

## **PRELIMINARY GEOTECHNICAL ASSESSMENT:**

### **12 Brentwood Place, Frenchs Forest**

<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** Extend the ground floor of the house over the footprint of the E portion of the existing terrace.
- 2.2** No significant excavations or fills are shown on the plans.
- 2.3** Details of the proposed development are shown on 5 drawings prepared by Gartner Trovato, project number 2110, drawings numbered DA-01 to DA-05, Revision A, dated 13/5/21.

## **3.0 Site Location**

- 3.1** The site was inspected on the 24<sup>th</sup> May, 2021 and again on the 26<sup>th</sup> May 2021.
- 3.2** This residential property is on the low side of the road and has a NW aspect. It is located on the moderately graded middle reaches of a hillslope. Medium Strength Hawkesbury Sandstone bedrock outcrops on the E side of the house and downhill of 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 with a cut for the garage and filling for lawn and garden areas. 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**

The natural slope falls across the property at an average angle of  $\sim 11^\circ$ . At the road frontage, a concrete driveway runs down the slope to a parking area and rendered masonry garage on the uphill side of the house. Stable low stack rock retaining walls support the cut for the parking area/garage and garden fill above. The single storey rendered masonry house is supported by rendered masonry walls and a concrete slab. The external supporting walls show no significant signs of movement. A stable Medium Strength Hawkesbury Sandstone rock face up to  $\sim 2.5\text{m}$  is located on the E side of the house. A terrace extends off the downhill side of the house. A lawn area is located on the downhill side of the house. Fill levels the uphill portion of the lawn. The W portion of the fill is supported by stable rendered masonry and stack rock retaining walls up to  $\sim 2.2\text{m}$  high. The N portion of the fill is battered at stable angles. Fill supported by a low stack rock retaining wall levels the downhill portion of the lawn.

A sandstone rock face is located  $\sim 5\text{m}$  from the downhill property boundary. The rock face is estimated to be  $\sim 10\text{m}$  high. The upper west portion of the rock face is estimated to be overhanging by up to  $\sim 2.5\text{m}$ . The overhang has a relatively thin cantilever arm in relation to its overhang length. However in the unlikely event the overhang fails, it will fail beyond the subject property boundary and fall on to the reserve below. It will not impact the subject property above. The area surrounding the house is mostly lawn covered with some paved areas. No geotechnical hazards were observed on the neighbouring properties that could impact on the subject property as seen from the street and subject property.

## **5.0 Recommendations**

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

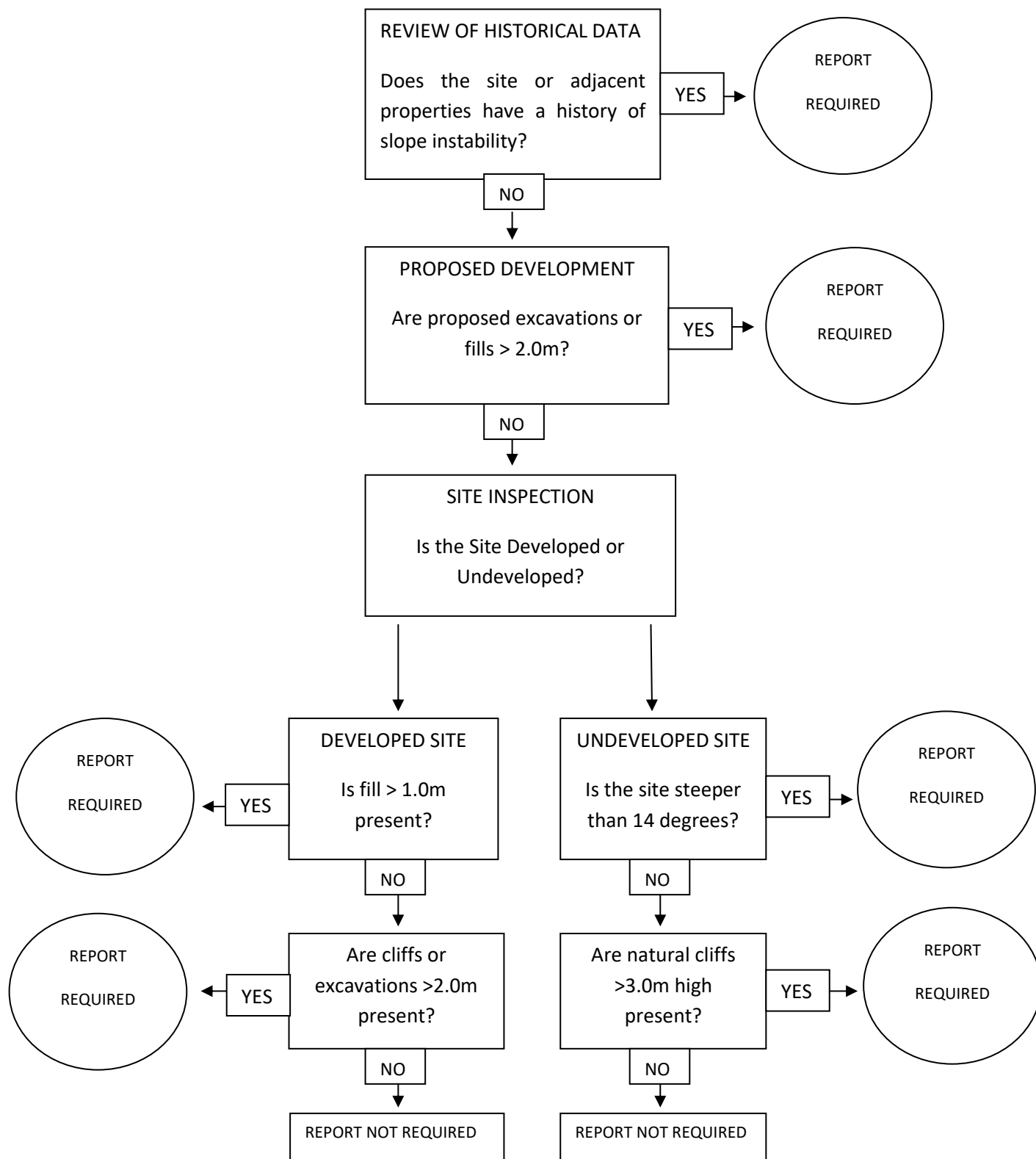
Provided good engineering and building practice are followed, no further Geotechnical assessment is recommended for the proposed development.

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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.

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