

## **PRELIMINARY GEOTECHNICAL ASSESSMENT:** **13 Dundilla Road, Frenchs Forest**

<b>1.0</b>	<b>LANDSLIP RISK CLASS</b> ( <i>Highlight indicates Landslip Risk Class of property</i> )
<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 existing garage on the uphill side and widen the existing driveway by excavating to a maximum depth of ~1.4m.
- 2.2** Landscaping works requiring filling to a maximum height of ~1.9m.
- 2.3** Details of the proposed development are shown on 6 drawings prepared by Jamie King Landscape Architect, project number 23002, drawings numbered Sht-101 to Sht-106, Issue C, dated 25/10/22.

### **3.0 Site Location**

- 3.1** The site was inspected on the 24<sup>th</sup> October, 2022.
- 3.2** This residential property is on the high side of the road and has an E aspect. It is located on the gently graded upper reaches of a hillslope. Medium Strength Hawkesbury Sandstone bedrock outcrops on the downhill side of the house and in the foundation space of the house. 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 filling for a lawn/garden area on the downhill side of the house and

a cut in the foundation space of the house. The proposed garage and driveway alterations require an excavation to a maximum depth of ~1.4m. The proposed landscaping works require filling to a maximum height of ~1.9m.

**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 land surface rises across the property at angles of <5°. The property is accessed by a concrete Right of Carriageway (ROW). A Medium Strength Hawkesbury Sandstone rock face some 8m high steps up the slope from the road to the downhill side of the ROW. The majority of the rock face was obscured by vegetation. The visible portion of the rock displays minor undercutting but is considered to be stable. A concrete driveway runs from the ROW to a garage under the house. Stable brick retaining walls up to ~1.6m high support the fill for a lawn and garden area on the downhill side of the house. The single storey brick house is supported by brick walls and brick piers. The supporting walls and piers stand vertical and show no significant signs of movement. A low excavation through sandstone bedrock is located in the foundation space of the house and on the uphill side of the existing garage. The cut face is unsupported, but the exposed rock shows no significant geological defects. A timber deck and gently sloping lawn extends off the uphill side of the house. The area surrounding the house is mostly lawn/garden covered with some paved areas. 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 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.

White Geotechnical Group Pty Ltd.



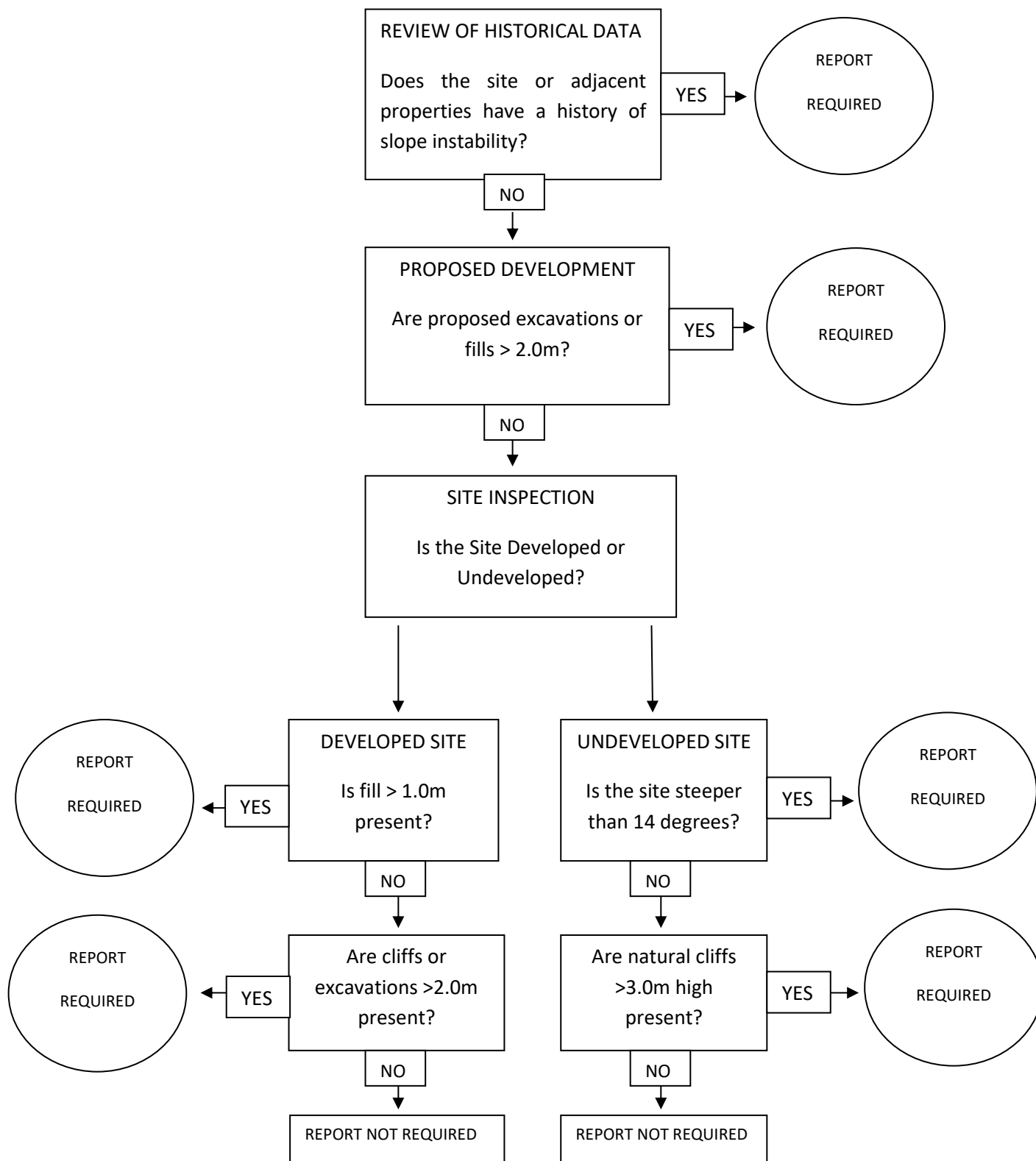
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## Preliminary Assessment Flow Chart – Northern Beaches Council (Warringah)



## 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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