CONSULTANTS ADVICE NOTICE

Date	29 October 2025	**Project No.**	4853	**Doc Ref No.**	4853-CAN-010-A
Project	495-511 Lygon Street, Brunswick East				
Subject	Substation Relocation and Revised Balcony Depths				
To	Jaden Mialszygrosz (KUD Architects) - jaden@kud.com.au Alex Morse (KUD Architects) - alex@kud.com.au				
CC	Kevin Lan (Mavenstone) kevin@mavenstone.com.au				
From	Sachith Weerasekara (JBA Consulting) – Sachith.weerasekara@jba.com.au				

Dear Jaden & Alex,

Further to the preliminary sag and sway assessment and the substation spatial requirements evaluation conducted by JBA Consulting Engineers, we provide the following clarifications regarding the proposed substation location and the canopy lengths on the ground floor of the building.

Impact of sag and sway clearances on canopy depths

JBA conducted sag and sway assessments with overlays created for the cabling spans between cabling on Lygon Street. Based on these overlays, JBA identified the canopies on Heritage Façade of the building encroach on the required wiring safety clearance zones on Lygon street. In order for the constructed building to be made compliant with sag and sway cable clearances, there are two feasible options:

1. Reducing the Heritage Façade canopy depth to 600mm, effectively making it such that a person cannot stand on the canopy;
2. Relocating cables underground, requiring extensive excavations and disturbances to Lygon St.

Either one of these may be adopted to resolve the clearance issue and make the installation safe.

After discussion with the project design team, it was agreed that reducing the Heritage Façade canopy depths is the preferred solution as it has reduced street disturbance and associated traffic management and/or road closures when compared to the other option.

Substation relocation

JBA conducted a spatial assessment in accordance with standard Citipower requirements for a 500 kVA indoor substation. The following discussions and pertinent points were had with Citipower:

- The Citipower New Connection Offer dated 19/05/2025 specifies that the high-voltage (HV) power connection must be supplied from Citipower's existing HV assets on Lygon Street.
- Citipower confirmed there is no alternative to supply HV cabling at the rear of the property.
- The design-to-date located the substation room at the rear of the property (with a previous assumption that HV cabling would also be via the rear of the property, rather than from Lygon St).
- Consequently, the updated design required HV cabling to be routed through the basement.
- For safety, HV cables must be encased in a concrete conduit measuring 1150 mm (H) × 890 mm (W).
- This encasement significantly impacts the basement ceiling height, providing a clearance of only 1680 mm in Basement 1 along the conduit path. This impacts the functionality of the carpark in the basement.

- This assessment by JBA has been confirmed through preliminary design drawings and spatial requirements provided by Citipower.

To resolve this design issue, JBA and the project team met at length to discuss alternative locations for the substation. It was agreed in the meeting, after exploring multiple options, that the lowest project impact option was to relocate the substation room to the east façade of the building (i.e. on Lygon St). The exact location for the substation positioned along the Lygon St alignment was discussed at length, with multiple options explored. Regardless of exact location along that alignment, the new location allowed the HV cabling to connect directly from the existing Citipower HV assets on Lygon St with reduced basement impact. The final location immediately to the south of the residential entry was agreed as the lowest impact compromise.

Alternative locations along the southern property boundary were explored but discarded as it would be non-compliant with Citipower requirements and damaging to the heritage façade.

We trust the above provides clarifications on the reasoning behind the relocation of the substation and changing of the canopy widths on the east façade.

Should you require clarification of any of the above please do not hesitate to contact the us.

Regards,

Sachith Weerasekara

Electrical Engineer
JBA Consulting Engineers