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Date: 31st July 2024
No. Pages: 1
Project No.: 2015-241.1

Development Officer
Northern Beaches Council.

Geotechnical Assessment of modification to approved works at 32 Bower Street, Manly, NSW

We understand the client has been requested to make some design changes to the approved Development Application (No. DA2019/0916) for the above site, No. 32 Bower Street, Manly, NSW.

As a result we have reviewed the following documents:

1. Our Report titled "Geotechnical Site Investigation for Proposed New Development at 32 Bower Street, Manly", Project No.: 2015-241.1 Rev 2, Dated: 17th January 2019.
2. Schematic architectural design drawings supplied by Campbell Architecture, Drawing No.: 00-04, undated (as referenced in the Geotechnical Report).
3. Stamped Plans by Campbell Architecture, Drawings DA 01 Rev B Dated 27th November 2019, DA 08 Rev B Dated 29th November 2019, and Drawings DA-01 to DA-04, all Rev B Dated 27th November 2019.
4. Site survey plan supplied by C.M.S. Surveyors Pty Ltd, Drawing Name: 17886detail, Dated: 12/07/18.
5. S4.55 Application design drawings by Eaton Molina Architects, Project No.: 0059, Drawings A.01.01-A, A.02.00-A. A.02.01-A, A.03.00-A to A.03.02-A, all Dated 17/07/2024

It is understood that the changes involve an increase to the excavation footprint at both L1 and L2 levels. The increase of excavation involves a minor (<0.50m) increase to the depth of excavation and a horizontal increase of up to 3.40m.

Geotechnical inspections have been undertaken at regular intervals throughout construction across the site. Generally, the footings for the new structure have required sandstone of low to medium strength. The subsurface conditions across the majority of the site have comprised low to medium strength sandstone with stable, sub-horizontal bedding planes spaced at generally 1.50m to 2.0m vertically and have therefore been suitable to meet the structural design requirements. However, in some locations the exposed bedrock has been assessed as very low strength or residual soil, considered unsuitable for bearing and additional excavation has been required.

In addition, variability within the rock mass was noted, particularly towards the eastern and northern, lower portions of the site adjacent to the natural gully. These areas have been exposed to greater levels of water seepage and therefore weathering, and contain deeper soil and weak material with buried boulders also present. It was therefore considered preferable for the rainwater tank, originally planned to be constructed atop this part of the site, to be relocated within the more stable low to medium sandstone at the back of the L1 benching, requiring a slight extension to excavation in that location.

The proposed changes to the original design do not significantly alter the geotechnical aspects of the proposed development or the site from those on which the original report were based, including the critical aspects of geotechnical assessment of excavation support systems.

As such we see no geotechnical reason for these changes not to be approved, provided all works are undertaken as per the recommendations of our reports.

We trust the above comments meet Council's requirements, if we can be of further assistance in regard to this matter please don't hesitate to contact the undersigned.

Yours faithfully,

Ben Taylor

Senior Geotechnical Engineer