

PRELIMINARY GEOTECHNICAL ASSESSMENT:

28 Dareen Street, Beacon Hill

1.0	LANDSLIP RISK CLASS (<i>Highlight indicates Landslip Risk Class of property</i>)
<input checked="" 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** Demolish the existing carport and construct a new garage in the same location.
- 2.2** Replace the existing deck on the downhill side of the house.
- 2.3** Various other external alterations.
- 2.4** Apart from those for footings, no excavations are required. No fills are shown on the plans.
- 2.5** Details of the proposed development are shown on 14 drawings prepared by All Australian Architecture, drawings numbered DA.00 to 13, Issue B, not dated.

3.0 Site Location

- 3.1** The site was inspected on the 17th July, 2020.
- 3.2** This residential property is on the low side of the road and has a NE aspect. It is located on the gently graded upper middle reaches of a hillslope. No rock outcrops

on the property. The Sydney 1:100 000 Geological sheet indicates the site is underlain by Hawkesbury Sandstone that is described as a medium to coarse grained quartz sandstone with very minor shale and laminite lenses. Sandstone bedrock is expected to underlie the surface at relatively shallow depths. The natural surface of the block has been altered with an excavation for a pool on the downhill side of the property and with filling used for landscaping on the downhill side of the property. The proposed development will not alter the surface further.

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 property at an average angle of $\sim 6^\circ$. At the road frontage, a concrete driveway runs to a carport attached to the E side of the house. The carport will be demolished as part of the proposed works. Between the road frontage and the house is a gently sloping lawn. The part two-storey brick house is supported on brick walls and brick piers. The external supporting walls of the house display no significant signs of movement and the supporting brick piers stand vertical. A pool has been cut into the slope on the downhill side of the property. The water level of the pool indicates no ground movement has occurred in the shell of the pool since its construction. A gently sloping lawn-covered fill extends off the downhill side of the house to the lower common boundary. The fill is supported by a low stable retaining wall. The area surrounding the house and garage 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.

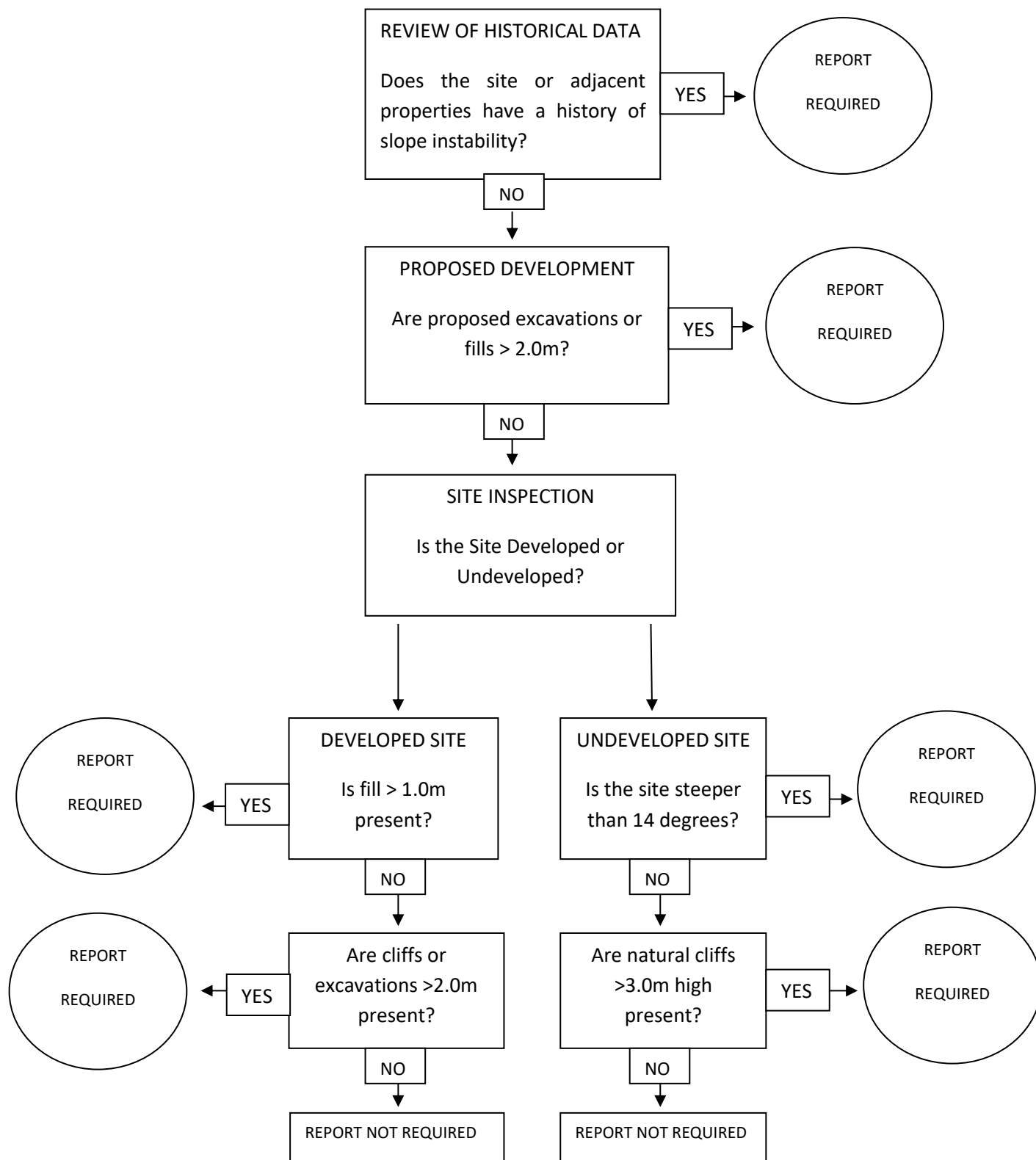
Provided good engineering and building practice are followed, no further Geotechnical assessment is recommended for the proposed development.

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.
