

The Secretary
NSW Department of Planning, Industry and Environment

23 August 2020

ATTENTION: Ania Dorocinska

Dear Sir or Madam

I refer to the Department's below email of 14 August 2020 regarding the Environmental Impact Statement (EIS) for State Significant Development SSD-10477 Sydney Business Park - Stage 3 for construction and operation of Stage 3 of Sydney Business Park. Comprising of four Warehouse and Distribution Centres, roads and infrastructure located at Hollinsworth Road and Astoria Street, Marsden Park (Part Lots 4 and 5 DP 1210172 and Part Lot 36 DP 262886) in the Blacktown City LGA. Submissions need to be made to the Department by 17 September 2020.

Please refer to the attached copy of Endeavour Energy's advice of 23 July 2020 provided to pjep environmental planning regarding the Request for Secretary's Requirements (SEARs). The recommendations and comments provided therein remain valid for the EIS.

Endeavour Energy has noted the following in the Stormwater Management and Servicing Report which is consistent with the advice previously provided to pjep environmental planning.

5.3 Electricity Supply

Marsden Park Industrial Precinct has recently had the benefit of the completion of major electricity infrastructure in the form of the South Marsden Park Zone substation located in Hollinsworth Road at Marsden Park. The Zone Substation is located 700 metres east of the subject site. The substation benefits from transmission supply at N-1 via connections to Rouse Hill and Marsden Park North Zone substations. The Zone substation currently has a firm capacity of 45MVA at N-1 and an installed capacity of 90MVA (2 x 45MVA). Current peak demand at this facility is 11MVA.

The expected demand on the network from the subject development is expected to be approximately 5.5 – 6.0 MVA. This bulk supply can be readily met by the existing zone capacity. Further Hollinsworth Road and Astoria Street both have new underground 11KV feeders located in the road reserve together with conduits to facilitate future feeder upgrades. It is proposed that as part of the Hollinsworth Road extension and the North-South Road 1 construction, the 11KV network would be extended and cross linked between Hollinsworth Road and Astoria Street. This will improve the reliability of the 11KV network in the area by enabling back up supply during outages or if any damage occurs.

Endeavour Energy has also noted that as shown in the following extract of the WH4 – Site Plan that provision has been made for two padmount substations. From Endeavour Energy's perspective the fact that provision is being made for the substation is a positive Endeavour Energy's general requirements is for a padmount substation be at ground level and have direct access from a public street unless it is provided with a suitable right of access and with an easement for the associated underground cables.

In regard to the proximity of the 'Diesel Generator Refueling Place' to the padmount substations, Endeavour Energy is aware that the provisions of State Environmental Planning Policy No 33— Hazardous and Offensive Development (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. Endeavour Energy's recommendation is that the separation distance be increased to as far as reasonably possible to minimise any potential risk.

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.

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

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From: Cornelis Duba
Sent: Thursday, 23 July 2020 1:26 PM
To: 'Phil Jones' <phil@pjep.com.au>
Cc: 'Michael Gray' <michael.gray@sydneybusinesspark.com.au>; 'Owen Walsh' <owen.walsh@sydneybusinesspark.com.au>
Subject: RE: Sydney Business Park - Stage 3 Facilities Project

Hello Phil

I refer to your below email of 15 July 2020 regarding the Request for Secretary's Requirements (SEARs) to the Department of Planning, Industry & Environment for Stage 3 Sydney Business Park to develop 4 new warehouse facilities and associated infrastructure at Hollinsworth Road and Astoria Street, Marsden Park (Part Lots 4 and 5 DP 1210172 and Part Lot 36 DP 262886).

In this regard as shown the following extract of a Draft Planning SEARs for another proposed State Significant Development which appears to be a standard requirement and is acceptable to Endeavour Energy.

13. Utilities

The EIS shall:

- address the existing capacity of the site to service the proposed development and any augmentation requirements for utilities, including arrangements for electrical network requirements, drinking water, wastewater and recycled water
- identify the existing infrastructure on-site and any possible impacts of the construction and operation of the proposal on this infrastructure.

As shown in the below site plan from Endeavour Energy's G/Net master facility model in regard to Stage 3 there are:

- No easements benefitting Endeavour Energy (active easements are indicated by red hatching with the blue hatching indicating a 'Retired Property' / released easement).
- 11,000 volt / 11 kilovolt (kV) high voltage and 132,000 volt / 132 kV high voltage underground cables, underground earth cables and underground pilot cables (carrying protection signals or communications between substations) to the Astoria Street road verge / roadway.
- Low voltage and 11 kV high voltage underground cables to the road verge / roadway for the extension of Hollinsworth Road.
- It is in proximity of Endeavour Energy's South Marsden Park Zone Substation located at Hollinsworth Road Marsden Park (Lot 100 DP 1188147).

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 'Dig Before You Dig' plan under the provisions of Part 5E 'Protection of underground electricity power lines' of the Electricity Supply Act 1995 (NSW).

The following is the advice that Endeavour Energy would provide should it receive a notification from the Department for a request for SEARs. I appreciate that not all the following issues may be directly or immediately relevant or significant to the request for SEARs / Development Application. However in keeping with the Department's aim of earlier and better engagement, 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.

- Network Capacity / Connection

Endeavour Energy has noted that the Scoping Report 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.

Table 1: Stage 3 Development Summary

Infrastructure and Services	
Potable Water, Sewer, Electricity and Telecoms	Extension and connection to existing mains in Hollinsworth Road and Astoria Street, and reticulation through the site


On 9 June 2020 Endeavour Energy made a submission to Blacktown City Council regarding Planning Proposal F19/1113 to amend State Environmental Planning Policy (Sydney Region Growth Centres) 2006 as it applies to land in the Marsden Park Industrial Precinct to:

- remove floor space ratio controls from all zones within the Precinct ;
- remove height of buildings controls from land zoned IN1 General Industrial, IN2 Light Industrial and B5 Business Development within the Precinct.

Endeavour Energy's Asset Planning & Performance Branch whilst not having undertaken a detailed analysis of the Planning Proposal provided the following advice which is also applicable to Stage 3:

The intent of the change in the planning controls is presumably to allow for high-density industrial developments with vertical or multi-level warehouses / buildings. At this time there is no issue with the increased density, in terms of peak demand at South Marsden Park Zone Substation there is currently spare capacity available but it is not unlimited ie. depending on the impact of the removal of the controls within the Precinct, the existing local network may need to be augmented at the appropriate time.

Endeavour Energy will continue to monitor the load growth on South Marsden Park Zone Substation. Any possible augmentation that may be required of the zone substation is not a prerequisite for the change to the development controls and new development proceeding.

In regard to the provision of electricity supply to sites within the Precinct, 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. Areas of the network utilising padmount substations (indicated by the symbol  on the site plan from Endeavour Energy's G/Net master facility model) 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.

As well as the capacity of distribution substations, other factors such as the size and rating / load on the conductors and voltage drop (which can affect the quality of supply particularly with long conductor runs) etc. need to be assessed. Given the large size of the proposed development an extension and/or augmentation of the existing local network will be required to facilitate the proposed development. However the extent of the works will not be determined until the final load assessment is completed. Endeavour Energy's preference is to alert proponents / applicants (and Council) of the potential matters that may arise as further development of 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. Depending on the outcome of the assessment, any required padmount substation/s 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 the attached copy of 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 9am - 4:30pm 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 may need to engage an ASP of an appropriate level and class of accreditation to assess the electricity load of the proposed development. The ASP scheme is administered by Energy NSW and details are available on their website via the following link or telephone 13 77 88:

<https://energy.nsw.gov.au/government-and-regulation/legislative-and-regulatory-requirements/asp-scheme-and-contestable-works> .

- 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.

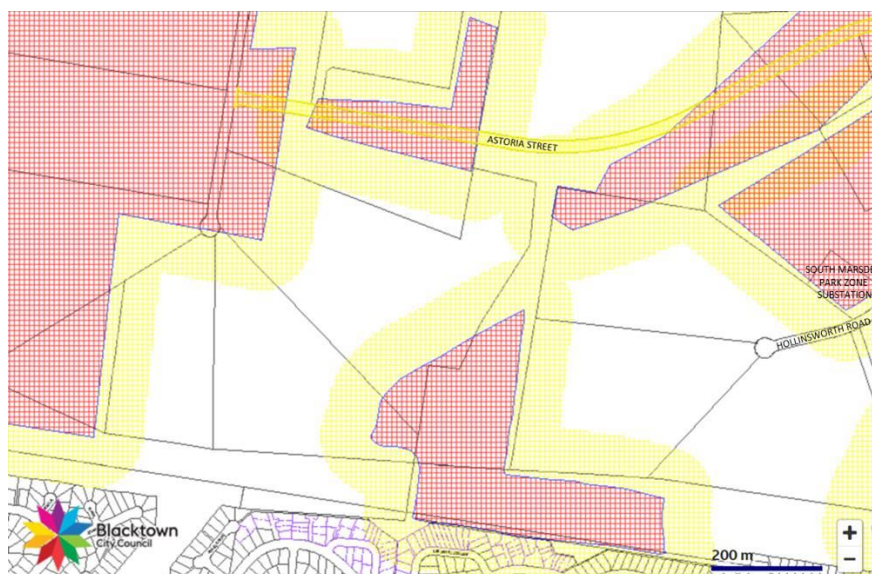
Where ducting is used, adequate spare ducts and easements must be provided at the outset to cover the final load requirements of the entire development plan.

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.

- Bushfire

Endeavour Energy has noted that as shown in the following extract of Blacktown City Council's online mapping system that part of Stage 3 is within a bushfire zone.



Although industrial uses are not covered by Chapters 5 to 7 of NSW Rural Fire Service 'Planning for Bush Fire Protection 2019' (PBP), the aim and objectives of PBP still need to be considered and a suitable package of bush fire protection measures should be proposed commensurate with the assessed level of risk to the development. PBP provides the following advice regarding electricity services:

5.3.3 Services – Water, electricity and gas

Intent of measures: to provide adequate services of water for the protection of buildings during and after the passage of a bush fire, and to locate gas and electricity so as not to contribute to the risk of fire to a building.

Table 5.3c

Performance criteria and acceptable solutions for water, electricity and gas services for residential and rural residential subdivisions.

PERFORMANCE CRITERIA		ACCEPTABLE SOLUTIONS	
The intent may be achieved where:			
ELECTRICITY SERVICES	➤ location of electricity services limits the possibility of ignition of surrounding bush land or the fabric of buildings.	➤ where practicable, electrical transmission lines are underground;	
		➤ where overhead, electrical transmission lines are proposed as follows: ➤ lines are installed with short pole spacing of 30m, unless crossing gullies, gorges or riparian areas; and ➤ no part of a tree is closer to a power line than the distance set out in ISSC3 <i>Guideline for Managing Vegetation Near Power Lines</i> .	

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.

- 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 / 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'.

- Location of Electricity Easements / Prudent Avoidance

The incorporation of electricity easements into privately owned lots is generally problematic for both Endeavour Energy and the future landowners and requires additional easement management to ensure no uncontrolled activities / encroachments occur within the easement area.

Accordingly Endeavour Energy's recommendation is that whenever reasonably possible, easements be entirely incorporated into public reserves and not burden private lots. Endeavour Energy's preference is to have continuity of its easements over the most direct and practicable route affecting the least number of lots as possible.

This is also in keeping with a policy of prudent avoidance. 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. 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 could become a potential safety risk, restrict access, reduce light levels from streetlights or result in the interruption of supply 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.

- **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 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. Endeavour Energy's contact details should be included in the Risk & Safety Management Plan.

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.

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Kind regards

Cornelis Duba

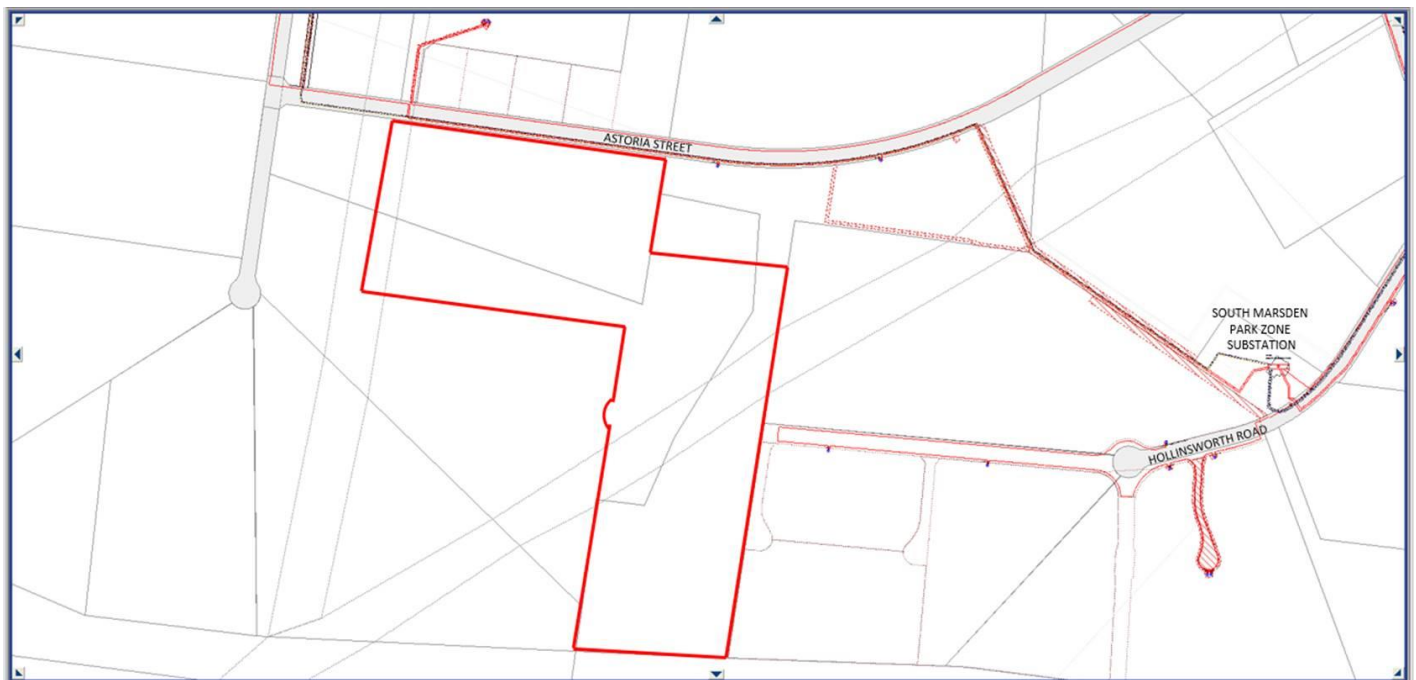
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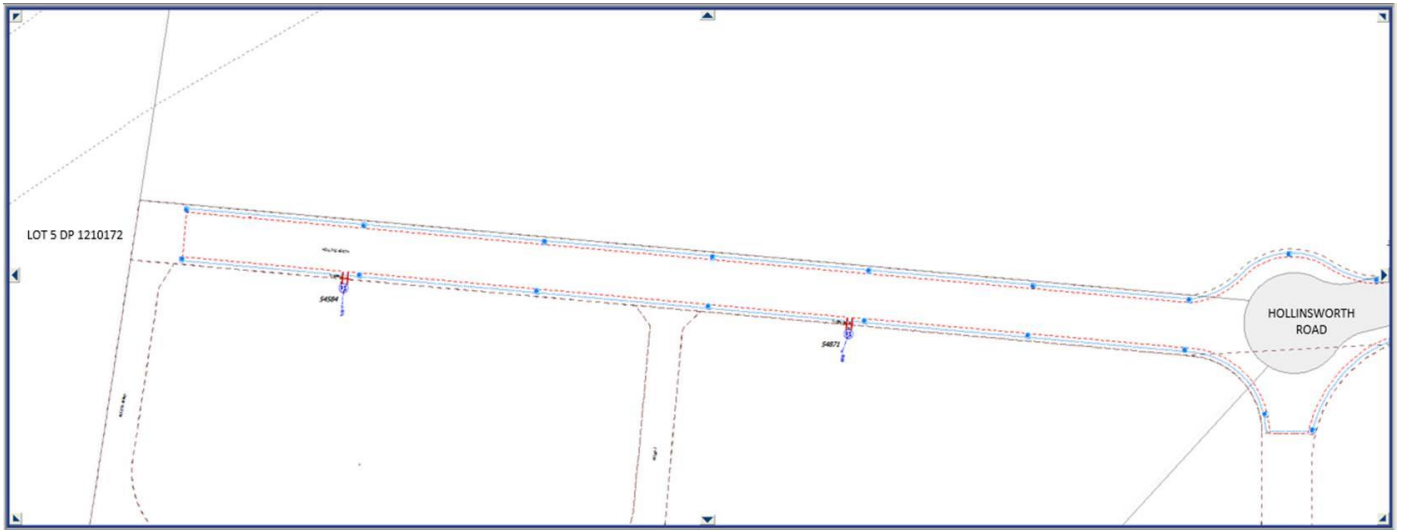
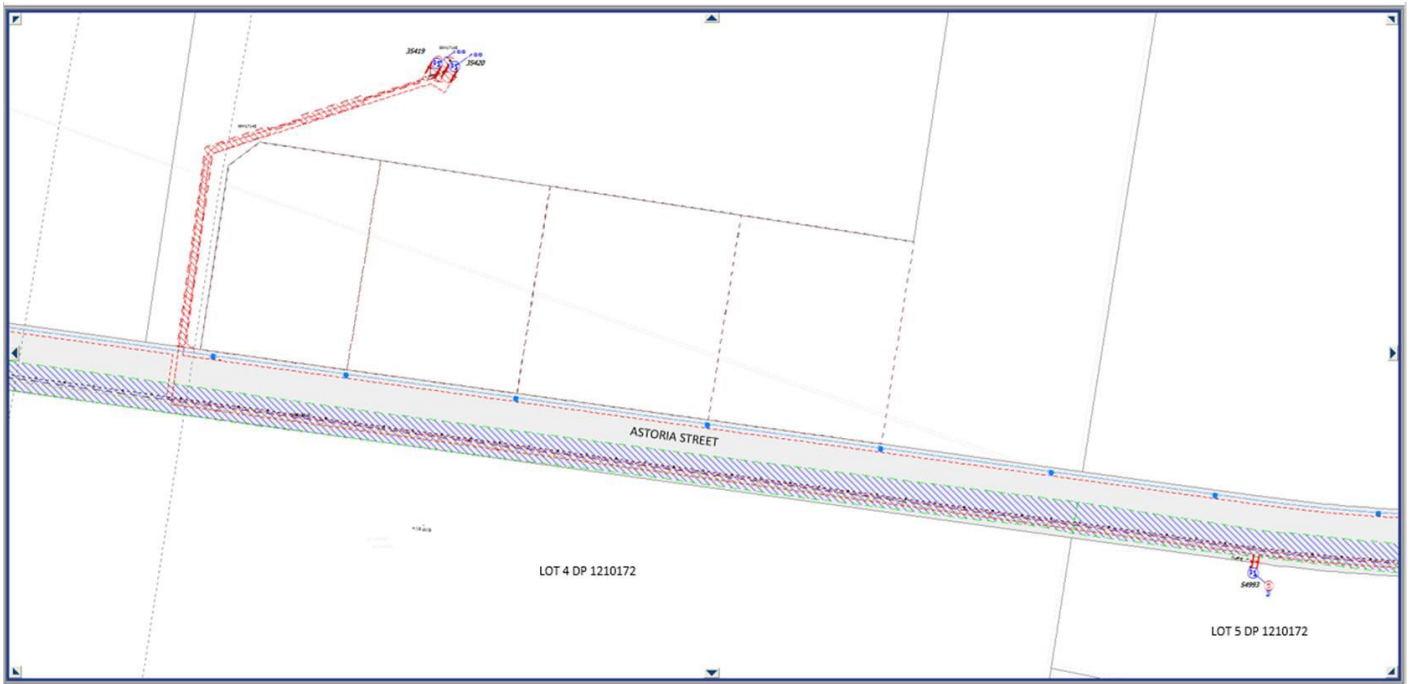
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From: Jessica Fountain <Jessica.Fountain@planning.nsw.gov.au>
Sent: Friday, 14 August 2020 4:29 PM
To: Property Development <Property.Development@endeavourenergy.com.au>
Cc: Ania Dorocinska <Ania.Dorocinska@planning.nsw.gov.au>
Subject: Notice of Exhibition – Sydney Business Park, Stage 3 (SSD-10477)

Dear Sir/Madam

The Department of Planning, Industry and Environment has received an Environmental Impact Statement (EIS) for the Sydney Business Park - Stage 3 (SSD-10477).

The EIS will be publicly exhibited from 21/08/2020 to 17/09/2020.

The EIS can be viewed on the Department's Major Projects website at <https://www.planningportal.nsw.gov.au/major-projects/project/37941> from 21/08/2020. 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 the 17/09/2020.

If you have any enquiries, please contact Ania Dorocinska on 02 9274 6225 or at ania.dorocinska@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 Aboriginal land. We acknowledge the traditional custodians of the land and we show our respect for elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.



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