

PRELIMINARY GEOTECHNICAL ASSESSMENT:

112A Clontarf Street, North Balgowlah

1.0	LANDSLIP RISK CLASS (<i>Highlight indicates Landslip Risk Class of property</i>)
☐	<i>A - Geotechnical Report not normally required</i>
☒	<i>B - Geotechnical Engineer (Under Council Guidelines) to decide if Geotechnical Report is required</i>
☐	<i>C - Geotechnical Report is required</i>
☐	<i>D - Geotechnical Engineer (Under Council Guidelines) to decide if Geotechnical Report is required</i>
☐	<i>E - Geotechnical Report required</i>

2.0 Proposed Development

- 2.1** Construct a new extension to the downhill side of the ground floor.
- 2.2** No excavations or fills are shown on the plans.
- 2.3** Details of the proposed development are shown on 16 drawings prepared by Sally Gardner Design & Draft, Job number 24-0712, drawings numbered A1 to A5, S1 to S6, N1, N2, and E1 to E3, dated 29/8/24.

3.0 Site Location

- 3.1** The site was inspected on the 4th September, 2024.
- 3.2** This residential property occupies the E side of a S-draining valley floor. As such, it has a predominantly W aspect in the location of the house. Medium Strength Hawkesbury Sandstone bedrock outcrops on the road reserve and within the foundation space of the house. Where sandstone is not exposed, it is expected to underlie the surface at relatively shallow depths. The natural surface of the block has been altered with an excavation for the garage level of the house and with filling for

landscaping across the uphill side of the property. The site has also been altered near the W boundary with the installation of a stormwater easement and large subsurface stormwater pipe. This was likely installed through the path of the original creek channel and back filled during the development of the block. The proposed development will not significantly alter the surface further.

3.3 The site shows no indications of historical movement in the natural surface that could have occurred since the property was developed. We are aware of no history of instability on the property.

4.0 Site Description

The natural slope falls at moderate angles from the road before easing to the W boundary of the property. The slope falls gently to the base of the gully before rising gently to the downhill side of the house. From the downhill side of the house to the E common boundary, the slope rises at moderate angles of $\sim 15^\circ$. At the road frontage, a concrete Right of Carriageway (ROW) runs down the slope to the base of the gully where a driveway diverts to a garage under the subject house. The cut for the garage has been taken through competent Medium Strength Sandstone. The cut displays no significant geological defects and is considered stable. The two-storey semi-detached house is supported on brick walls and brick piers. No significant signs of movement were observed in the supporting walls and the visible supporting piers stand vertical. Some of the supporting walls and piers were observed to be supported directly onto outcropping sandstone bedrock within the foundation space of the house. We note there was evidence of significant surface water pooling within the foundation space. The owner informed us this would be remediated as part of the proposed works. The slope between the uphill side of the house and the E common boundary is terraced with two stable timber retaining walls reaching $\sim 0.6\text{m}$ high. The area surrounding the house and driveway is mostly garden and lawn-covered. No signs of movement associated with slope instability were observed on the grounds. No cliffs or large rock faces were observed on the property or

in the near vicinity. The adjoining neighbouring properties were observed to be in good order as seen from the road and the subject property.

5.0 Recommendations

The proposed development and site conditions were considered and applied to the current council requirements. See the required inspection below that is to be carried out during construction and is a requirement for the final geotechnical certification. Apart from the inspection, it is not expected additional geotechnical input will be required provided good design and building practices are followed.

6.0 Inspection

The client and builder are to familiarise themselves with the following required inspection as well as council geotechnical policy. We cannot provide geotechnical certification for the owners or the regulating authorities if the following inspection has not been carried out during the construction process.

- Any footings are to be inspected and approved by the geotechnical consultant while the excavation equipment and contractors are still onsite and before steel reinforcing is placed or concrete is poured.

White Geotechnical Group Pty Ltd.



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Information about your Preliminary Assessment

This Preliminary Assessment relies on visual observations of the surface features observed during the site inspection. Where reference is made to subsurface features (e.g., the depth to rock) these are interpretations based on the surface features present and previous experience in the area. No ground testing was conducted as part of this assessment and it is possible subsurface conditions will vary from those interpreted in the assessment.

In some cases, we will recommend no further geotechnical assessment is necessary despite the presence of existing fill or a rock face on the property that exceed the heights that would normally trigger a full geotechnical report, according to the Preliminary Assessment Flow Chart. Where this is the case, if it is an existing fill, it is either supported by a retaining wall that we consider stable, or is battered at a stable angle and situated in a suitable position on the slope. If it is a rock face that exceeds the flow chart limit height, the face has been deemed to be competent rock that is considered stable. These judgements are backed by the inspection of over 5000 properties on Geotechnical related matters.

The proposed excavation heights referred to in section 2.0 of this assessment are estimated by review of the plans we have been given for the job. Although we make every reasonable effort to provide accurate information excavation heights should be checked by the owner or person lodging the DA. If the excavation heights referred to in in section 2.0 of this assessment are incorrect, we are to be informed immediately and before this assessment is lodged with the DA.