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REFERENCE: TRIM 2017/36/32

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Re: SSD 8755 - 192 Balaclava Rd, Macquarie Park - Macquarie University Central Courtyard Precinct Redevelopment.

I refer to Department of Planning and Environment SSD 8755.

This letter is Ausgrid's response under clause 45(2) of the State Environmental planning Policy (Infrastructure) 2007.

The assessment and evaluation of environmental impacts for a new development consent (or where a development consent is modified) is undertaken in accordance with requirements of Section 79C of the Environmental Planning and Assessment Act 1979. One of the obligations upon consent authorities, such as local councils, is to consider the suitability of the site for the development which can include a consideration of whether the proposal is compatible with the surrounding land uses and the existing environment.

In this regard, Ausgrid requires that due consideration be given to the compatibility of proposed development with existing Ausgrid infrastructure, particularly in relation to risks of electrocution, fire risks, Electric & Magnetic Fields (EMFs), noise, visual amenity and other matters that may impact on Ausgrid or the development.

With Regard to: Macquarie University Central Courtyard Precinct Redevelopment at 192 Balaclava Rd, Macquarie Park

- S5b-1_CC-AR-DA-NA- 003 - Site Plan - Issue B (6/10/2017)

Ausgrid consents to the above mentioned development subject to the following conditions:-

Method of Electricity Connection

The method of connection will be in line with Ausgrid's Electrical Standard (ES)1 – 'Premise Connection Requirements.

Supply of Electricity

It is recommended for the nominated electrical consultant/contractor to provide a preliminary enquiry to Ausgrid to obtain advice for the connection of the proposed development to the adjacent electricity network infrastructure. An assessment will be carried out based on the enquiry which may include whether or not:

- The existing network can support the expected electrical load of the development
- A substation may be required on-site, either a pad mount kiosk or chamber style and;
- site conditions or other issues that may impact on the method of supply.

Please direct the developer to Ausgrid's website, www.ausgrid.com.au about how to connect to Ausgrid's network.

Conduit Installation

The need for additional electricity conduits in the footway adjacent to the development will be assessed and documented in Ausgrid's Design Information, used to prepare the connection project design.

Vegetation

All proposed vegetation underneath overhead power lines and above underground cables must comply with the requirements of ISSC 3 Guideline For Managing Vegetation Near Power Lines.

Streetlighting

The developer is to consider the impact that existing streetlighting and any future replacement streetlighting and maintenance may have on the development. Should the developer determine that any existing streetlighting may impact the development, the developer should either review the development design, particular the placement of windows, or discuss with Ausgrid the options for relocating the streetlighting. The relocating of any streetlighting will generally be at the developers cost. In many cases is not possible to relocate streetlighting due to its strategic positioning.

Service Mains

It appears the existing overhead electricity service mains, that supply the subject property, may not have sufficient clearance to the proposed construction as per the requirements of "The Installation and Service Rules of NSW".

It is recommended that the developer engage a Level 2 Accredited Service Provider (ASP) Electrician to ensure that the installation will comply with the Service Rules.

Proximity to Existing Network Assets

Underground Cables

There are existing underground electricity network assets within the site boundary.

Special care should also be taken to ensure that driveways and any other construction activities within the footpath area do not interfere with the existing cables in the footpath. Ausgrid cannot guarantee the depth of cables due to possible changes in ground levels from previous activities after the cables were installed. Hence it is recommended that the developer locate and record the depth of all known underground services prior to any excavation in the area.

Safework Australia – Excavation Code of Practice, and Ausgrid's Network Standard NS156 outlines the minimum requirements for working around Ausgrid's underground cables.

Substation

There are existing electricity substation assets within the site boundary.

The substation ventilation openings, including substation duct openings and louvered panels, must be separated from building air intake and exhaust openings, natural ventilation openings and boundaries of adjacent allotments, by separation distances which meet the requirements of all relevant authorities, building regulations, BCA and Australian Standards including AS 1668.2: The use of ventilation and air-conditioning in buildings - Mechanical ventilation in buildings.

In addition to above, Ausgrid requires the substation ventilation openings, including duct openings and louvered panels, to be separated from building ventilation system air intake and exhaust openings, including those on buildings on adjacent allotments, by not less than 6 metres.

Exterior parts of buildings within 3 metres in any direction from substation ventilation openings, including duct openings and louvered panels, must have a fire rating level (FRL) of not less than 180/180/180 where the substation contains oil-filled equipment, or 120/120/120 where there is no oil filled equipment and be constructed of non-combustible material.

The development must comply with both the Reference Levels and the precautionary requirements of the ICNIRP Guidelines for Limiting Exposure to Time-varying Electric and Magnetic Fields (1 HZ – 100 kHz) (ICNIRP 2010).

For further details on fire segregation requirements refer to Ausgrid's Network Standard 113.

Existing Ausgrid easements, leases and/or right of ways must be maintained at all times to ensure 24 hour access. No temporary or permanent alterations to this property tenure can occur without written approval from Ausgrid.

For further details refer to Ausgrid's Network Standard 143.

For Activities Within or Near to the Electricity Easement:

Purpose Of Easement

This easement was acquired for the 11,000 volt distribution assets currently owned and operated by Ausgrid. The purpose of the easement is to protect the distribution assets and to provide adequate working space along the route of the cables for construction and maintenance work. The easement also assists Ausgrid in controlling works or other activities under or near the distribution cables which could either by accident or otherwise create an unsafe situation for workers or the public, or reduce the security and reliability of Ausgrid's network.

The Following Conditions Apply for any Activities Within the Electricity Easement:

1. Safework Australia – Excavation Code of Practice, and Ausgrid's Network Standard NS156 outlines the minimum requirements for working around Ausgrid's underground cables.
2. Ausgrid is not responsible for the reinstatement of any finished surface within the easement site.
3. Ausgrid requires 24 hour access along the easement for plant and personnel. For the purpose of exercising its rights under the easement, Ausgrid may cut fences and/or walls and install gates in them. Where the easements on a site do not provide practical access to all of Ausgrid's infrastructure, a suitable right of access at least 5m wide must be provided to each asset.
4. Access driveways shall withstand the weight of a heavy rigid truck when fully laden weighing 30 tonne.
5. Access gates, minimum 4.5 metres wide, may be required in all fences crossing the transmission line easement.
6. Driveways and other vehicle access must be capable of supporting the heaviest vehicle likely to traverse the driveway without damaging Ausgrid's assets.
7. No buildings/structures or parts thereof constructed may encroach the easement.
8. No machine excavation is permitted within the easement without Ausgrid's express permission.
9. During building construction, adequate controls must be put in place to prevent vehicles and machinery from damaging the Ausgrid assets.
10. Bulk solids (e.g sand and gravels) are not to be stored within the easement area.
11. Any change to ground levels must be submitted to Ausgrid for approval.
12. The proposed finished ground levels within the easement must provide a minimum of 600mm cover to the 11kV Distribution Cables.
13. The developer is to signoff on the last page of this letter stating that they have understood the requirements of this letter and agree to comply with its requirements. A signed copy of the last page must be returned to development@ausgrid.com.au prior to the construction certificate for the development being issued.
14. Ausgrid is to be indemnified from all actions, suits, claims and demands of whatsoever nature, which Ausgrid may incur as a result of the encroachment/s.
15. Ausgrid reserves the right, by written notice, to require the owner of the property, at the owner's expense, to implement further safety measures, removal or modification of any encroachments not specifically approved by Ausgrid should this be necessary in the future for the safe and continued operation or upgrade of the network asset.

Please do not hesitate to contact Paul Nakhle on Ph: (02) 9269 7587 (please quote our ref: Trim 2017/36/32) should you require any further information.

Regards, Paul

Paul Nakhle
Portfolio Manager - Asset Protection
Ausgrid - Field Services
Ph: (02) 9269 7587

I/We have read and understood my/our responsibilities as stated in Ausgrid's letter:-

Re: SSD 8755 - 192 Balaclava Rd, Macquarie Park - Macquarie University Central Courtyard Precinct Redevelopment

(Additional individual property details e.g lot or unit No.) _____

Signed:- _____ Date: _____ / _____ / _____

Name/s:- _____
(owner/authorised representative of the abovementioned property)