

## **PRELIMINARY GEOTECHNICAL ASSESSMENT:**

### **4A Cambridge Avenue, Narraweena**

<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** Demolish the existing house and construct a new part two-storey house.
- 2.2** Install a new pool on the E side of the property by excavating to a maximum depth of ~1.1m.
- 2.3** No fills are shown on the plans.
- 2.4** Details of the proposed development are shown on 16 drawings prepared by Sally Gardner Design and Draft, job number 19-0131, drawings numbered N1, N2, A1 to A8, and S1 to S6, dated 29/5/20.

## **3.0 Site Location**

- 3.1** The site was inspected on the 28<sup>th</sup> May, 2020, and previously on the 30<sup>th</sup> June, 2016.
- 3.2** This residential property is on the low side of the road and has a SE aspect. It is located on the gently graded crest and upper reaches of a hillslope. Medium

Strength Hawkesbury Sandstone bedrock outcrops across the entire site. Where rock is not exposed at the surface, it is expected at relatively shallow depths. The natural surface of the block has been altered by minor filling and an excavation for the existing garage. The proposed development will require an excavation to a maximum depth of ~1.1m for the proposed pool.

**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 road frontage, the natural slope falls gently at angles of ~5° to the lower common boundary. At the road frontage, a concrete driveway runs to a concrete paved area and a garage under the house. The fill for the driveway is supported by a series of rough stack rock retaining walls reaching ~2.2m high. These walls are located on the newly subdivided lot at 4B Cambridge Avenue. The walls are covered in dense vegetation in parts but from what could be seen no signs of movement were observed. The ground cover around the house is a gently sloping lawn with exposed sandstone at the surface. The part two-storey brick and timber house will be demolished as part of the proposed works. Along the lower boundary and immediately below, Medium Strength Sandstone bedrock outcrops. 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.

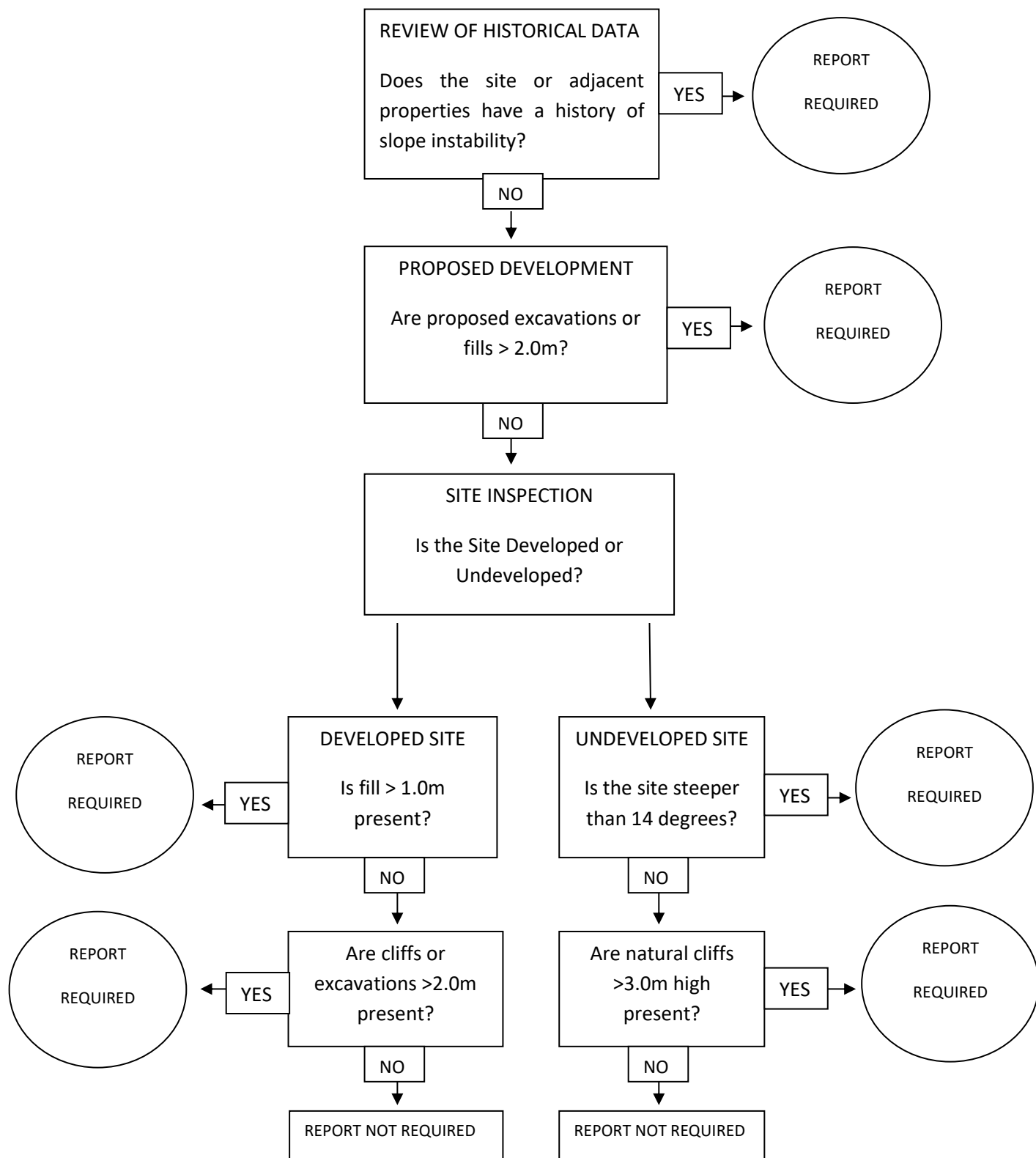
Provided good engineering and building practice are followed no further Geotechnical assessment is recommended for the proposed development.

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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.

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