

PRELIMINARY GEOTECHNICAL ASSESSMENT:

34 Mathews Street, Davidson

1.0	LANDSLIP RISK CLASS (<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 pergola on the uphill side of the house and construct a new pergola in the same location.
- 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 2 drawings prepared by Pergola Land, sheets numbered 1 and 2, Revision A, dated 9/4/22.

3.0 Site Location

- 3.1** The site was inspected on the 26th April, 2022.
- 3.2** This residential property is on the high side of the road and has a SE aspect. It is located on the gentle to moderately graded middle reaches of a hillslope. Medium Strength Hawkesbury Sandstone bedrock outcrops above 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

pool and with filling used for landscaping across the site. 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 rises across the property at gentle to moderate angles. At the road frontage, a concrete driveway runs to a garage on the ground floor of the house. Between the road frontage and the house is a gently sloping garden fill. The fill is supported by a brick retaining wall reaching ~1.2m high. This wall displays stepped cracking in multiple locations but no significant signs of deflection and is currently considered stable. The two-storey brick house is supported on brick walls. Minor vertical cracking was observed through the bricks adjacent to the E corner of the house. This type of cracking is typical of houses of this age and construction and is not considered an indication of slope instability. No other significant signs of movement were observed in the supporting walls of the house. A tile-paved patio extends off the uphill side of the house. The cut for the patio is supported by a timber crib retaining wall ~0.6m high. This wall was almost entirely obscured by vegetation and could not be adequately assessed. A gentle garden slope continues above this wall to the upper boundary. A pool has been cut into the slope on the SW side of this garden slope. The water level of the pool indicates no ground movement has occurred in the shell of the pool since its construction. An undeveloped bush slope rises beyond the upper boundary. Competent Medium Strength Sandstone outcrops through this slope in places. The area surrounding the house is mostly paved or garden 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.

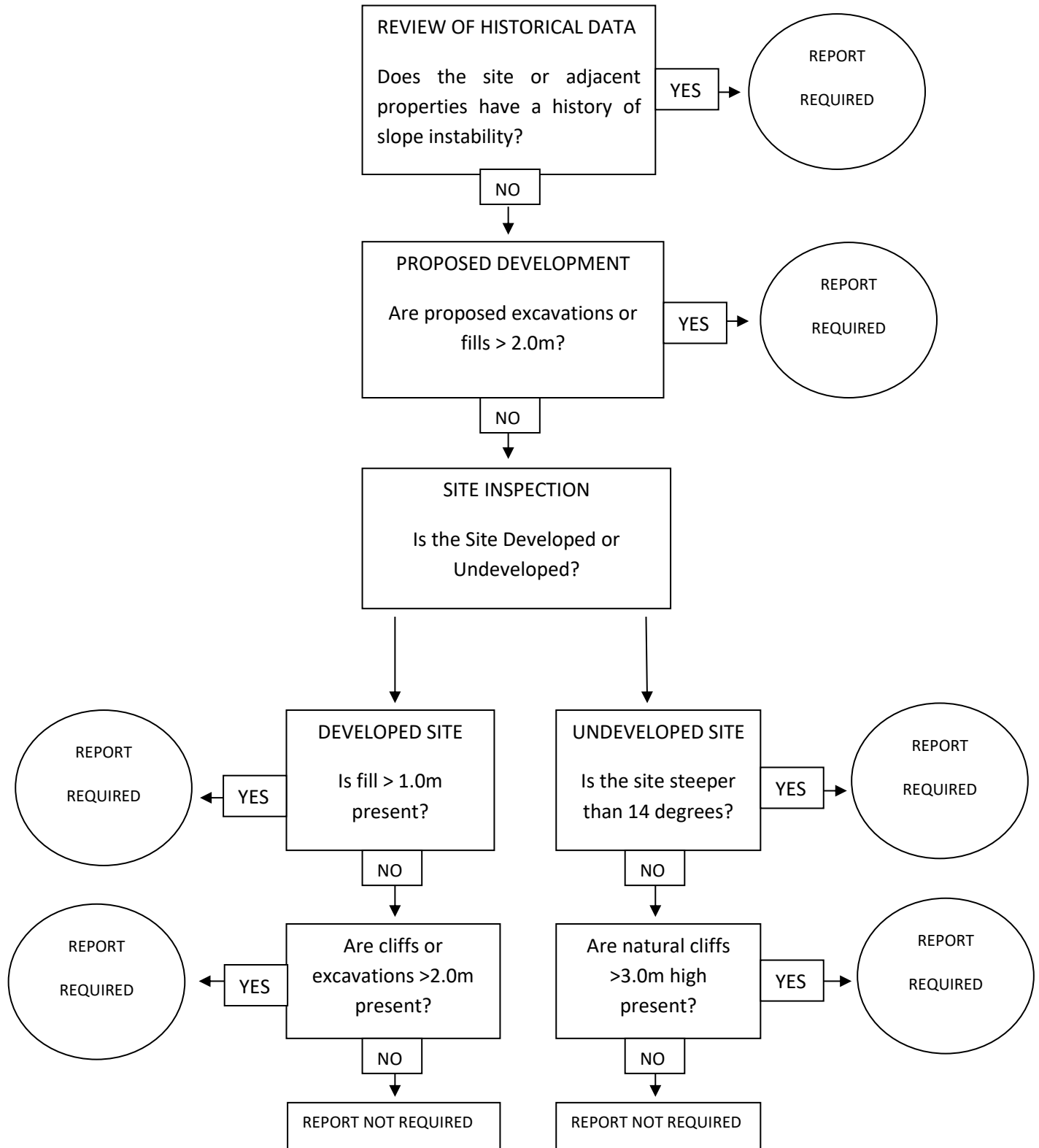
Provided good engineering and building practice are followed, no further Geotechnical assessment is recommended for the proposed development.

White Geotechnical Group Pty Ltd.



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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.
