

# Jack Hodgson Consultants Pty Limited

CONSULTING CIVIL. GEOTECHNICAL AND STRUCTURAL ENGINEERS

ABN: 94 053 405 011

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# PRELIMINARY GEOTECHNICAL ASSESSMENT FOR PROPOSED ALTERATIONS AND ADDITIONS AT 79A RYAN PLACE BEACON HILL

### 1.0 INTRODUCTION.

- 1.1 This assessment has been prepared to accompany an application for development approval with Warringah Council.
- 1.2 The site is located in land that is subject to Areas B & C 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 (Highlight indicates Landslip Risk Class of property)
A Geotechnical Report not normally required
B Geotechnical Engineer (Under Council Guidelines) to decide if Geotechnical Report is required
C Geotechnical Report is required
D Council officers to decide if Geotechnical Report is required
E Geotechnical Report required

1.3 The experience of Jack Hodgson Consultants spans some 40 years in Warringah and the Greater Sydney region.

## 2.0 PROPOSED ALTERATIONS TO APPROVED DEVELOPMENT.

- 2.1 Widen existing suspended concrete parking platform.
- 2.2 Construct extension to southern side of existing timber cabin.
- 2.3 Details of the proposed alterations to the approved development are shown on a set of architectural drawings prepared by PMW; drawing numbered CE-1, CP-1, SE-1, dated December 30<sup>th</sup>, September 2015.

#### 3.0 SITE LOCATION



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3.1 The site was inspected on the 11<sup>th</sup> February 2016. Jack Hodgson Consultants have previously inspected this site on numerous occasions for previous DA applications. Previous inspections include but are not limited to the following; July 2013, July 2011, May 2010, July 2009, December 2008, February 2006, January 2004, December 2002 and on several occasions in 2003.

3.2 The property is on the low side of the road and has a southerly aspect. The land slopes across the property at angles of some 15 degrees. The slope above the site extends at similar angles up to Beacon Hill. The land below the site gradually eases in grade to the toe of the slope towards Clearview Place.

## 4.0 SITE DESCRIPTION

From the road frontage a shared access paved concrete drive leads to a suspended carport uphill from the house. The carport is suspended on concrete columns and appears well constructed. Below the carport, low timber and stack rock retaining walls are in good condition and show no signs of instability. A well-constructed storage platform is suspended between concrete columns. Access to the downhill side of the house is via a concrete path, and stairs which extend down the western boundary. Sandstone rock outcrops below the house and at several points across the property. The outcropping rock is massively bedded with limited wide spaced jointing and no geological defects observed in the rock faces. Several large joint blocks and floaters were observed across the property. These appear to be resting in secure positions and show no signs of movement. No significant movement has been identified in the exposed rock during the course of our inspections spanning well over a decade. A well-constructed timber cabin is situated towards the centre of the southern portion of the block. No evidence of any movement or slope instability was identified at the time of our inspection.

#### 5.0 RECOMMENDATIONS

The proposed alterations and additions and existing site conditions were considered and applied to the Council Flow Chart for class B and C areas as contained within Clause E10 of Warringah DCP and the WLEP. No geotechnical hazards will be created by the completion of the approved development or proposed alterations and additions in accordance with good engineering and building practice. With the exception of those required for footings, the proposed works do not require significant excavations or filling and no further geotechnical reporting is considered necessary. The Geotechnical engineer is to inspect the foundation materials of all footing excavations before concrete is placed.

JACK HODGSON CONSULTANTS PTY. LIMITED.

Peter Thompson MIE Aust CPEng

Civil/Geotechnical Engineer