of the site eg. streetlight columns, power poles, overhead and underground cables etc.

- Excavation

The applicant should be advised of the following object of Section 49A 'Excavation work affecting electricity works' of the of *Electricity Supply Act 1995* (NSW) covering the carrying out or proposed carrying out of excavation work in, on or near Endeavour Energy's electrical infrastructure.

Electricity Supply Act 1995 No 94

Current version for 8 January 2016 to date (accessed 30 March 2016 at 08:12)

[Part 5](#) > [Division 2](#) > [Section 49A](#)

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49A Excavation work affecting electricity works

- (1) This section applies if a network operator has reasonable cause to believe that the carrying out or proposed carrying out of excavation work in, on or near its electricity works:
 - (a) could destroy, damage or interfere with those works, or
 - (b) could make those works become a potential cause of bush fire or a potential risk to public safety.
- (2) In those circumstances, a network operator may serve a written notice on the person carrying out or proposing to carry out the excavation work requiring the person:
 - (a) to modify the excavation work, or
 - (b) not to carry out the excavation work, but only if the network operator is of the opinion that modifying the excavation work will not be effective in preventing the destruction or damage of, or interference with, the electricity works concerned or in preventing those works becoming a potential cause of bush fire or a potential risk to public safety.

If the development entails the completion of any work in and/or affecting Endeavour Energy's adjoining electrical infrastructure, prior contact must be made to Endeavour Energy's Easements Officer, Philip Wilson, on 9853 7110 alternately Philip.Wilson@endeavourenergy.com.au.

- Asbestos

Endeavour Energy's G/Net master facility model indicates that the site is a location identified or suspected of having asbestos or asbestos containing materials (ACM) present in the network. Whilst Endeavour Energy's underground detail is not complete within G/Net in some areas, in older communities, cement piping was regularly used for the electricity distribution system and in some instances containing asbestos to strengthen the pipe; for insulation; lightness and cost saving.

When undertaking works on or in the vicinity of Endeavour Energy's electricity network, asbestos or ACM must be identified by a competent person employed by or contracted to the applicant and an asbestos management plan, including its proper disposal, is required whenever construction works has the potential to impact asbestos or ACM.

The company's potential locations of asbestos to which construction / electricity workers could be exposed include:

- o customer meter boards;
- o conduits in ground;
- o padmount substation culvert end panels; and
- o joint connection boxes and connection pits.

Further details are available by contacting Endeavour Energy's Health, Safety & Environment via Head Office enquiries on telephone: 133 718 or (02) 9853 6666 from 8am - 5:30pm.

- Public Safety

Workers involved in work near electricity infrastructure run the risk of receiving an electric shock and causing substantial damage to plant and equipment. I have attached Endeavour Energy's public safety training resources, which were developed to help general public / workers to understand why you may be at risk and what you can do to work safely. The public safety training resources are also available via Endeavour Energy's website via the following link:

<http://www.endeavourenergy.com.au/wps/wcm/connect/ee/nsw/nsw+homepage/communitynav/safety/safety+brochures>

- Emergency Contact

In case of an emergency relating to Endeavour Energy's electrical network, the applicant should note Emergencies Telephone is 131 003 which can be contact 24 hours/7 days.

Could you please pass on the attached resources to the applicant? Should you wish to discuss this matter, or have any questions, please do not hesitate to contact me or the contacts identified above in relation to the various matters. As I am working on different projects across the company's franchise area, to ensure a response contact by email is preferred.

Yours faithfully

Cornelis Duba

Development Application Review

Network Environment & Assessment

T: 9853 7896

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