

**PRELIMINARY GEOTECHNICAL ASSESSMENT  
FOR  
PROPOSED ALTERATIONS AND ADDITIONS  
AT  
30 CAREEBONG ROAD, FRENCHS FOREST**

**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 Area 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:-

	<b><i>LANDSLIP RISK CLASS (Highlight indicates Landslip Risk Class of property)</i></b>
<input type="checkbox"/>	<i>A Geotechnical Report not normally required</i>
<input checked="" type="checkbox"/>	<i>B Geotechnical Engineer (Under Council Guidelines) to decide if Geotechnical Report is required</i>
<input type="checkbox"/>	<i>C Geotechnical Report is required</i>
<input type="checkbox"/>	<i>D Council officers to decide if Geotechnical Report is required</i>
<input type="checkbox"/>	<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** Various first floor alterations and addition to the existing residence, new metal roof and boundary fence.

**2.2** Details of the proposed development are shown on a series of architectural drawings prepared by Phil Brown Drafting, Project number 1826, Drawing numbers DA03 – DA10 and dated 6<sup>th</sup> April, 2021.

### **3.0 SITE LOCATION**

**3.1** The site was inspected for this assessment on the 9<sup>th</sup> April, 2021.

**3.2** This average sized rectangular corner residential block has a southerly aspect and is located in the top part of the slope. From the road frontage the moderate to steep slope falls predominately from North to South at average angles of 5 to 15 degrees. The slope continues down varying in slope from gentle to steep to the waters of Middle Harbour.

### **4.0 SITE DESCRIPTION**

From the road frontage the top northern boundary has small battered slope that reduces as the boundary continues to the east and west. A short concrete driveway and crossing starts near the middle of the eastern road boundary, heading west towards the existing residence and also to the south down to the existing detached garage and carport. Pedestrian access to the main entrance of the existing residence is via the landscaped pathway and the driveway that leads to the front stairs and balcony. Access to the northern lawn area of the property is via a gated fence on the north eastern side of the existing residence. The rear yard can be accessed via a pathway that gently slopes down to the terraced lawn area in the south western corner of the property. A small landscaped retaining wall supports the cut for the lowest lawn area. Access to the rear yard is also via the pathway between the existing residence and the detached garage. 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**

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. The boundary fence may require pier and beam foundation system. Minimum allowable bearing capacity of the Hawksbury Sandstone is 600 kPa.

The proposed alterations, additions and existing site conditions were considered and applied to the Council Flow Chart for class B area 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.

**HODGSON CONSULTING ENGINEERS PTY LTD**



**Garth Hodgson MIE Aust**  
**Member No. 2211514**  
**Civil/Geotechnical & Structural**  
**Engineer**