



Shelmerdines
Consulting Engineers

15 December 2020
PM/KG: 7039-L2

Carmichael Tompkins Property Group
88 Phillip Street
SYDNEY NSW 2000

Attention: Mr Luke Gladwish

Dear Sir,

LORETO NORMANHURST – ELECTRICITY SUPPLY

As requested we reviewed the increases in the electrical load of eastern side of the school campus arising from the construction of the proposed new buildings and the proposed air conditioning of the existing Primary School. Based on the current architectural drawings, our estimate of the electrical loads of the proposed new works is as follows:

Early Learning Centre	44 kVA
New Boarding House	361 kVA
Carpark P1	32 kVA
Carpark P4	<u>49 kVA</u>
Sub-Total	486 kVA
Primary School Air Conditioning (Separate School Project)	<u>90 kVA</u>
TOTAL	<u>576 kVA</u> (800amps / phase)

The load on the existing supply to the eastern side of the campus is 180 amps / phase. Hence the estimated new maximum demand on that side of the campus is 980 amps / phase.

In our application to Ausgrid dated 20 August 2019, we advised of an estimated new load of 889 amps / phase. On the basis of this application Ausgrid have advised that it will be necessary to establish a kiosk substation to serve the additional load.

Our preliminary design for the new substation allows for the installation of a substation with a maximum rating of 1000 kVA (1600 amps / phase).

The minor load increase resulting from the new Carparks would not alter this proposal.

We trust the foregoing is of assistance.

Yours faithfully
SHELMERDINES

Peter W. Matthews