

**PRELIMINARY GEOTECHNICAL ASSESSMENT
FOR
PROPOSED ALTERATIONS AND ADDITIONS
AT
11 QUIRK STREET, DEE WHY**

1.0 INTRODUCTION.

1.1 This assessment has been prepared to accompany an application for development approval.

1.2 The site is located in land that is subject to Areas A & B on the Landslip Risk Map. The methods used in this Assessment are based on those described in Landslide Risk Management March 2007, published by the Australian Geomechanics Society. Also Council checklist contained within Clause E10 of Warringah DCP and the WLEP Map identifying the Landslip Risk Class as highlighted (red) below:-

	<i>LANDSLIP RISK CLASS (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 Council officers to decide if Geotechnical Report is required</i>
☐	<i>E Geotechnical Report required</i>

1.3 The experience of Hodgson Consulting Engineers spans some 25 years in Northern Beaches and the Greater Sydney area.

2.0 PROPOSED DEVELOPMENT

2.1 Construct new deck at the rear of the exiting residence on the first floor level.

2.2 Details of the proposed development are shown on a series of architectural drawings prepared by Martin Vestergaard Designs, Reference No: HA0821, Dwg No: DA 00 to 03, 10 to 12, 20, 100 to 104, 200, Issue A and dated 26th October, 2021.

3.0 SITE LOCATION

3.1 The site was inspected for this assessment on the 2nd September, 2021.

3.2 This average sized rectangular residential block has a southerly aspect is at the top of the slope. From the road frontage the gentle sloped road reserve changes to moderate to steep slope of average angles of 5 to 20 degrees towards the rear of the existing residence continuing to the fall towards the south. Only the southern last third of the property is in Area B and the rest of the site including where the proposed works are located is in Area A on the Landslip Risk mapping.

4.0 SITE DESCRIPTION

4.1 From the road frontage the short concrete driveway crossing starts near the middle of northern front boundary of the property heading south towards the double garage that extends in front of the two storey of the existing residence. Pedestrian access to the main entrance of the existing residence is via the driveway and a pathway on the eastern side of the double garage. Access to the rear of the property is via gated fences on the eastern and western sides of the existing residence. At the rear of the existing residence is a deck area and landscaped areas. Small retaining walls help terrace the rear yard. Lawn areas are interspersed between exposed Hawkesbury Sandstone.

4.2 The existing residence is of brick veneer construction supported by masonry walls and piers on strip and pad footings. At the time of our inspection no significant geotechnical hazards were identified and the existing residence was in good condition with no signs of significant movement due to geotechnical instability.

5.0 RECOMMENDATIONS

5.1 The proposed alterations and additions may require minimal excavation for any new footings that are required. The depth to the underlying bedrock is approximately 0.0 to 1.5 metres. We recommend that any new foundations required are to be taken to the underlying bedrock.

5.2 The proposed alterations, additions and existing site conditions were considered and applied to the Council Flow Chart for classes A & B areas as contained within Clause E10 of Warringah DCP and the WLEP. Based on this preliminary assessment, the proposed development works would be considered satisfactory from a Geotechnical and landslip perspective subject to the application of good engineering practice for the structural design and construction methods. As it is not proposed to undertake any major excavation for the future works it is therefore recommended that no further geotechnical assessment is required.

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