

29 August 2025

Our ref: 5894

Nibraas Ahmad
Mirvac

Mirvac WSU Milperra Subdivision

ASP L3 Design DCP Controls

Edgewater Connections has been engaged to carry out ASP L3 design for the proposed subdivision works at WSU Milperra. This letter outlines the impact of DCP items C1, C2, C6 C8 and C9 and their impact on the ASP L3 Design

- C1. The provision of EV charging infrastructure within the public domain is encouraged where practicable.**
- C2. In the event the provision of EV charging infrastructure cannot be provided, adequate space and electricity connections for battery storage and electric vehicle charging services should be provided to futureproof for future implementation of EV charging stations. This provision must include utility infrastructure capable of at least 480 volts and 100 amps to facilitate future EV charging infrastructure.**

The DCP requires provisions for EV Charging infrastructure throughout the subdivision, notably around the public opens pace, with some parks being allocated multiple charging provisions. The required provision for these chargers is a minimum of 480 volts at 100 amps or 48kVA. These loads will be the largest loads in the subdivision, being significantly larger than that of a standard domestic house, generally provisioned at 3.5kVA in accordance with Ausgrid standards.

It is best practice in electrical design to locate the substation as close possible to the load centre in order to reduce the require cable size and voltage drop. In this case the largest load centre would be the EV chargers, having a provision an order of magnitude larger than a residential house. Locating the substations adjacent the chargers would allow for the most efficient design downstream of the substation.

Additionally, the largest supply you can get off a standard Ausgrid pillar is 400V at 200A (80kVA) which would allow for a maximum of one charger with minimal capacity for future increase of the charger size. The installation of more than one charger would require either a direct distributor or a dedicated substation to support the charger. As the subdivision works are for provision for EV charging only, having the substation as close as possible to the future location leaves the most flexibility for future install and increases in EV charging capacity.

- C6. Each dwelling must install (or be designed to facilitate the installation of) a solar PV array, inverter and battery system sufficiently large to provide enough renewable energy to balance its predicted energy use over a year.**
- C9. All new residential developments must be designed to accommodate future capability to be completely offset by renewable energy i.e. reach net zero carbon emissions.**

These aspects of the DCP will be addressed in the individual house designs with the MSB design at each property being designed to accommodate the connection of solar and battery systems, along with the special provisions required in each premises. The ASP L3 design for the Ausgrid distribution network is not directly impacted by these requirements.

C8. All public domain lighting should be powered by a PV and battery system.

In a standard subdivision the lighting is owned and maintained by the DNSP (Ausgrid) on behalf of council. Ausgrid have an approved material list form which this lighting equipment must be selected. Standard Ausgrid light fixtures are supplied by mains power from the nearest pillar.

If council require installation of solar powered lighting under the DCP then council will need to take ownership of the lighting columns including the ongoing maintenance and repairs.

If you require further information on the electrical works, please contact the undersigned.

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Signature:



Nathan Albertini