

## **PRELIMINARY GEOTECHNICAL ASSESSMENT:**

### **22 Halloran Avenue, Davidson**

<b>1.0</b>	<b>LANDSLIP RISK CLASS</b> ( <i>Highlight indicates Landslip Risk Class of property</i> )
<input type="checkbox"/>	<i>A - Geotechnical Report not normally required</i>
<input checked="" type="checkbox"/>	<i>B - Geotechnical Engineer (Under Council Guidelines) to decide if Geotechnical Report is required</i>
<input type="checkbox"/>	<i>C - Geotechnical Report is required</i>
<input type="checkbox"/>	<i>D - Geotechnical Engineer (Under Council Guidelines) to decide if Geotechnical Report is required</i>
<input type="checkbox"/>	<i>E - Geotechnical Report required</i>

## **2.0 Proposed Development**

- 2.1** Construct a new carport on the uphill side of the house.
- 2.2** Extend the downhill side of the house.
- 2.3** Construct a new deck on the NW side of the house.
- 2.4** Various other internal and external alterations.
- 2.5** Apart from those for footings, no significant excavations are required. No fills are shown on the plans.
- 2.6** Details of the proposed development are shown on 4 drawings prepared by Connect Drafting, Project number CD-086/20, sheets numbered 1 to 4, Issue A, dated 24/4/20.

## **3.0 Site Location**

- 3.1** The site was inspected on the 23<sup>rd</sup> June, 2020.

**3.2** This residential property is on the low side of the road and has a NE aspect. It is located on the gentle to 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 an excavation for the house and with filling used for landscaping on 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  $\sim 9^\circ$ . At the road frontage, a concrete driveway runs to a garage attached to the NW side of the house. Between the road frontage and the house is a gentle to moderately sloping lawn. An excavation has been made in the slope to create a level platform for the house. The cut is supported by a stable brick retaining wall  $\sim 1.0\text{m}$  high. A portion of this wall was observed to be supported directly onto competent Medium Strength Sandstone. The single-storey 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 outcropping sandstone within the foundation space and on the downhill side of the house. The slope on the NW side of the house is terraced with a series of low stable flagging walls. A tile-paved fill extends off the downhill side of the house. The fill is supported by a stable timber retaining wall  $\sim 1.0\text{m}$  high. A gently sloping lawn extends to the lower boundary. The area surrounding the house and driveway is mostly lawn-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 road and the subject property.

## 5.0 Recommendations

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

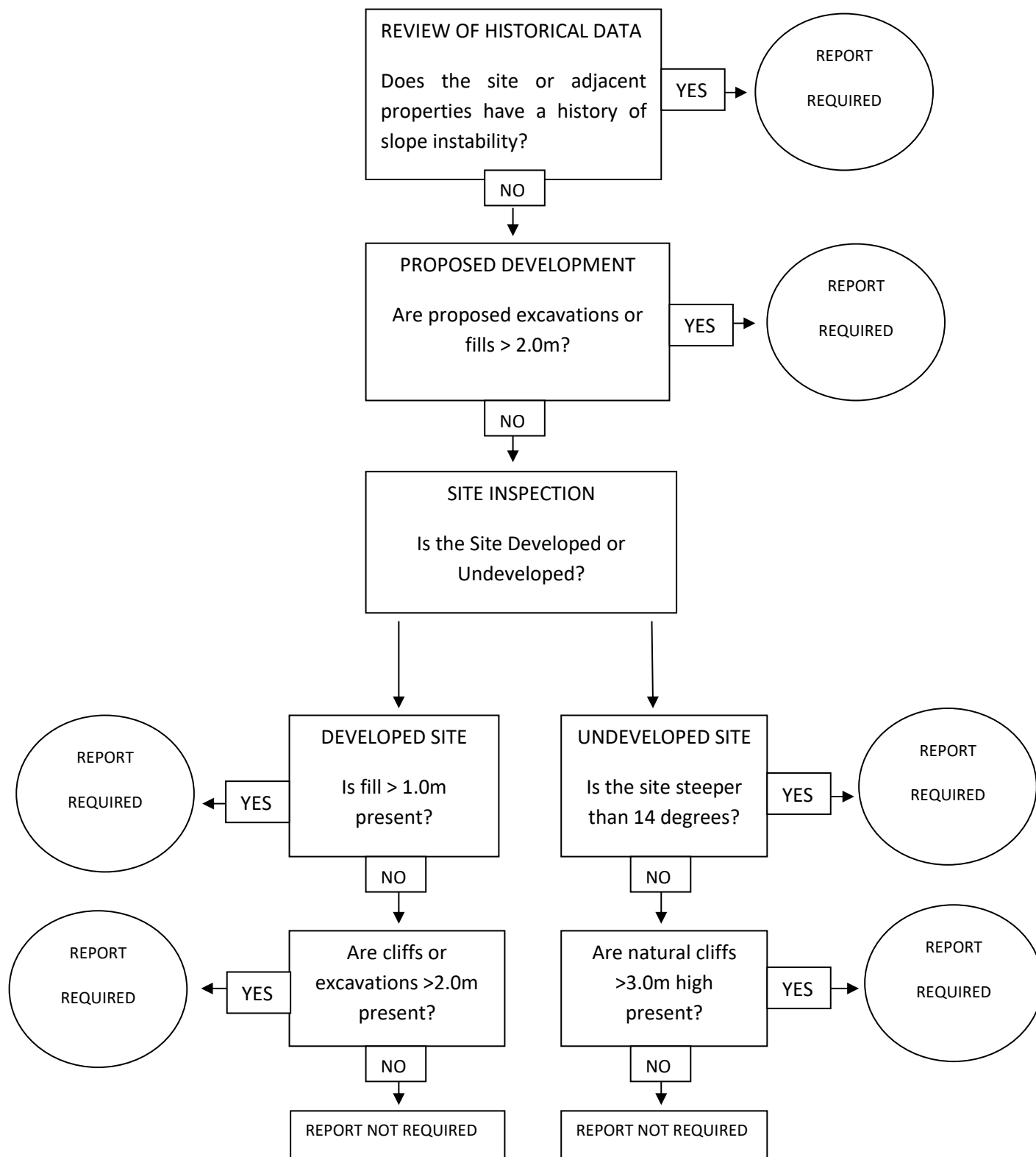
Provided good engineering and building practice are followed, no further Geotechnical assessment is recommended for the proposed development.

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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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