

11 November 2020

171566

Built Developments  
Level 7, 343 George Street  
Sydney NSW 2000

Attention: Jono Cottee

## 52 Phillip Street

### Structural Engineering Design Development of Stage 1 Scheme

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Dear Jono,

We are writing to confirm that as part of the Stage 1 design studies for 52 Phillip Street, TTW has undertaken detailed Structural engineering analysis and design to develop the viability of the proposed scheme for the building. The new structure has been designed as a new, independent structure which does not take any reliance on 50 Phillip Street and 121 Macquarie Street.

As part of the development of the structural design, TTW have utilised detailed engineering input from both Wind and Geotechnical Engineering consultants. These studies have drawn on existing geotechnical information on the site and surrounds as well as detailed wind engineering data for Sydney.

A review has been undertaken on the existing structure and its ability to support the proposed Hotel development. As the building was originally designed as a commercial office type building, it has a imposed load capacity of approximately 3.8kPa which is suitable for the majority of Hotel uses. TTW also have proposed that the 50 Phillip Street be assessed to AS3826 from a Seismic compliance perspective in order to conserve the heritage fabric. The proposal to utilise AS3826 would entail diaphragm strengthening of the building to provide minimum life safety requirements for the structure whilst avoiding invasive strengthening of the existing masonry walls.

TTW have also worked closely with a Built Developments and Built Construction teams to develop methodologies for the works that control the risk of damage to the existing building fabric. The works reviewed include approaches for the construction of the central lightwell column, the support and underpinning of the eastern roof and masonry structure and provision for shoring where excavation occurs adjacent to existing walls. These approaches have been outlined in the Heritage Construction Methodology Report undertaken.

Based on the engineering studies undertaken, the proposed development has been engineered structurally within the spatial and heritage constraints of the 50 Phillip St. The structural scheme developed has been co-ordinated with the building envelope and is suitable to be developed as part of the Design Excellence process prior to Stage 2 lodgement.

Should you require anything further please contact the undersigned.

Yours faithfully,  
**TAYLOR THOMSON WHITTING (NSW) PTY LTD**  
in its capacity as trustee for the  
**TAYLOR THOMSON WHITTING NSW TRUST**



**KEVIN BERRY**  
Director

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