From: Cornelis Duba [mailto:Cornelis.Duba@endeavourenergy.com.au]
Sent: Friday, 13 October 2017 12:41 PM
To: DPE CSE Information Planning Mailbox <information@planning.nsw.gov.au>
Cc: Jeffrey Smith <Jeffrey.Smith@endeavourenergy.com.au>
Subject: NSW Planning & Environment Notice of Exhibition SSD 8200 RE St Marys Resource Recovery Facility 21 and 25 Dunheved Circuit, St Marys

The Secretary
NSW Planning & Environment

ATTENTION: Kelly McNicol, Team Leader Industry Assessments

Dear Sir or Madam

I refer to the Department's letter of 11 September 2017 regarding Development Application SSD 8200 at St Marys Resource Recovery Facility located 21 and 25 Dunheved Circuit, St Marys (Lot 9 DP 31908 and Lot 143 DP 1013185). The proposal involves increasing the operating capacity of an existing resource recovery facility to process up to 350,000 tonnes per annum (tpa) of general solid waste (non-putrescible) and to expand the processing shed and associated operations to include 21 Dunheved Circuit. Submissions need to be made to the Department by 13 October 2017.

As shown in the below site plans from Endeavour Energy's G/Net master facility model in regards to the proposed building area there are:

- Easements benefitting Endeavour Energy (indicated by red hatching) for 11,000 volt / 11 kV high voltage underground cables, an indoor substation and a padmount substation.
- Low voltage and 11,000 volt / 11 kV high voltage overhead power lines (including a pole mounted substation indicated by the symbol) traversing the site not held under easement.
- An extended service line/customer owned pole (indicated by the green circle) to the customer connection point on the existing facility / building.
- Low voltage and 11 kV high voltage overhead power lines to part of the road verge / roadways.

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). 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).

In regards to the low voltage and 11 kV high voltage overhead power lines that are not held under an easement, they are protected assets and deemed to be lawful for all purposes under Section 53 'Protection of certain electricity works' of the *Electricity Supply Act 1995* (NSW). Essentially this means the owner or occupier of the land cannot take any action in relation to the presence in, on or over the land of electricity works ie. they cannot remove the electricity infrastructure encroachment from their property.

These protected assets are managed on the same basis as if an easement was in existence. In accordance with the attached copy of Endeavour Energy's Mains Design Instruction MDI 0044

'Easements and Property Tenure Rights', as shown in the following extract of Table 1 – 'Minimum easement widths', the low voltage and 11 kV high voltage overhead power lines require a 9 metre minimum easement width ie. 4.5 metres to either side of the centre line of the poles / overhead power lines. Where the theoretical easement width is not provided, the minimum required safety clearances to any structures must be maintained – please refer to the below point 'Safety Clearances'.

Table 1 - Minimum easement widths

	Voltage	Asset Type	Construction	Minimum Easement (m)
Overhead Assets	400V–22kV	Bare Construction	All	9
		ABC		
		CCT		

Please find attached for the applicant's reference a copy Endeavour Energy's 'General Restrictions for Overhead Power Lines'. The following is a summary of the usual / main terms of Endeavour Energy's electrical easements requiring that the land owner:

- Not install or permit to be installed any services or structures 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.

If the proposed works (other than those approved / certified by Endeavour Energy's Network Connections Branch as part of an enquiry / application for load please refer to the following point 'Network Capacity / Connection') will encroach/affect Endeavour Energy's easements or protected assets, contact must first be made with the Endeavour Energy's Easements Officer, Jeffrey Smith, on direct telephone 9853 7139 or alternately email Jeffrey.Smith@endeavourenergy.com.au.

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

- Network Capacity / Connection

  Although there is an existing customer connection, with the expansion of the operations the applicant for the future proposed development of the site will need to submit an application for connection of additional 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 additional required padmount substation 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

Whilst not having undertaken a detailed evaluation of the Development Application, Endeavour Energy's Asset Strategy & Planning Branch have provided the following advice:

- *St Marys Recovery Facility is supplied by padmount substations no.s 18017 and 29917.*
- *Substation no. 18017 has reasonable spare capacity to accept additional load.*
- *Substation no 29917 has comparatively limited spare capacity and to accept additional load would need to be upgraded to a larger size / load capacity.*
- *Both substations are connected to the same feeder taking supply from Endeavour Energy's Werrington Zone Substation located at 242-246 Forrester Road St Marys approximately 2.5 kilometres by road to the south-east of the site. This feeder currently has some spare capacity, but is also required to supply a large nearby subdivision.*
- *The Environmental Impact Statement in regards to electricity demand refers to emissions rather than load. Endeavour Energy would need to see the size of additional load as depending on the size and timing of the additional load for this site, another supply option may need to be established.*

- Safety Clearances

Any future proposed buildings, structures, etc. must comply with the minimum safe distances / clearances for voltages up to and including 132,000 volts (132kV) as specified in AS/NZS 7000:2010 'Overhead line design - Detailed procedures' and the 'Service and Installation Rules of NSW'. Different voltages are kept at different heights, the higher the voltage, the higher the wires are positioned on the pole. Similarly, the higher the voltage, the greater the required building setback. These distances must be maintained at all times to all buildings and structures ie. including temporary site sheds, tower cranes used during construction etc. and regardless of the Council's allowable building setbacks etc. under its development controls, allowance must be made for the retention of appropriate / safe clearances. As a guide please find attached a copy of Endeavour Energy Drawing 'Overhead Lines Minimum Clearances Near Structures'.

Even if there is no issue with the safety clearances to the structures, 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 (and a distance of 4.0 metres for the erection and dismantling of scaffolding). For future access and maintenance of buildings and structures, in order to avoid the

need to work within the safe approach distances for ordinary persons (which requires an authorised or instructed person with technical knowledge or sufficient experience to perform the work required and a safety observer for operating plant) or possibly an outage request and/or erection of a protective hoarding, the retention of adequate building setbacks and/or suitable building design eg. not having parts of the building normally accessible to persons in close proximity of the overhead power lines, the use of durable / low maintenance finishes to reduce the need to access areas within the safe approach distances, is recommended. Alternatively the adoption of an underground solution may be required.

- Earthing

The construction of any building or structure (including fencing, signage, flagpoles etc.) that is connected to or in close proximity to Endeavour Energy's electrical network is required to comply with AS/NZS 3000:2007 'Electrical installations' to ensure that there is adequate connection to the earth. Inadequate connection to the earth places persons and the electricity network at risk.

- Network Access

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.

Please find attached for the applicant's reference a copy Endeavour Energy's 'Guide to Fencing and Maintenance Around Padmount Substations'.

- Contamination

Endeavour Energy has noted the following in the Environmental Impact Statement:

10.3 Potential impacts

10.3.1 Construction

Geology and Soils

Contamination

Potentially contaminated material present at the Proposal site may include the following.

- Fill Material (subsurface and surface)
- Soils around fuel storage areas and substation areas
- Previously cultivated soils from grazing activities
- Groundwater.

Table 10-3 Likelihood of contamination

Areas of Potential Environmental Concern	CoPC	Likely sources of potential contamination	Likelihood of Contamination being present on site
Soils and groundwater around substation locations	TRH/TPH, BTEXN, PAH, Metals-8, OC/OPPs, PCBs, and Asbestos	Leaks, spills and maintenance of the substation.	Low

Endeavour Energy's management and / or remediation measures for its network sites is implemented based on the presence of contaminants of potential concern that from a contamination perspective would make a site unsuitable for its required use as part of the electricity network. Based on current and historical use of padmount substation sites, Endeavour Energy normally would only undertake targeted intrusive site investigations to identify or assess concentrations of contaminants of potential concern if an incident / fault was to occur on a site. Should the site require significant augmentation or redevelopment, investigations would be undertaken by the applicant to determine whether environmental management or remediation is required on the substation site. Should that occur, and the padmount substation is identified as a source of the contamination as a result of Endeavour Energy's network operations / actions on the site, the applicant will need to by contact Endeavour Energy's Health, Safety & Environment via Head Office enquiries on telephone: 133 718 or (02) 9853 6666 from 8am - 5:30pm.

- 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 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 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.

- 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. street light columns, power poles, overhead 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. 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 the Emergencies Telephone is 131 003 which can be contacted 24 hours/7 days.

I appreciate that not all the foregoing issues may not be 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 as development occurs within the area in closer proximity of the existing (and future required) electricity infrastructure on and in the vicinity of the site.

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

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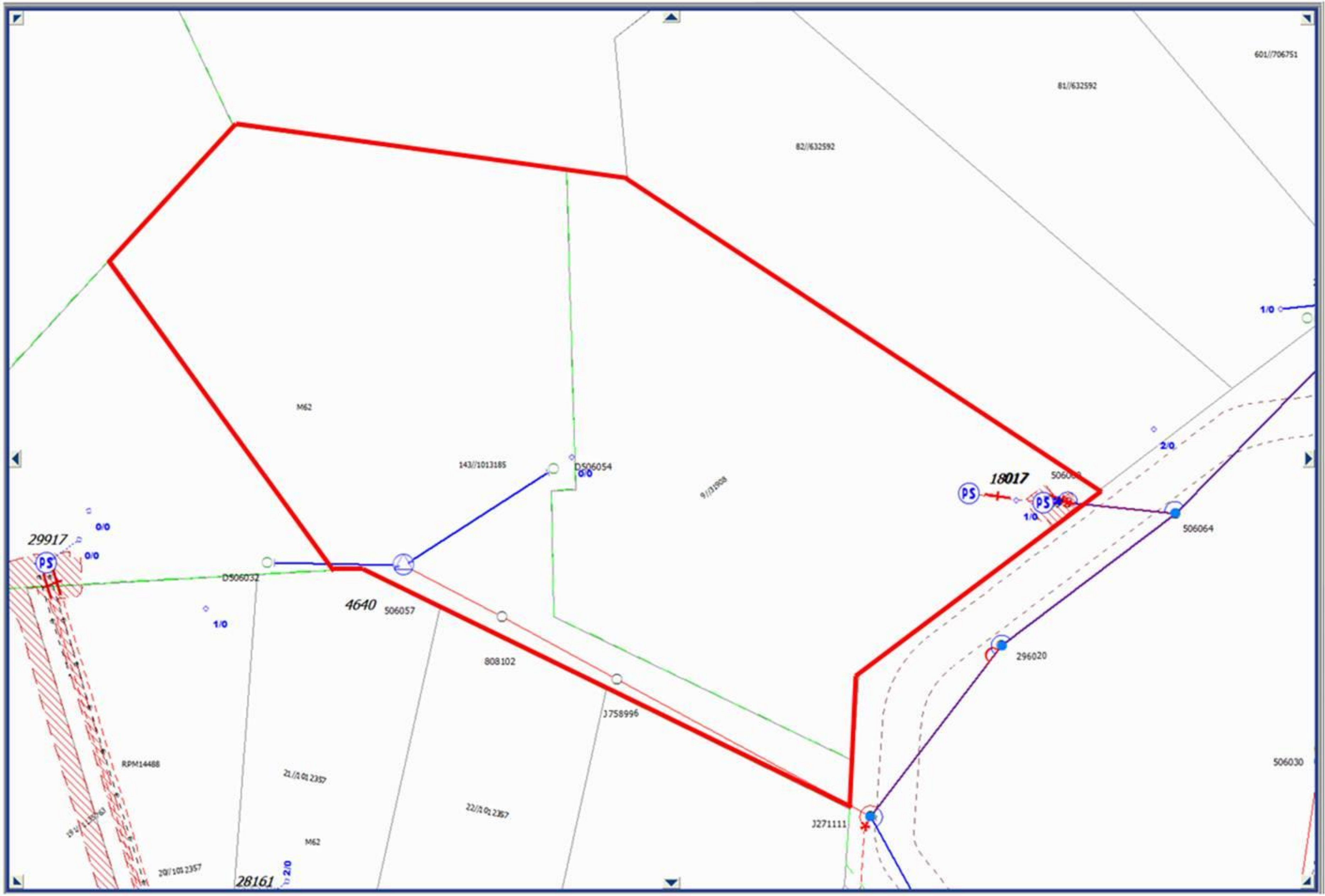
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