

PRELIMINARY GEOTECHNICAL ASSESSMENT:

30 Towradgi Street, Narraweena

1.0	<i>LANDSLIP RISK CLASS (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 deck on the E side of the house.
- 2.2** Apart from those for footings, no excavations are required. No fills are shown on the plans.
- 2.3** Details of the proposed development are shown on 4 drawings prepared by Connect Drafting, drawing number CD-118/19-V1, Issue A, sheets numbered 2 to 4 are dated 14/2/18, and sheet number 1 is dated 14/5/19.

3.0 Site Location

- 3.1** The site was inspected on the 22nd August, 2019.
- 3.2** This residential property is level with the road and has a N aspect. The block runs longways to the E so the slope is a cross-fall. It is located on the moderately graded middle reaches of a hillslope. Medium Strength Hawkesbury sandstone bedrock outcrops and steps up 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 filling used for landscaping across 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

From the upper boundary to the lower boundary, the natural slope falls at an average angle of $\sim 18^\circ$. At the road frontage, a concrete driveway runs to a garage on the ground floor of the house and to a stone-paved parking area on the W side of the property. The parking area is cut into the slope $\sim 0.8\text{m}$. The cut is supported by two stable stack rock retaining walls on either side of the parking area. A $\sim 1.5\text{m}$ high rock face rises above the parking area and is undercut $\sim 1.3\text{m}$. The undercut joint block has a relatively thick cantilever arm in relation to its overhang length and does not show any jointing or cracking through the supporting cantilever arm as viewed from above or below. As such, we consider it to be currently stable. The slope above the undercut is terraced with two stable stack rock retaining walls. The part two-storey brick house is supported on brick walls. The external supporting walls of the house display no significant signs of movement. A gently sloping lawn and garden area extends off the E side of the house. Competent Medium Strength Sandstone was observed to be outcropping through the lawn in places. A $\sim 3.0\text{m}$ high rock face rises to the upper boundary. No undercutting or other significant geological defects were observed in the rock face and it is considered stable. 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.

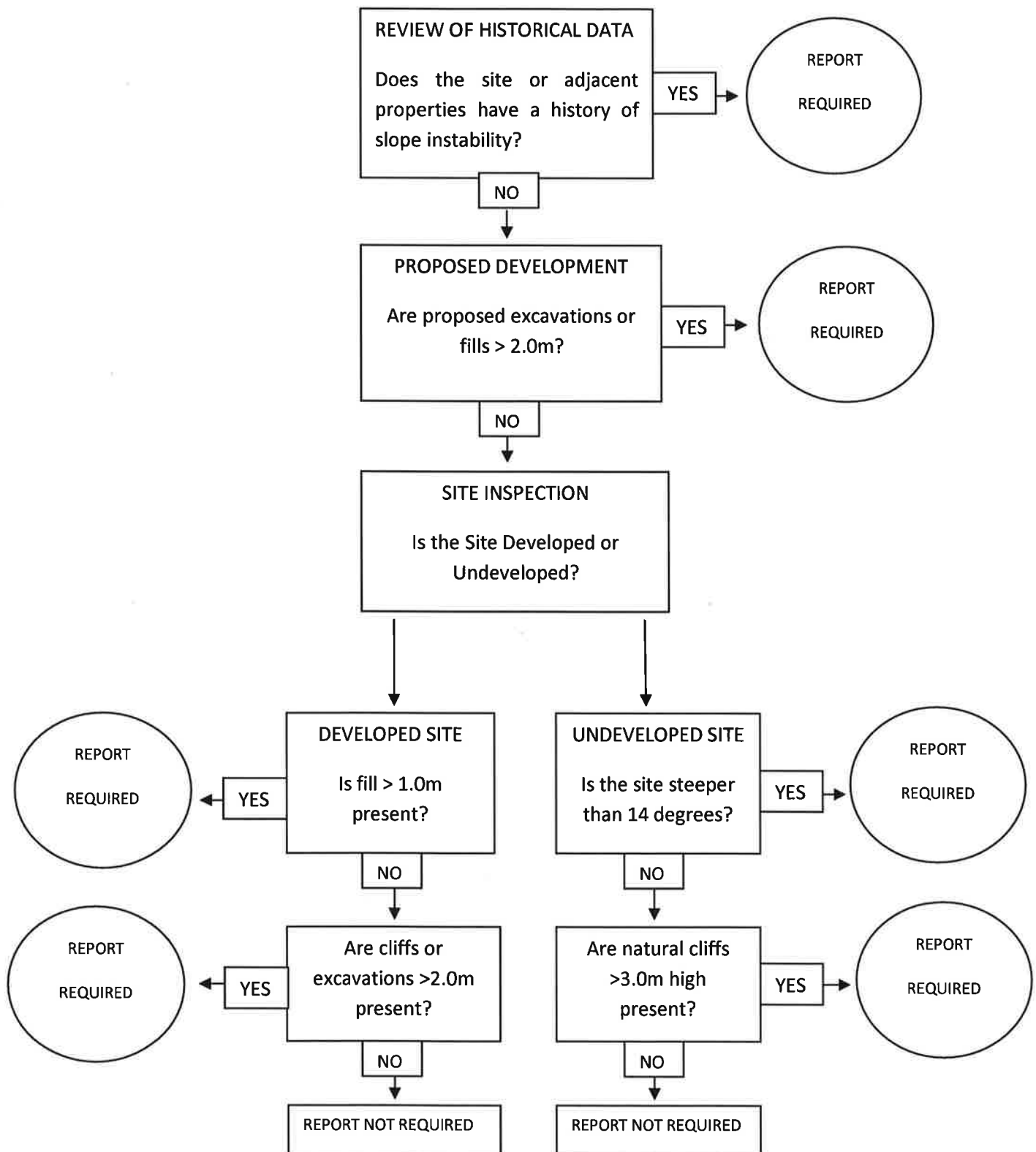
Provided good engineering and building practice are followed, no further Geotechnical assessment is recommended for the proposed development.

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 section 2.0 of this assessment are incorrect we are to be informed immediately and before this assessment is lodged with the DA.
