

Ref: SRE/771/KH/21

5<sup>th</sup> May 2021

Attn: MR. CHRISOSTOMOS &amp; MRS. HELEN KRETZAS

12 BANGAR CLOSE

KILLARNEY HEIGHTS, NSW 2087

Dear MR Chrisostomos &amp; MRS Helen Kretzas,

**RE: PRELIMINARY GEOTECHNICAL ASSESSMENT FOR PROPOSED ADDITIONS & ALTERATIONS AT 12 BANGAR CLOSE, KILLARNEY HEIGHTS NSW 2087 - PRELIMINARY GEOTECHNICAL REPORT**

Further to the email received on the 25<sup>th</sup> of March 2021, Soilsrock Engineering was commissioned to carry a preliminary geotechnical assessment of the site conditions and give recommendations regarding the proposed development above.

**1. INTRODUCTION**

The current report describes the geotechnical assessment carried following the requirements of the Northern Beach Council - Warringah, according with Clause E10 of the Warringah Development Control Plan (DCP 2011), and the Warringah Local Environmental Plan 2011 (LEP 2011) Map which identifies the Landslip Risk Classes as per **Table 1** below.

**Table 1 – LANDSLIP RISK CLASSES A TO E**

Thick Box	LANDSLIP RISK CLASS (thick box indicates Landslip Risk Class of Property)
<input checked="" type="checkbox"/>	A Geotechnical Report not normally required
<input checked="" type="checkbox"/>	B Preliminary assessment of site conditions required to determine whether a geotechnical report is required.
<input type="checkbox"/>	C Geotechnical Report required
<input type="checkbox"/>	D Preliminary assessment of site conditions required to determine whether a geotechnical report required
<input type="checkbox"/>	E Geotechnical Report required

The site inspection was carried on 29<sup>th</sup> March 2021 to access existing site conditions. Details of the proposed development are shown on the Architectural Drawings for DA Submission prepared by "Arch and Co", "PROPOSED ALTERATION & ADDITION TO AN EXISTING RESIDENTIAL

DWELLING AT 12 BANGAR CLOSE, KILLARNEY HEIGHTS, NSW 2087 LOT 15 SECTION 75 DP 758566", Job No. 01221, Rev 1 which are part of the DA submission.

- Sheet No.: DA - 101, "COVER SHEET", dated of 20/04/21.
- Sheet No.: DA - 102, "SITE CONTENTS", dated of 21/04/2021.
- Sheet No.: DA - 103, "SITE ANALYSIS", dated of 21/04/2021.
- Sheet No.: DA - 104, "DEMOLITION PLAN", dated of 21/04/2021.
- Sheet No.: DA - 105, "SITE PLAN", dated of 21/04/2021.
- Sheet No.: DA - 106, "GROUND LEVEL PLAN", dated of 21/04/2021.
- Sheet No.: DA - 107, "FIRST LEVEL PLAN", dated of 21/04/2021.
- Sheet No.: DA - 108, "ROOF PLAN", dated of 21/04/2021.
- Sheet No.: DA - 109, "EAST ELEVATION", dated of 21/04/2021.
- Sheet No.: DA - 110, "NORTH ELEVATION", dated of 21/04/2021.
- Sheet No.: DA - 111, "EAST & WEST ELEVATIONS", dated of 21/04/2021.
- Sheet No.: DA - 112, "SECTIONS", dated of 21/04/2021.
- Sheet No.: DA - 113, "SHADOW DIAGRAMS", dated of 21/04/2021.
- Sheet No.: DA - 114, "FINISHES SCHEDULE", dated of 21/04/2021.
- Sheet No.: DA - 115, "LANDSCAPED AREA DIAGRAM", dated of 21/04/2021.

Survey Drawings for DA Submission prepared by "EAST WEST SURVEYORS PTY LTD" , "DETAIL AND INTERNAL SURVEY OF LOT 15 SEC 75 IN DP 758566 No. 12 BANGAR CLOSE KILLARNEY HEIGHTS, NSW 2087", Job No.20/2976, Rev 1, dated 26/01/2021 which are part of the DA submission.

## **2. SITE LOCATION**

The subject site is situated at 12 Bangar Close, Killarney Heights NSW, surrounded by the residential properties such as 13 Bangar Close at North side, bounded by 56 Killarney Dr to the West side, 3 and 4 Bangar Close to the East and 11 Bangar Close to the South.

## **3. PROPOSED DEVELOPMENT**

The development proposes to demolish walls on the existing ground floor to construct, new dining, new living and new laundry rooms. An additional level (Level 1) it is proposed to be constructed above the existing ground level. Overall, the alterations proposed will change the existing building to two story house and comprises the following: five bedrooms, three bath and two living rooms and the stairs coming from the ground floor level. The additional top-level loading

would need to be suitable for the existing ground level and must be confirmed by the structural engineer.

#### **4. EXISTING SITE DESCRIPTION**

The subject site is known as Lot/Section plan: 15/75, DP758566, 12 Bangar Close, Killarney Heights NSW, which is in a rectangle shape with approximately 696.8m<sup>2</sup> in total site area, it is containing a brick house surrounded by paling fence and brick wall, bounding the residence from nearby neighbours. The existing dwelling is a one-storey brick residential house in good condition for its age.

From the analyses of Sydney 1:100 000 Geological Map, it is indicated the site is underlain by Hawkesbury Sandstone which is described as medium to coarse-grained quartz sandstone, very minor shale, and laminate lenses.

The site is slightly slopping down from East to West with approximately 0° to 5° from the beginning of the property, and over 5° with the backyard area. No evidence of important cracks and/or settlements were observed, no evidence of slope instability was identified at the time of the inspection.

#### **5. CONCLUSIONS**

According with the Warringah Landslip Risk Map, the site is located partially within the Areas A (Slope less than 5 degrees) and B (Flanking Slopes from 5 to 25 degrees). Sites located within area B a preliminary geotechnical Report is required (according with the Clause E10 of Warringah DCP 2011).

Further to the analyses of the Council Checklist Flowchart attached on the **Appendix 1** and on this preliminary assessment, the proposed ground floor alterations, and upper floor addition, it is considered satisfactory from a geotechnical and landslip perspective subject to the application of good engineering practice. No further detailed geotechnical report is required.

However, it is recommended to carry further geotechnical site inspections by a competent professional geotechnical engineer, to confirm the existing footings are founded in a competent and solid soil or rock foundations suitable to take the additional loads of the proposed upper storey addition. It is also recommended to ensure that any new footings required for ground floor extension to be founded as well in competent foundations materials.

Please do not hesitate to contact the undersigned if you have any questions regarding this letter report or if you require further assistance.

Yours faithfully,  
For and on behalf of  
**Soilsrock Engineering Pty Ltd**



**Jorge Cabaco**

BEng MEng MIEAust CPEng RPEQ NER

**Principal Geotechnical Engineer**

**ENGINEERS AUSTRALIA**

**CHARTERED ENGINEER | NER NATIONAL ENGINEERS REGISTRATION No. 3789414**

**Appendix 1 – Checklist Flow Chart for Council’s Assessment of Site Conditions and Need for Geotechnical Report in Landslip Risk Classes B and D**

## APPENDIX 1

### CHECKLIST FLOW CHART FOR COUNCIL'S ASSESSMENT OF SITE CONDITIONS AND NEED FOR GEOTECHNICAL REPORT IN LANDSLIP RISK CLASSES B AND D

