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To: DA Submission Mailbox

Subject: Online Submission

24/02/2025

MS Philippa Randall 21 Ilya AVE Bayview NSW 2104

RE: DA2025/0055 - 4 Taminga Street BAYVIEW NSW 2104

Phillipa Randall 21 Ilya Avenue, Bayview, NSW.

Geotechnical Assessment of Proposed Development at Neighbouring PropertyNo. 4 Taminga Street, Bayview

It is understood that a Development Application (DA2025/0055) for proposed works at 4 Taminga Street, Bayview has been submitted. Due to the proximity to your property (21 Ilya Avenue) and the works previously completed there (boulder stabilisation) you have requested a geotechnical review of the application and its potential impacts.

As a result, we have reviewed the following documents:

1.

Geotechnical Report by White Geotechnical Group titled "Geotechnical Investigation for Alterations and Additions at 4 Taminga Street, Bayview", Project No.: J5810, Dated: 17 December 2024.

2. Development Application design drawings by Watershed Architects, Job No.: 24007, Issue: C, Drawing No.: DA00 to DA19, Dated: 16 December 2024.

The Development Application proposed works involve alterations and additions to the house and property at 4 Taminga Street, which generally involve internal modification to the existing dwelling and the construction of a new garage with lift, green roof and new entry/deck. The proposed garage is understood to involve bulk excavation of up to 4.90m depth with respect to existing ground surface levels and will be located to the north-east of the existing dwelling and approximately 10m from the common boundary with your property.

The geotechnical report indicates that the geological sequence to be excavated will comprise fill and colluvium over bedrock. The fill and colluvium were interpreted to contain boulders with only one test location (DCP 6) interpreted to have encountered bedrock at 2.80m depth. The bulk excavation is therefore anticipated to extend through soils and boulders for the upper half with sandstone bedrock in the lower portion. The boulders are expected from local outcrops to comprise medium strength sandstone rock whilst the bedrock is expected to comprise medium to high strength sandstone.

Your property at No. 21 Ilya Avenue has a common boundary with No. 4 Taminga Street and is located upslope to the south-west with an approximately 17m high sub-vertical to slightly undercut sandtsone bedrock cliff line formed adjacent to the common boundary, within your property.

At the crest of this cliff, within your property, is a large boulder which was the subject of recent extensive stabilising works (grout underpinning, bolting) due to its determined high levels of risk associated with instability and the definite catastrophic impact that its failure would have upon No. 4 Taminga Street. Whilst the stabilizing works completed to the boulder are considered to have mitigated that risk to well within 'Acceptable' risk levels (AGS 2007 / NB Council) the impact of any neighbouring works on your property and those stabilizing works for the boulder are of concern.

The potential for instability from the proposed works impacting your property is non-existent due to the bedrock cliff line. However, the excavation of boulders and the bedrock is expected to require rock excavation equipment (i.e. excavator with rock hammers). This equipment will create ground vibrations during its operation which can travel through the bedrock for significant distances and have an impact on structures.

Whilst it is anticipated that the excavation position and access restrictions will limit the scale of machinery used in the works, it is recommended that extreme caution be implemented by the neighbouring property owners and their builders to ensure that the excavation works do not create vibrations sufficient enough to result in any impact to the boulder stability in your property. It is considered that a maximum vibration level of 3mm/s PPV at the crest of the cliff line will ensure negligible impact can occur.

This level of caution should be acknowledged by the neighbouring property owner and Council as part of the DA assessment process and implemented during the works, preferably through condition.

Troy Crozier
Principal
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MAIG, RPGeo - Geotechnical and Engineering