

The Secretary  
NSW Planning, Industry & Environment


13 October 2021

**ATTENTION: Shaun Williams**

Dear Sir or Madam

I refer to the Department's below email of 13 September 2021 regarding the public exhibition of the Environmental Impact Statement (EIS) for State Significant Development SSD-18204994 Snack Brands Manufacturing Facility for 'Construction and operation of a chips/snack foods manufacturing facility to connect to the existing adjoining Snack Brands Warehouse and Distribution facility' at 2 and 14 Distribution Drive, Orchard Hills (Lots 10 and 11 DP 271141) in the Penrith City Local Government Area. Submissions need to be made to the Department by 13 October 2021.

As shown in the below site plans from Endeavour Energy's G/Net master facility model (and extracts from Google Maps Street View) there is:

- An easement benefitting Endeavour Energy (indicated by red hatching) for 11,000 volt / 11 kilovolt (kV) high voltage underground cables running from Distribution Drive to Mamre Road.
- Padmount substations no.s 54149, 54150 and 54151 (indicated by the symbols  to the southern Distribution Drive road frontage over which easements and restrictions will need to be created on title in accordance with Endeavour Energy's Mains Design Instruction MDI 0044 'Easements and Property Tenure Rights'.
- Low voltage and 11 kV underground cables to parts of the southern Distribution Drive road verge / roadway.
- Low voltage overhead power lines to parts of the Mamre Road road verge / roadway.

Subject to the satisfactory 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 the EIS indicates 'The incoming power supply has been negotiated with Endeavour Energy'. Accordingly the applicant must complete the application for connection of load with Endeavour Energy's Network Connections Branch who are responsible for managing the conditions of supply with the proponent and their Accredited Service Provider (ASP). The applicant will also need to contact Endeavour Energy's Network Connections Branch (via Head Office enquiries on business days from 9am - 4:30pm on telephone: 133 718 or (02) 9853 6666) if this Development Application:

- Includes any contestable works projects that are outside of any existing approved / certified works.
- Results in an electricity load that is outside of any existing Supply / Connection Offer requiring the incorporation of the additional load for consideration.

For the two new 11,000 volt / 11 kilovolt (kV) high voltage feeders required to facilitate the proposed development, for similar projects Endeavour Energy's Network Connections Branch has provided the following advice regarding the transmission requirements and high voltage distribution requirements:

*Appropriate consideration of the environmental impact when constructing a new feeder will need to be provided. The impact of these types of works in most settings are considerable, including:*

- *Network outages to facilitate the completion of the electrical works.*
- *Traffic diversions and disruptions to traffic flow which will require a traffic management plan.*
- *Establishing appropriate barriers and signage to ensure traffic and pedestrians are safely diverted around works*
- *Liaising with the road controlling authority to ensure works align with their strategies and requirements.*
- *Other typical construction impacts might include noise and vibration associated with construction equipment, and dust from the construction zone which will need to be managed to minimise these impacts.*
- *Notifying properties whose access and/or power supply will be affected.*

*In saying the foregoing, it is expected that Endeavour Energy's processes and procedures will be followed when application is made for connection to Endeavour Energy's electricity supply network and these will apply to projects such as this. These procedures require the submission of a Summary Environmental Report (SER) with each electrical design submitted to Endeavour Energy's Network Connections Branch for Certification. Endeavour Energy is a Determining Authority under Part 5 Environmental Planning and Assessment Act, 1979 (NSW) and under the auspices of the Code of Practice for Authorised Network Operators (the Code) as prepared by the then Department of Planning and Environment in 2015.*

- 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 treed<sup>2</sup> 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.

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<sup>2</sup> 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.

- Bushfire

Endeavour Energy has noted the EIS indicates a Bushfire Protection Assessment has been undertaken having regard to the requirements of NSW Rural Fire Service ‘Planning for Bush Fire Protection 2019’ which provides the following advice regarding electricity services.

### 3.4 Electricity services

Table 3-4 outlines the proposed performance solution and compliance with the performance criteria for electricity services.

Table 3-4 – performance criteria for electricity services (PBP guidelines pg. 68)

Performance criteria	Solution	Compliance	
		Acceptable solution	Performance criteria
Location of electricity services limits the possibility of ignition of surrounding bushland or the fabric of buildings.	Where practicable, electrical transmission lines are underground.	☑	
	Where overhead electrical transmission lines are proposed: <ul style="list-style-type: none"> <li>• lines are installed with short pole spacing (30m), unless crossing gullies, gorges or riparian areas; and</li> <li>• no part of a tree is closer to a power line than the distance set out in ISSC3 Guideline for Managing Vegetation Near Power Lines.</li> </ul>	☑	

The following is an extract of Endeavour Energy’s Company Policy 9.1.1 Bushfire Risk Management:

#### 9.1.1 BUSHFIRE RISK MANAGEMENT

##### 1.0 POLICY STATEMENT

The company is committed to the application of prudent asset management strategies to reduce the risk of bushfires caused by network assets and aerial consumer mains to as low as reasonably practicable (ALARP) level. The company is also committed to mitigating, the associated risk to network assets and customer supply reliability during times of bushfire whilst achieving practical safety, reliability, quality of supply, efficient investment and environmental outcomes. The company is committed to compliance with relevant acts, regulations and codes.

Accordingly the electricity network required to service the proposed development must be fit for purpose and meet the technical specifications, design, construction and commissioning standards based on Endeavour Energy’s risk assessment associated with the implementation and use of the network connection / infrastructure for a bushfire prone site. In assessing bushfire risk, Endeavour Energy has traditionally focused on the likelihood of its network starting a bushfire, which is a function of the condition of the network. Risk control has focused on reducing the likelihood of fire ignition by implementing good design and maintenance practices. However the potential impact of a bushfire on its electricity infrastructure and the safety risks associated with the loss of electricity supply are also considered.

- 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.

Conversely, Endeavour Energy's electricity infrastructure is potentially a source of ignition for fires. Endeavour Energy's risk control has focused on reducing the likelihood of fire ignition by implementing good design and maintenance practices. However there is still the potential for fires to occur as a result of fault currents, flashovers, fallen conductors, vehicle impacts etc. and the potential for these as a risk to hazardous and offensive development should also be considered.

- 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. It applies to all electrical installations including temporary builder's supply / connections.

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.

The earthing system is usually in the form of an earth electrode consisting of earth rods or mats buried in the ground. It should be designed by a suitably qualified electrical engineer / Accredited Service Provider (ASP) following a site-specific risk assessment having regard to the potential number of people could be simultaneously exposed, ground resistivity etc. For details of the ASP scheme please refer to the above point 'Network Capacity / Connection'.

In particular appropriate consideration should be provided to the conductivity of the fencing within an easement or in proximity of electricity infrastructure (particularly with overhead power lines which may fall as a result of storm damage or accidental strikes) where there is a possibility it could act as a conductor of electricity and dangerous currents may be carried along the fence. Where conductive / metal fencing is used it must be appropriately earthed eg. the by the use of isolation panels where the fence enters or exits the easement created by the use of timber posts and/or earth electrode installed adjacent to the easement or overhead power lines.

- Easement Management / Network Access

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

- Not install or permit to be installed any buildings, structures or services within the easement site.
- Not alter the surface level of the easement site.
- 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.

Endeavour Energy's preference is for no activities or encroachments to occur within its easements. Most activities are prohibited within the padmount substation easement. However, if any proposed works or activities (other than those approved / certified by Endeavour Energy's Network Connections Branch as part of an enquiry / application for load or asset relocation project) will encroach / affect Endeavour Energy's easements, contact must first be made with the Endeavour Energy's Easements Officer, Jeffrey Smith, on business days on direct telephone 9853 7139 or alternately email [Jeffrey.Smith@endeavourenergy.com.au](mailto:Jeffrey.Smith@endeavourenergy.com.au) or [Easements@endeavourenergy.com.au](mailto:Easements@endeavourenergy.com.au) .

Please find attached for the applicant's reference copies of Endeavour Energy's:

- Mains Design Instruction MDI 0044 'Easements and Property Tenure Rights' which deals with activities / encroachments within easements.
- General Restrictions for Underground Cables.
- Guide to Fencing, Retaining Walls and Maintenance Around Padmount Substations.

It is imperative that the access to the existing electrical infrastructure on and in proximity of the site be maintained at all times. To ensure that supply electricity is available to the community, access to the electricity infrastructure may be required at any time. Restricted access to electricity infrastructure by electricity workers causes delays in power restoration and may have severe consequences in the event of an emergency.

- Prudent Avoidance

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 reducing exposure and increasing separation distances to more sensitive uses such as residential or schools, pre-schools, day care centres or where potentially a greater number of people are regularly exposed for extended periods of time.

These emissions are usually not an issue but with Council's permitting or encouraging development with higher density, reduced setbacks and increased building heights, but as the electricity network operates 24/7/365 (all day, every day of the year), the level of exposure can increase.

Endeavour Energy believes that irrespective of the zoning or land use, applicants (and Council) should also adopt a policy of prudent avoidance by the siting of more sensitive uses eg. the office component of an industrial building, away from and less susceptible uses such as garages, non-habitable or rooms not regularly occupied eg. storage areas in a commercial building, towards any electricity infrastructure – including any possible future electricity infrastructure required to facilitate the proposed development.

Where development is proposed near electricity infrastructure, Endeavour Energy is not responsible for any amelioration measures for such emissions that may impact on the nearby proposed development.

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.

- Vegetation Management

The planting of large trees near electricity infrastructure is not supported by Endeavour Energy. Particularly for overhead power lines, ongoing vegetation management / tree trimming is a significant network cost and falling trees and branches during storms are a major cause of power outages.

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 existing trees which are of low ecological significance in proximity of overhead power lines be removed and if necessary replaced by an alternative smaller planting. Any planting needs to ensure appropriate clearances are maintained whilst minimising the need for future pruning.

Screening vegetation around a padmount substation should be planted a minimum distance of 800mm plus half of the mature canopy width from the substation easement and have shallow / non-invasive roots. This is to avoid trees growing over the easement as falling branches may damage the cubicle and the electricity infrastructure as do tree roots. All vegetation is to be maintained in such a manner that it will allow unrestricted access by electrical workers to the substation easement all times.

- 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 AS 2601-2001: 'The demolition of structures' as updated from time to time. 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 i.e. all electrical apparatus shall be regarded as live until isolated and proved de-energised by approved means.

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 power lines and underground cables etc.

- 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. Please find attached copies of 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 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](mailto: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. Endeavour Energy's contact details should be included in any relevant risk and safety management plan.

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 (and Council) 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](mailto:property.development@endeavourenergy.com.au) is preferred.

With the COVID-19 health risk a significant number of Endeavour Energy staff are working from home. Access to emails and other internal stakeholders can accordingly be somewhat limited. As a result, it may sometimes take longer than usual to respond to enquiries. Thank you for your ongoing understanding during this time.

Yours faithfully

Cornelis Duba

Development Application Specialist

Network Environment & Assessment

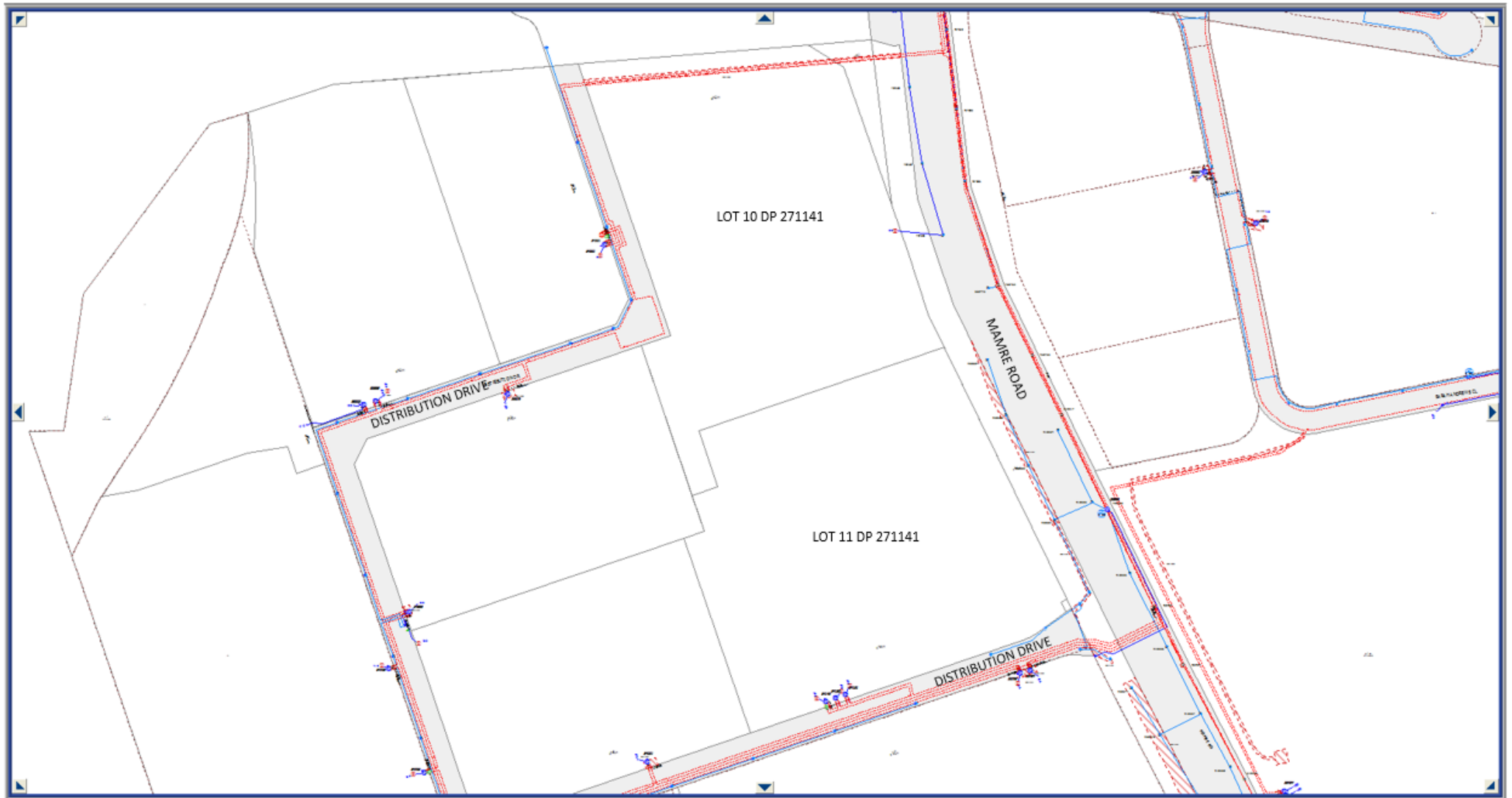
M: 0455 250 981

E: [cornelis.duba@endeavourenergy.com.au](mailto:cornelis.duba@endeavourenergy.com.au)

51 Huntingwood Drive, Huntingwood NSW 2148

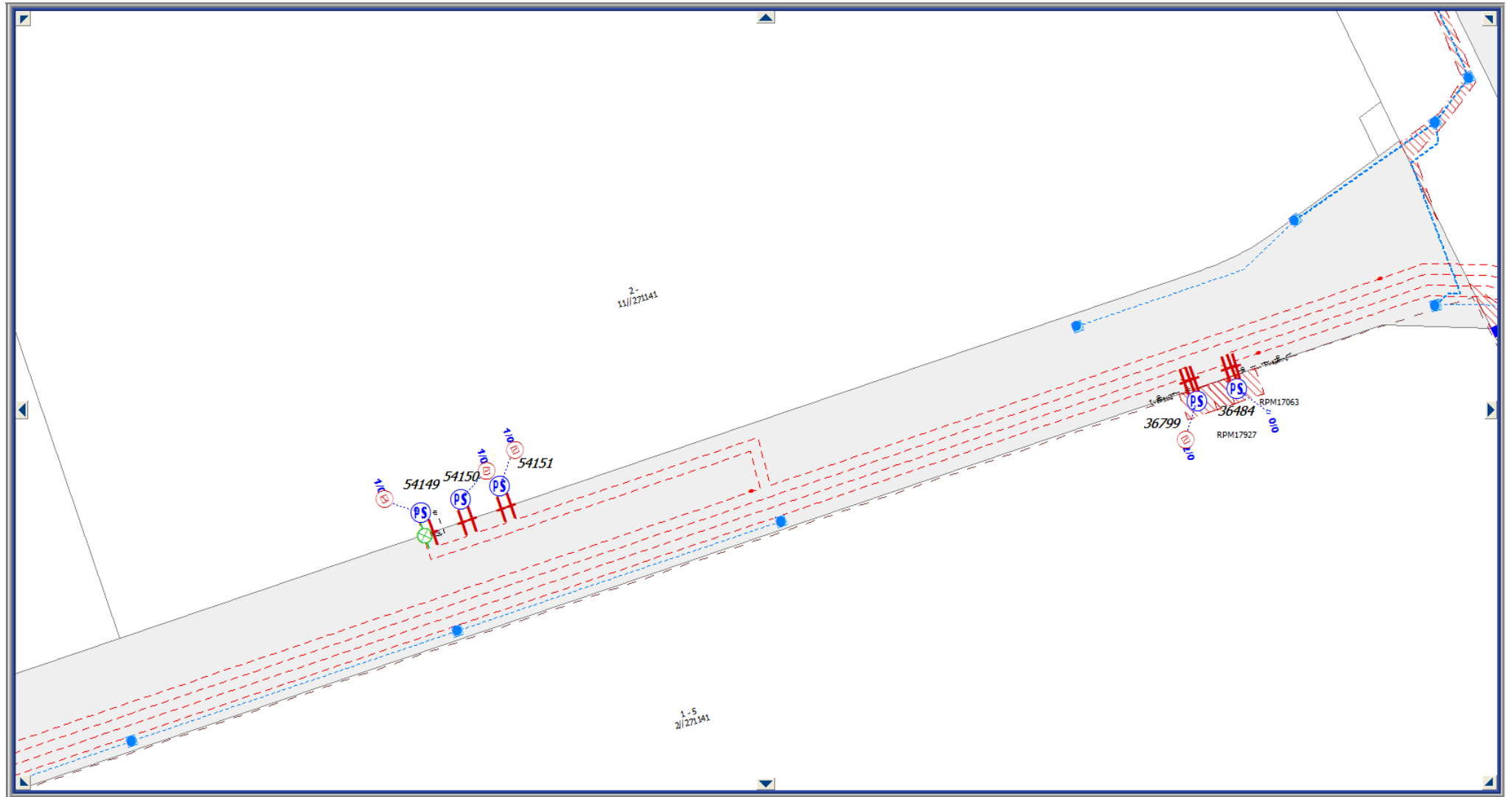
[www.endeavourenergy.com.au](http://www.endeavourenergy.com.au)





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. Easements benefitting Endeavour Energy are indicated by red hatching. 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 customer 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).

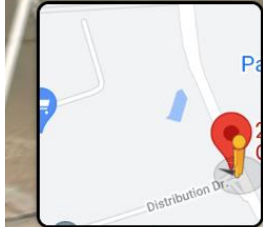




Mamre Rd  
Erskine Park, New South Wales



Street View - May 2021

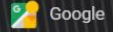


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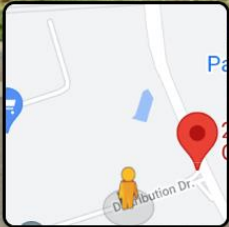
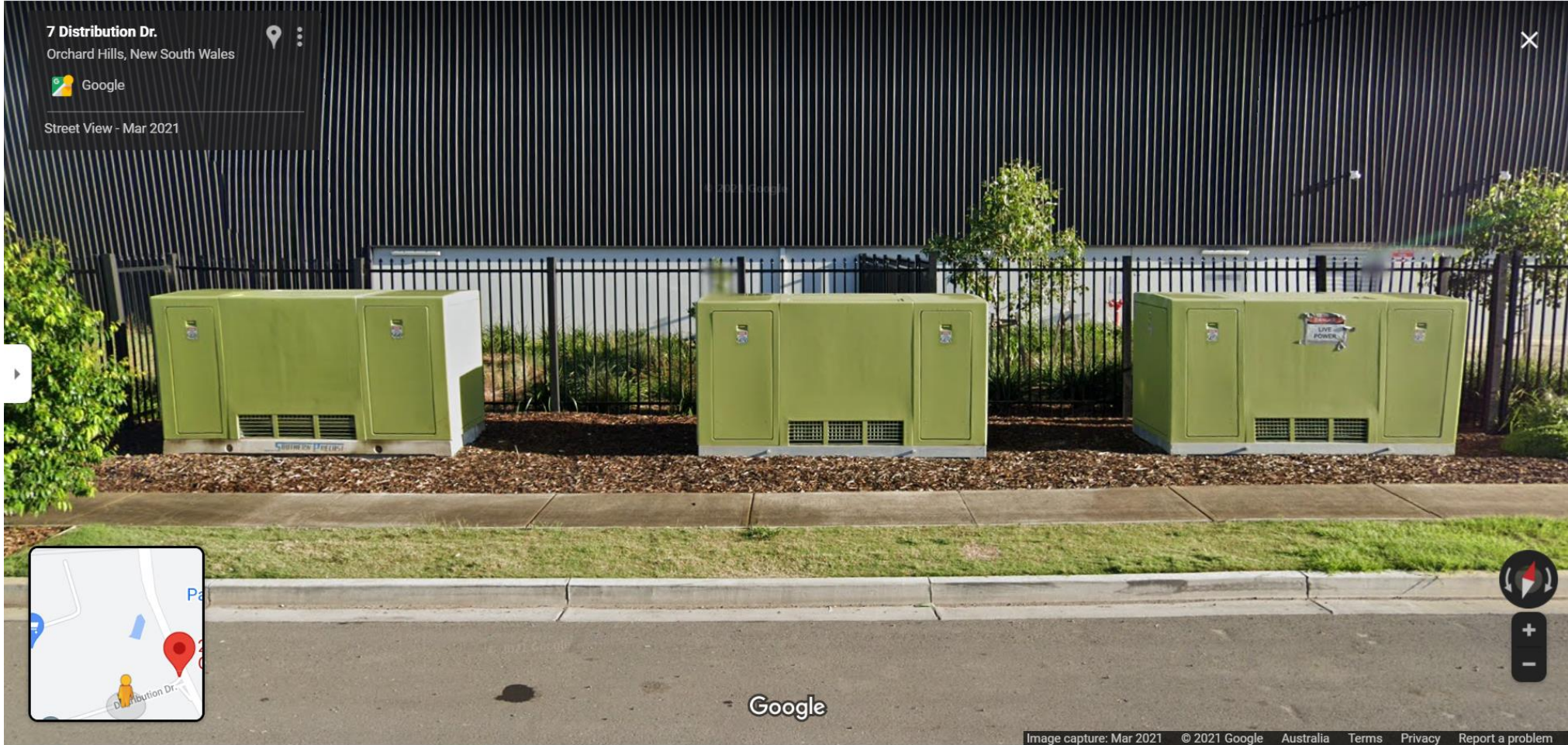
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7 Distribution Dr.

Orchard Hills, New South Wales



Street View - Mar 2021



Google

**From:** Jessica Fountain <Jessica.Fountain@planning.nsw.gov.au>  
**Sent:** Monday, 13 September 2021 4:30 PM  
**To:** Property Development <Property.Development@endeavourenergy.com.au>  
**Cc:** Shaun Williams <Shaun.Williams@planning.nsw.gov.au>  
**Subject:** Notice of Exhibition – Snack Brands Manufacturing Facility (SSD-18204994)

Dear Endeavour Energy

The Department of Planning, Industry and Environment (Department) has received an Environmental Impact Statement (EIS) for the Snack Brands Manufacturing Facility (SSD-18204994).

The EIS will be publicly exhibited from Thursday 16 September 2021 to Wednesday 13 October 2021.

The EIS can be viewed on the Department's Major Projects website at <https://www.planningportal.nsw.gov.au/major-projects/project/41791> from **Thursday 16 September 2021**. If you wish to view the documents prior to this date, you will need to register an agency account on the Major Projects site. A User Guide is attached for your reference.

The Department invites you to advise on the proposal, including advice on recommended conditions by **Wednesday 13 October 2021**.

If you have any enquiries, please contact Shaun Williams on (02) 8275 1345 or via email at [shaun.williams@planning.nsw.gov.au](mailto:shaun.williams@planning.nsw.gov.au).

Regards

**Jess Fountain**  
**DA Coordinator**

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*The Department of Planning, Industry and Environment acknowledges that it stands on Country which always was and always will be Aboriginal land. We acknowledge the Traditional Custodians of the land and waters, and we show our respect for elders past, present and emerging. We are committed to providing places in which Aboriginal people are included socially, culturally and economically through thoughtful and collaborative approaches to our work.*



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