

## PRELIMINARY GEOTECHNICAL ASSESSMENT:

### 39 Ballyshannon Road, Killarney Heights

<b>1.0</b>	<b>LANDSLIP RISK CLASS</b> (Highlight indicates Landslip Risk Class of property)
<input type="checkbox"/>	A - Geotechnical Report not normally required
<input checked="" type="checkbox"/>	B - Geotechnical Engineer (Under Council Guidelines) to decide if Geotechnical Report is required
<input type="checkbox"/>	C - Geotechnical Report is required
<input type="checkbox"/>	D - Geotechnical Engineer (Under Council Guidelines) to decide if Geotechnical Report is required
<input type="checkbox"/>	E - Geotechnical Report required

## 2.0 Proposed Development

- 2.1 Construct a new deck on the downhill side of the house.
- 2.2 Construct a new above-ground pool on the downhill side of the property.
- 2.3 Various other external alterations.
- 2.4 Apart from those for footings, no excavations are required. No fills are shown on the plans.
- 2.5 Details of the proposed development are shown on 6 drawings prepared by Hao Design, Project number 190925, drawings numbered 01 to 06, Revision A, dated 28/10/19.

## 3.0 Site Location

- 3.1 The site was inspected on the 23<sup>rd</sup> October, 2019.
- 3.2 This residential property is on the low side of the road and has a SW aspect. It is located on the moderately graded upper middle reaches of a hillslope. Medium

Strength Hawkesbury sandstone bedrock outcrops and steps down the property. Where sandstone is not exposed, it is expected to underlie the surface at relatively shallow depths. The natural surface of the block has been altered little with the development to date. The proposed development will not alter the surface further for the proposed works.

**3.3** The site shows no indications of historical movement in the natural surface that could have occurred since the property was developed. We are aware of no history of instability on the property.

#### **4.0 Site Description**

From the upper boundary to the lower boundary, the natural slope falls at an average angle of  $\sim 13^\circ$ . At the road frontage, a concrete driveway runs to a garage on the ground floor of the house. The fill for the road is battered to stable angles and is terraced with two stable gabion retaining walls. The two-storey brick house is supported on brick walls. The external supporting walls of the house display no significant signs of movement. The SE corner of the house was observed to be supported directly onto competent Medium Strength Sandstone bedrock. This outcrop steps down to a near-level lawn that extends off the downhill side of the house. Another outcrop steps down from the lawn to the undeveloped bushland below. No undercutting or other significant geological defects were observed in either outcrop and they are considered stable. The undeveloped bushland continues to and beyond the lower common boundary. The area surrounding the house is mostly paved or lawn covered. No signs of movement associated with slope instability were observed on the grounds. The adjoining neighbouring properties were observed to be in good order as seen from the road and the subject property.

#### **5.0 Recommendations**

The proposed development and site conditions were considered and applied to the Council Flow Chart.

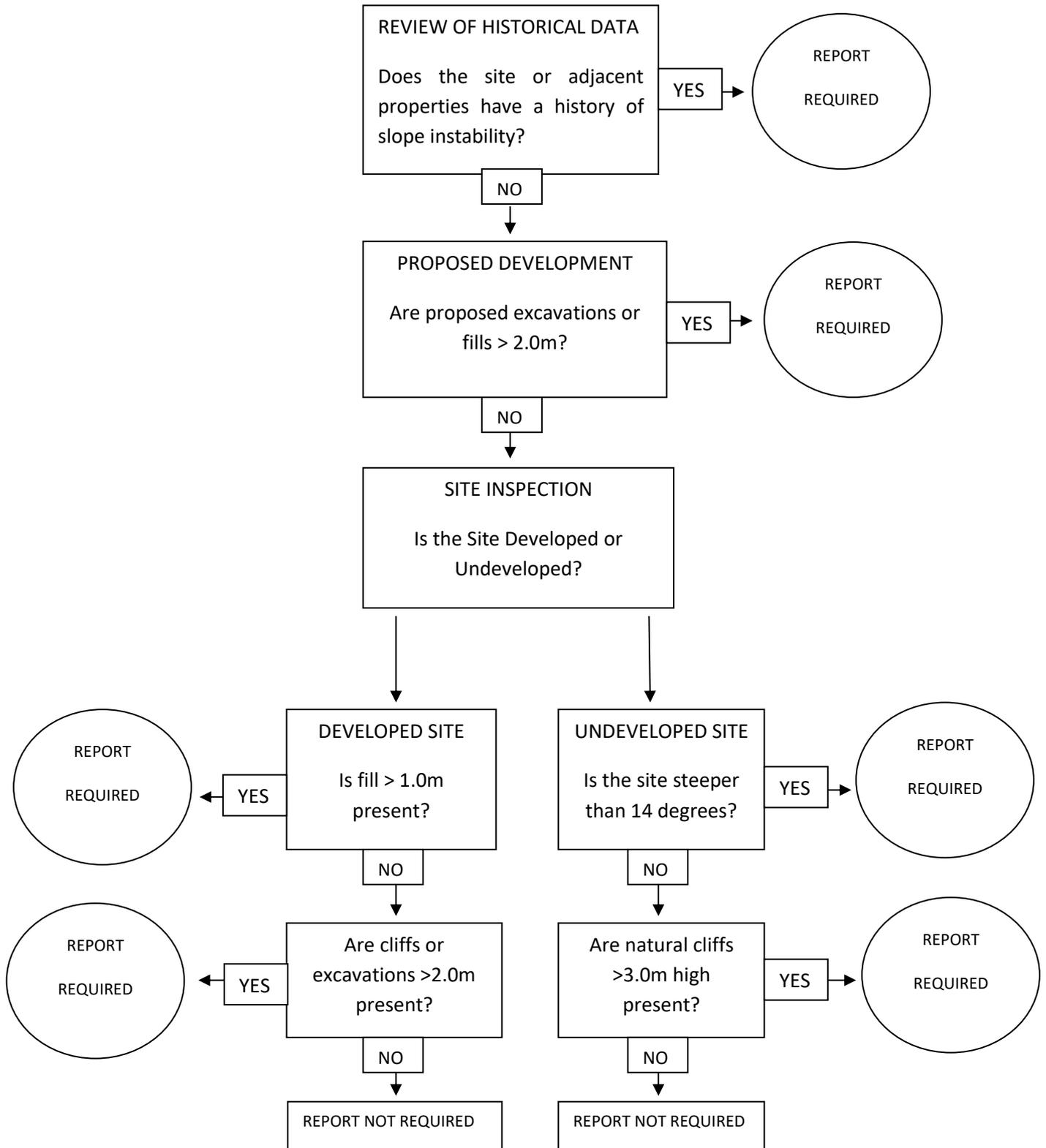
Provided good engineering and building practice are followed, no further Geotechnical assessment is recommended for the proposed development.

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## Preliminary Assessment Flow Chart – Northern Beaches Council (Warringah)



## Information about your Preliminary Assessment

This Preliminary Assessment relies on visual observations of the surface features observed during the site inspection. Where reference is made to subsurface features (e.g. the depth to rock) these are interpretations based on the surface features present and previous experience in the area. No ground testing was conducted as part of this assessment and it is possible subsurface conditions will vary from those interpreted in the assessment.

In some cases, we will recommend no further geotechnical assessment is necessary despite the presence of existing fill or a rock face on the property that exceed the heights that would normally trigger a full geotechnical report, according to the Preliminary Assessment Flow Chart. Where this is the case, if it is an existing fill, it is either supported by a retaining wall that we consider stable, or is battered at a stable angle and situated in a suitable position on the slope. If it is a rock face that exceeds the flow chart limit height, the face has been deemed to be competent rock that is considered stable. These judgements are backed by the inspection of over 5000 properties on Geotechnical related matters.

The proposed excavation heights referred to in section 2.0 of this assessment are estimated by review of the plans we have been given for the job. Although we make every reasonable effort to provide accurate information excavation heights should be checked by the owner or person lodging the DA. If the excavation heights referred to in in section 2.0 of this assessment are incorrect we are to be informed immediately and before this assessment is lodged with the DA.