

## **PRELIMINARY GEOTECHNICAL ASSESSMENT:**

### **32 Badcoe Road, Cromer**

<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 existing ground and first floor levels of the house downslope.
- 2.2** No excavations or fills are required.
- 2.3** Details of the proposed development are shown on 11 drawings prepared by Harriet Weir, drawings numbered DA.00 to DA.10, Revision A, dated 18/10/21.

## **3.0 Site Location**

- 3.1** The site was inspected on the 24<sup>th</sup> June, 2021.
- 3.2** This residential property is on the low side of the road and has a NE aspect. It is located on the moderately graded 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 with excavations for the carport and lower ground floor of the house and with filing used for landscaping the

downhill side of the property. 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 site at an average angle of  $\sim 13^\circ$ . At the road frontage, a concrete driveway runs to a stable carport between the road frontage and the house. The cut for the carport is supported by a stable  $\sim 0.6\text{m}$  high stack rock retaining wall. The part three-storey brick house is supported on brick walls and brick piers. The supporting walls display no significant signs of movement and the supporting piers stand vertical. Some of the supporting walls and piers were observed to be supported directly onto competent Medium Strength Sandstone within the foundation space of the house. An excavation has been made through the outcropping rock within the foundation space for the lower ground floor of the house. The cut has been taken entirely through the rock and from what could be seen of the cut, it appears stable. A narrow fill extends off the downhill side of the house. The fill is supported by a stable  $\sim 1.4\text{m}$  high stack rock retaining wall. The wall was observed to be supported directly onto outcropping Medium Strength Sandstone. A gently sloping lawn-covered fill falls from the base of this wall to the lower common boundary. This fill is lawn-covered and is battered to stable angles. The area surrounding the house and driveway is mostly garden-covered or paved with some lawn 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 road and the subject property.

## **5.0 Recommendations**

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

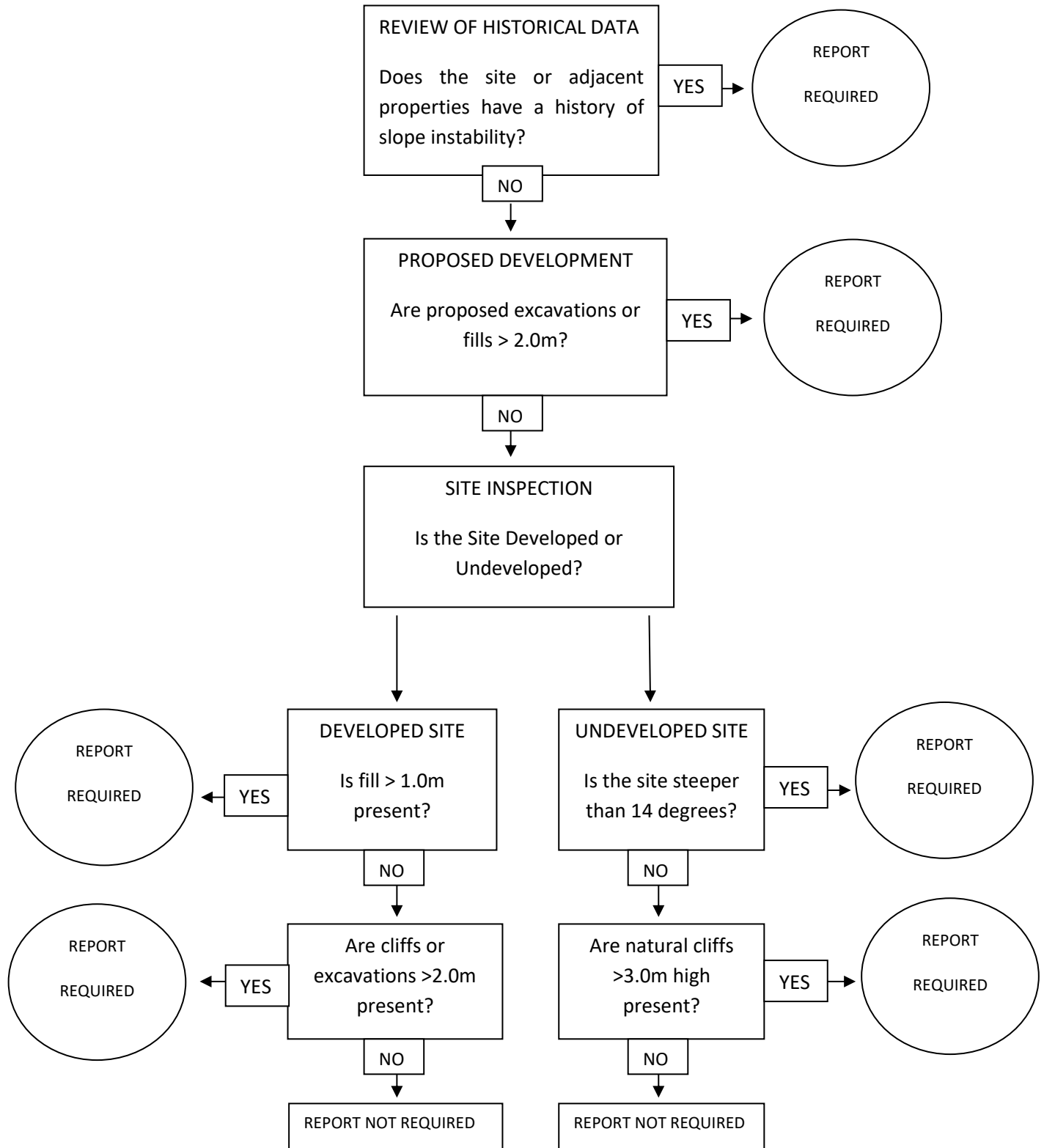
Provided good engineering and building practice are followed, no further Geotechnical assessment is recommended for the proposed development.

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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.

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