

## **PRELIMINARY GEOTECHNICAL ASSESSMENT:**

### **39 Kirkstone Road, Wheeler 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 type="checkbox"/>	B - Geotechnical Engineer (Under Council Guidelines) to decide if Geotechnical Report is required
<input type="checkbox"/>	C - Geotechnical Report is required
<input checked="" 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 gazebo in the SE corner of the property.
- 2.2** Minor levelling will be required to construct the proposed gazebo.
- 2.3** Details of the proposed development are shown on 7 drawings prepared by Michal Korecky, drawing number 19071, sheets numbered 1 to 7, Issue 1, dated 25/9/19.

## **3.0 Site Location**

- 3.1** The site was inspected on the 26<sup>th</sup> September, 2019.
- 3.2** This residential property is level with the road and has a SW aspect. The block runs longways to the S so the slope is a cross-fall. It is located on the gently graded middle reaches of a hillslope. Medium Strength Hawkesbury Sandstone bedrock outcrops on the opposite side of the road to the subject 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 filling used for landscaping across the site. Minor levelling will be required to construct the proposed gazebo.

**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 rises across the property at an average angle of  $\sim 7^\circ$ . At the road frontage, a brick-paved driveway runs to a garage on the lower ground floor of the house. Between the road frontage and the house is a gently sloping lawn-covered fill. The fill is supported by a stable stack rock retaining wall reaching  $\sim 2.0\text{m}$  high. The two-storey brick house is supported on brick walls. The external supporting brick walls display no significant signs of movement. A gently sloping lawn surrounded by garden beds extends off the S side of the house to the S 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. No cliffs or large rock faces were observed on the property or in the near vicinity. 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.

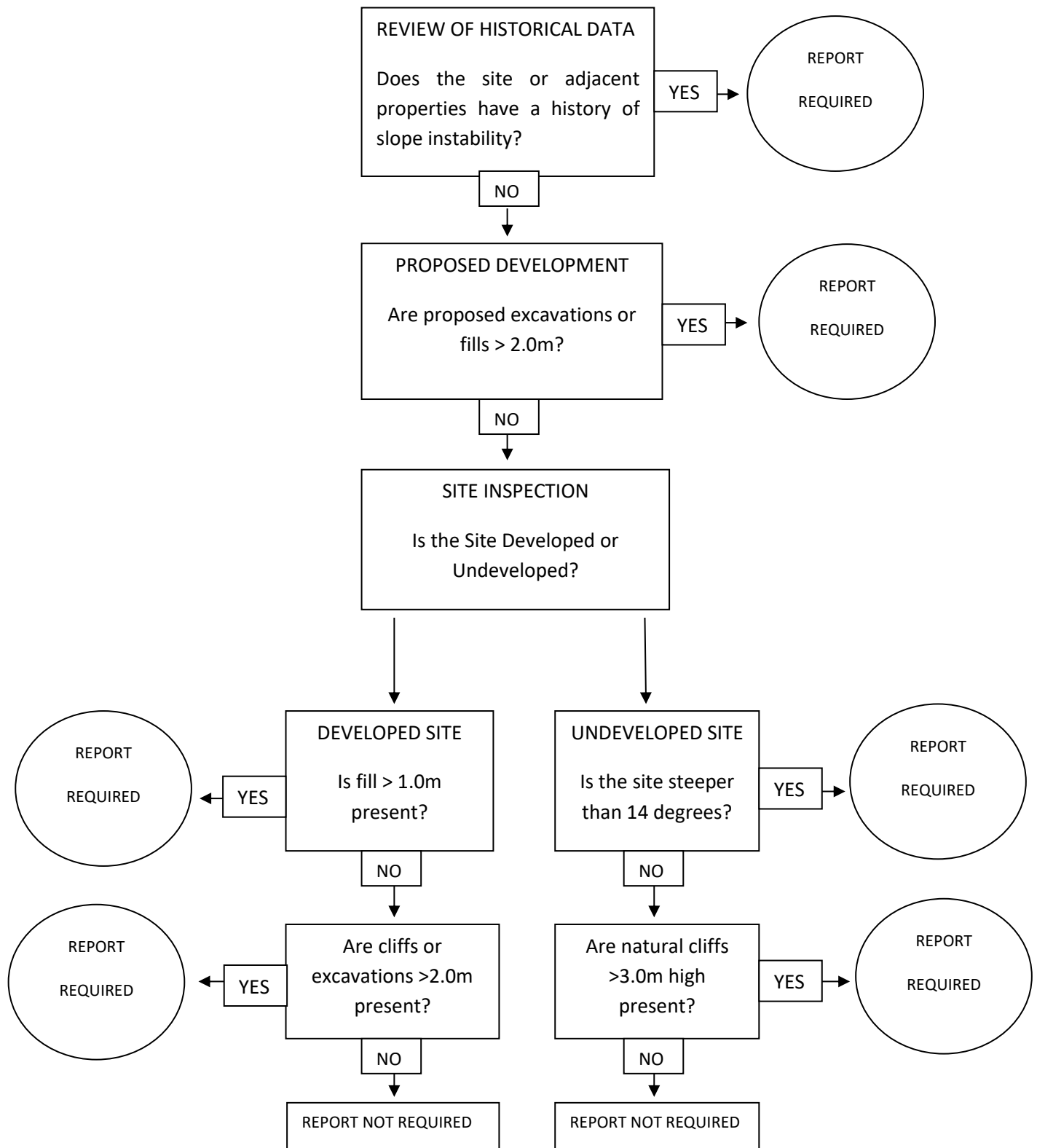
Provided good engineering and building practice are followed, no further Geotechnical assessment is recommended for the proposed development.

White Geotechnical Group Pty Ltd.



Ben White M.Sc. Geol.,  
AusIMM., CP GEOL.  
No. 222757  
Engineering Geologist.

## 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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