

The Secretary
NSW Department of Planning, Industry and Environment

10 September 2020

ATTENTION: William Hodgkinson, Team Leader, Industry Assessments Planning and Assessment

Dear Sir or Madam

I refer to the Department's letter of 1 September 2020 regarding the notice of exhibition of the Environmental Impact Statement (EIS) for State Significant Development SSD-8184 for the Fairfield Sustainable Resource Centre Expansion located at the corner of Hassall Street and Widemere Road, Wetherill Park (Lot 1 DP 515773, Lot 34 DP 657040, Lots 35 & 37 DP 3082, Lot 100 DP 1220637, Lots 1 & 2 DP 620755, Lot 1 DP 368374) in the Fairfield local government area. Submissions need to be made to the Department by 2 October 2020.

Please find attached a copy of Endeavour Energy's submission made to Fairfield City Council on 21 May 2019 regarding Development Application No. 165.1/2019 at 2 Widemere Road WETHERILL PARK (PART LOT: 1 DP: 515773) for 'Proposed Community Recycling Centre'. The recommendations and comments provided therein are also applicable to this Development Application.

In regard to the Fairfield Sustainable Resource Centre, as shown in the below site plans from Endeavour Energy's G/Net master facility model (and extracts from Google Maps Street View) there are:

- Low voltage and 11,000 volt / 11 kilovolt (kV) high voltage overhead power lines and underground cables to the northern section of the Widemere Road road verge / roadway.
- Extended low voltage overhead power lines coming from a pole on the opposite side of Widemere Road to two customer owned / private poles (indicated by the green circles) providing a customer connection point for the existing facilities.
- Endeavour Energy's Wetherill Park Zone Substation is located approximately 440 metres to the south west at Redfern Street Wetherill Park (Lot 3 DP 584227).

Please note the location, extent and type of any electricity infrastructure, boundaries etc. shown on the plan is indicative only. In addition it must be recognised that the electricity network is constantly extended, augmented and modified and there is a delay from the completion and commissioning of these works until their capture in the model. 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).

As an adjoining or nearby owners and occupiers, Endeavour Energy's Wetherill Park Zone Substation being a non-habitable building / site is comparatively less impacted. Whilst Endeavour Energy is not necessarily opposed to the Development Application, and Wetherill Park Zone Substation is not a 'sensitive receptor' in the traditional sense of being a habitable / residential use, the electrical equipment / operation of the site would be affected by excessive / cumulative dust emissions. In particular the Wetherill Park Zone Substation is an 'outdoor' design and whilst the most sensitive protection, automation and control equipment is located in substation control building, the equipment in the open yard including transformers, switches, circuit breakers etc. should not be subject to excessive dust emissions eg. it could cause a flashover to occur on the insulators and start a fire in the substation. From Endeavour Energy's perspective it is imperative that the appropriate air quality management measures are implemented and adhered to in order to minimise any impact on the Wetherill Park Zone Substation (as well as the other electricity infrastructure on and in proximity of the site).

In regard to Endeavour Energy's role as an electricity supply authority, it has the following additional recommendations and comments.

- State Environmental Planning Policy No 33 - Hazardous and Offensive Development (SEPP33)

Endeavour Energy is aware that the provisions of SEPP33 in the preparation of a preliminary hazard assessment electricity infrastructure is not defined / regarded as sensitive land use. However, in similar situations Endeavour Energy has sought further advice from the consultants preparing the preliminary hazard assessment on the basis that, although not a sensitive land use in the traditional / environmental sense, if the electricity infrastructure on or in proximity of the site (which also may be a potential ignition source) is damaged, the resulting outage could leave many properties / customers without power. The consultants have been requested to specifically address the risks associated with the proximity of the electricity infrastructure ie. detail design considerations, technical or operational controls etc. to demonstrate as required by SEPP33 that the proposed business / development is suitably located and can be built and operated with an adequate level of safety and pollution control.

- Safety Clearances

As a minimum any buildings, structures, etc. whether temporary or permanent must comply with the minimum safe distances / clearances for voltages up to and including 132,000 volts (132 kV) for any building or structure (including fencing, signage, flag poles etc.) whether temporary or permanent must comply with the minimum safe distances / clearances for voltages up to and including 132 kV as specified in:

- Australian/New Zealand Standard AS/NZS 7000 – 2016: 'Overhead line design' as updated from time to time.
- 'Service and Installation Rules of NSW' which can be accessed via the following link to the Energy NSW website:

<https://energy.nsw.gov.au/government-and-regulation/legislative-and-regulatory-requirements/service-installation-rules> .

These distances must be maintained at all times to all buildings and structures and regardless of the Council's allowable building setbacks etc. under its development controls. As a guide please find attached a copy of Endeavour Energy Drawing 86232 'Overhead Lines Minimum Clearances Near Structures'.

Even if there is no issue with the safety clearances to the building or structure, ordinary persons must maintain a minimum safe approach distance of 3.0 metres to all voltages up to and including 132,000 volts / 132 kV. Work within the safe approach distances requires an authorised or instructed person with technical knowledge or sufficient experience to perform the work required, a safety observer for operating plant as well as possibly an outage request and/or erection of a protective hoarding.

- Network Asset Design

Endeavour Energy's Company Policy 9.2.5 'Network Asset Design', includes the following requirements for electricity connections to new urban subdivision / development:

5.11 Reticulation policy

5.11.1 Distribution reticulation

In order to improve the reliability performance of and to reduce the operating expenditure on the network over the long term the company has adopted the strategy of requiring new lines to be either underground cables or where overhead is permitted, to be predominantly of covered or insulated construction. Notwithstanding this strategy, bare wire overhead construction is appropriate and permitted in some situations as detailed below.

In areas with the potential for significant overhanging foliage, CCT is used to provide increased reliability as it is less susceptible to outages from wind-blown branches and debris than bare conductors. CCT must only be used in treed² areas as the probability of a direct lightning strike is low. In open areas where the line is not shielded from a direct lightning strike, bare conductors must generally be used for 11kV and 22kV reticulation.

Non-metallic Screened High Voltage Aerial Bundled Cable (NMSHVABC) must be used in areas which are heavily treed and where it is not practicable to maintain a tree clearing envelope around the conductors.

² A "treed" area is one with a substantial number of trees adjacent to the line, in each span. In these situations CCT is used to provide increased reliability as it is less susceptible to outages from wind-blown

5.11.1.1 Urban areas

Reticulation of new residential subdivisions will be underground. In areas of low bushfire consequence, new lines within existing overhead areas can be overhead, unless underground lines are cost justified or required by either environmental or local council requirements.

Where underground reticulation is required on a feeder that supplies a mixture of industrial, commercial and/or residential loads, the standard of underground construction will apply to all types of load within that development.

Where ducting is used, adequate spare ducts and easements must be provided at the outset to cover the final load requirements of the entire development plan.

Extensions to the existing overhead 11kV/22kV network must generally be underground. Bare wire will be used for conductor replacements and augmentations except in treed areas where CCT or NMSHVABC must be used.

Extensions to the existing overhead LV network and augmentations must either be underground or ABC. Conductor replacements greater than 100m in route length must utilise aerial bundled cable.

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. Subject to the foregoing Endeavour Energy has no objection to the Development Application.

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 in the attachment 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.

With the current COVID-19 health risk, as many as possible of Endeavour Energy staff are working from home. As a result there is only a small contingent located at the Huntingwood head office for essential operations. Although working from home, access to emails and other internal stakeholders is now somewhat limited and as a result it may take longer than usual to respond to enquiries. Thank you for your understanding during this time.

Yours faithfully

Cornelis Duba

Development Application Specialist

Network Environment & Assessment

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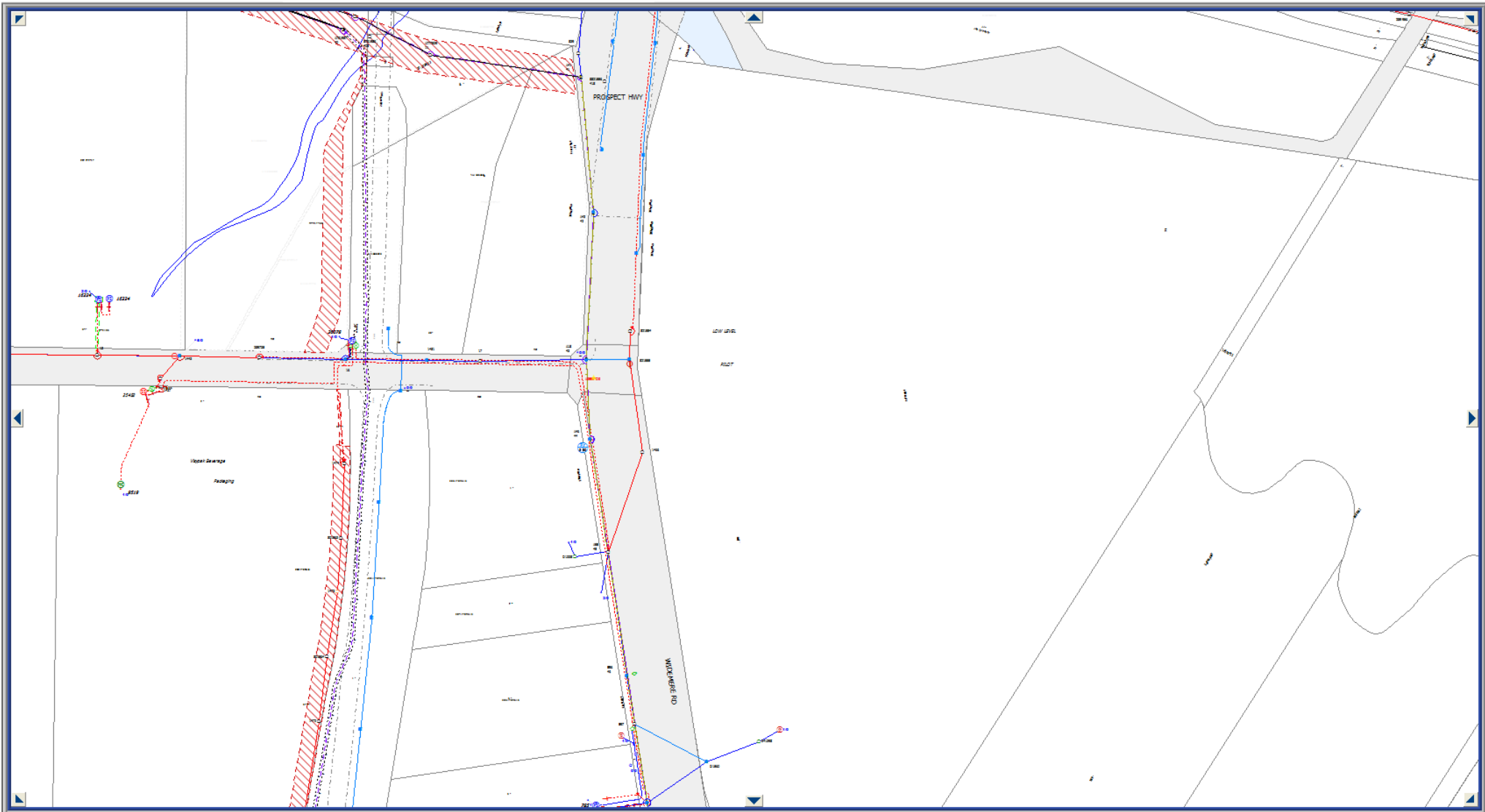


2 Proposed Development



Figure 1 Extract from Architectural Site Plan prepared by 4d Architects – refer Appendix 5







39 Davis Rd

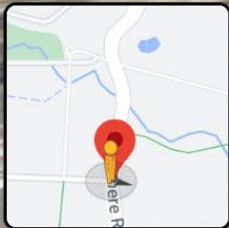
Wetherill Park, New South Wales



Google



Street View





Google

Image capture: Nov 2019 © 2020 Google Australia Terms Report a problem

3 Widemere Rd

Wetherill Park, New South Wales

 Google

 Street View



From: Cornelis Duba

Sent: Tuesday, 21 May 2019 8:24 AM

To: mail@fairfieldcity.nsw.gov.au

Cc: HTasdarian@fairfieldcity.nsw.gov.au

Subject: FAIRFIELD CITY COUNCIL DEVELOPMENT APPLICATION NO. 165.1/2019 RE 2 WIDEMERE ROAD WETHERILL PARK

The General Manager
Fairfield City Council

ATTENTION: Ms H Tasdarian, Senior Development Planner

Dear Sir or Madam

I refer to Council's letter of 23 May 2019 (received by Endeavour Energy's Records Management section on 20 May 2019) regarding Development Application No. 165.1/2019 at 2 Widemere Road WETHERILL PARK (PART LOT: 1 DP: 515773) for 'Proposed Community Recycling Centre'. Submissions need to be made to Council by 3 June 2019 ie. 14 days.

As per Endeavour Energy's attached email of 12 October 2018 which was sent to all the Councils in Endeavour Energy's franchise area, to assist Endeavour Energy it would be appreciated if possible in future Council could email any development application and/or planning proposal notifications to property.development@endeavourenergy.com.au.

Please note that under the provision of State Environmental Planning Policy (Infrastructure) 2007 (NSW), Section 45 'Determination of development applications—other development' Endeavour Energy has 21 days after the notice is given in order to enable it to provide comments about potential safety risks.

As shown in the below site plans from Endeavour Energy's G/Net master facility model (and extract from Google Maps Street View) in relation to the Site there are:

- No easements over the site benefitting Endeavour Energy (easements are indicated by red hatching).
- 11,000 volt / 11 kilovolt (kV) high voltage overhead power lines to the road verge / roadway.
- No existing low voltage service conductor or customer connection point.

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).

Endeavour Energy's G/Net master facility model does not show electricity infrastructure belonging to other authorities. The 'EASEMENT FOR TRANSMISSION LINE 30.48 WIDE - (VIDE J259850)' that adjoins the northern side of the Site appear to be for a voltage in excess of the 132,000 volts / 132 kV that are not part of Endeavour Energy's distribution network and is to the benefit of TransGrid, the owner and operator of the high voltage electricity transmission network. Their contact details to seek comments on the development application are available on their website via the following link:

<https://www.transgrid.com.au/Pages/contact.aspx>.

Subject to the resolution of the foregoing and the following 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 in detail the suitability of the site for the development in regards to whether the available electricity services are adequate for the development.

Utilities

The proposed Building will be designed to incorporate all utility services that will be required to service the future use of the buildings.

The availability of electricity supply to a site is based on a wide range of factors eg. the age and design of the network; other development in the locality utilising previously spare capacity within the local network; the progress of nearby / surrounding sites including electricity infrastructure works eg. a smaller and isolated development that may not of its own accord require a substation may require a substation to facilitate the development and from which the spare capacity is made available to subsequent nearby development. Older / above ground areas of the network utilising pole mounted substations have comparatively limited capacity of 25 kilovolt amperes (kVA) up to a maximum of 400 kVA where as a newer padmount substation can accommodate loads from 315 kVA up to 1,500 kVA (typically 500 kVA) ie. there is a significant variation in the number and type of premises able to be connected to a substation.

Applicants should not automatically assume that the presence of electricity infrastructure or nearby similar development means that adequate supply is immediately available to facilitate their proposed development. The existing substations in the locality may have sufficient spare capacity to accommodate any additional load. However an extension and/or augmentation of the existing network may be required but this will not be determined until a detailed assessment is undertaken. Endeavour Energy's preference is to alert proponents / applicants (and Council) of the potential matters that may arise as further redevelopment of urban areas continues to occur.

In due course the applicant for the 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. 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 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 an Accredited Service Provider (ASP) of an appropriate level and class of accreditation. The ASP scheme is administered by NSW Resources & Energy 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> .

The new low voltage service conductor / customer connection point must comply with the 'Service and Installation Rules of NSW' which can be accessed via the following link to the NSW Planning & Environment website:

- 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. For new electricity infrastructure, from an earthing perspective child care centres are regarded as a 'special location' and the applicant's ASP needs to consider that the existing local network may not have taken into account the possible use of the site for this purpose.

- 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 (including any new electricity infrastructure required to facilitate the proposed development). Only low growing shrubs not exceeding 3.0 metres in 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 (at least the same distance from overhead power lines as their potential full grown height) 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 a potential safety risk, cause of bush fire, restrict access, reduce light levels from streetlights or result in the interruption of supply. Such landscaping may be 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.

Endeavour Energy's recommendation is that consideration be given to the removal of any existing trees which are of low ecological significance in the proximity of overhead power lines. For any proposed planting of trees in proximity of overhead power lines it is recommended they be replaced with an alternative smaller planting to ensure appropriate clearances are maintained whilst minimising the need for future pruning.

- 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.

- Asbestos

Endeavour Energy's G/Net master facility model indicates that the site is in an area identified or suspected of having asbestos or asbestos containing materials (ACM) present in the electricity 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:

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

Further details are available by contacting Endeavour Energy's Safety & Environmental Services Branch 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>

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 multiple 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.

- Emergency Contact

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

I appreciate that not all the foregoing issues may be directly 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

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