

PRELIMINARY GEOTECHNICAL ASSESSMENT:

25 Beacon Avenue, Beacon Hill

1.0	LANDSLIP RISK CLASS (<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** Extend the uphill and downhill side of the house.
- 2.2** Construct a new first floor addition.
- 2.3** Various other minor internal and 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 18 drawings prepared by Sally Gardner Design and Draft, Job number 21-0726, drawings numbered A1 to A8, S1 to S7, N1, N2, and E1, dated 22/11/21.

3.0 Site Location

- 3.1** The site was inspected on the 9th December, 2021.
- 3.2** This residential property is on the low side of the road and has a SW aspect. It is located on the moderate to steeply 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 filling for the driveway and 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

The natural slope falls across the site at an average angle of $\sim 20^\circ$. Between the road frontage and the house is a steep, terraced garden slope. The terraces are supported by rough but stable stack rock retaining walls. Medium Strength Sandstone outcrops through this slope in places. The part three-storey brick and timber framed and clad house is supported on brick walls. Some minor cracking was observed in the W supporting walls of the house. The plans show these walls are to be underpinned as part of the proposed works. The supporting walls display no other significant signs of movement. Some of the downhill supporting walls of the house were observed to be supported directly onto outcropping Medium Strength Sandstone. A garage under the uphill side of the house is accessed from a Right of Carriageway (ROW) off Beacon Avenue farther to the W. The fill for the driveway where it meets the subject property is supported by a stable brick retaining wall reaching $\sim 1.3\text{m}$ high. The slope between the house and lower common boundary is terraced with a series of low stable stack rock and timber retaining walls. The lowest of these walls reaches $\sim 1.4\text{m}$ high and is considered stable. The area surrounding the house and driveway is mostly lawn-covered with some paved areas. No significant 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.

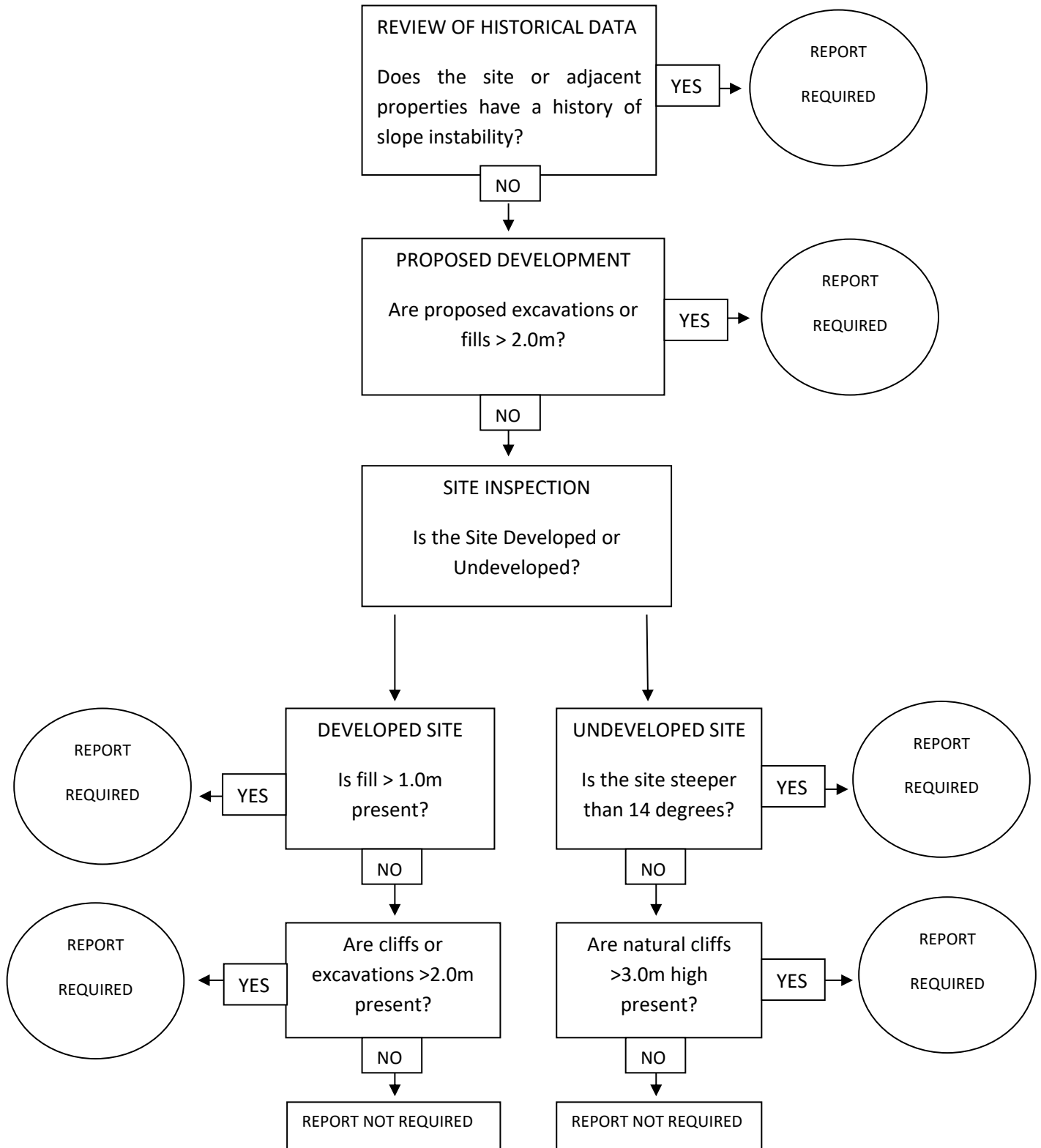
Provided good engineering and building practice are followed, no further Geotechnical assessment is recommended for the proposed development.

White Geotechnical Group Pty Ltd.



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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.
