

**PRELIMINARY GEOTECHNICAL ASSESSMENT
FOR
PROPOSED ALTERATIONS AND ADDITIONS
AT
1 COREEN AVENUE, TERREY HILLS**

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 and 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:-

	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 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 first floor additions over the existing residence and a lower garage in the existing location.

2.2 Details of the proposed development are shown on a series of architectural drawings prepared by Living Architectural Planning, Reference No: BA0922, Sheet No: 1 to 7, Issue A and dated September, 2022.

3.0 SITE LOCATION

3.1 The site was inspected for this assessment on the 24th November, 2022.

3.2 This average sized residential block has a northerly aspect. From the road frontage the site rises gently to south towards the rear boundary at approximately average angles of 0 to 10 degrees. Near the rear boundary there is a Hawkesbury Sandstone outcrop some 3 to 4 metres high. The moderate slope continues to the south rising to the crest near Terrey Hills Oval.

4.0 SITE DESCRIPTION

4.1 From the road frontage a concrete driveway crossing starts at the north western corner of the property heading south towards the attached double garage located on the north western front corner of the existing residence. Access to the main entrance is via the driveway. A paved patio and pathway provides access to the main entry of the property on the east side of the driveway. Access to the rear of the property is via separate grassed pathways on the western and eastern sides of the existing residence. At the rear of the existing residence is a paved patio area that runs the width of the residence. This level area has a small but observed to be stable landscaped retaining wall along the south edge. Above is an irregular shaped level grass lawn at the bottom of the Hawkesbury Sandstone outcrop. The outcrop has two wind weathered caves. Displaced joint bocks and exposed Hawkesbury Sandstone were overserved on and around the subject property. The existing residence is of brick veneer construction supported on a raft slab, 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 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 1.0 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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