

PRELIMINARY GEOTECHNICAL ASSESSMENT:

16 Pertaka Place, Narraweena

1.0	LANDSLIP RISK CLASS (Highlight indicates Landslip Risk Class of property)
☐	A - Geotechnical Report not normally required
☒	B - Geotechnical Engineer (Under Council Guidelines) to decide if Geotechnical Report is required
☐	C - Geotechnical Report is required
☐	D - Geotechnical Engineer (Under Council Guidelines) to decide if Geotechnical Report is required
☐	E - Geotechnical Report required

2.0 Proposed Development

- 2.1** Add a new Second floor to the uphill side of the existing house.
- 2.2** Extend the existing deck on the downhill side of the house. Construct a pergola over the footprint of the extended deck.
- 2.3** Various other internal and external alterations to the existing house.
- 2.4** No significant excavations or fills are shown on the plans.
- 2.5** Details of the proposed development are shown on 11 drawings prepared by Drawn4U Computer Drafting, drawings numbered 251119-00 to 251119-10, Issue A, dated 10/04/20.

3.0 Site Location

- 3.1** The site was inspected on the 18th May, 2020.
- 3.2** This residential property is on the high side of the road and has an N aspect. It is located on the moderately graded middle reaches of a hillslope. Medium Strength

Hawkesbury Sandstone bedrock outcrops throughout the property. Where sandstone is not exposed, it is expected to underlie the surface at relatively shallow depths. Cuts have been made to provide level platforms for the house and garage. Fill has been used for landscaping purposes on the uphill and downhill sides 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 rises across the property at an average angle of 14°. At the road frontage, a concrete driveway runs to the existing garage and house. Next to the driveway is a landscaped lawn area. The fill for the lawn is supported by stable low timber retaining walls. Medium Strength Sandstone bedrock outcropping above the lawn has some closely spaced bedding planes but is considered competent rock. A low cut has been made through outcropping rock behind the garage. The cut face is unsupported and is considered stable. The existing deck on the downhill side of the house is supported by steel posts on competent Medium Strength Sandstone. A cut has been made through the rock on neighbouring property to the W near the common boundary. The cut face is unsupported and appears stable.

The existing part two storey rendered brick house is supported by brick walls and brick piers. The supporting walls and piers stand vertical and show no significant signs of movement. A deck on the uphill side of the property is supported on outcropping Medium Strength Sandstone. A portion of the rock underlying the deck is undercut but given the thickness of the cantilever arm and no visible presence of defects in the arm, the undercut is considered to be stable. Sandstone bedrock is outcropping throughout the uphill side of the property and on the slope above.

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.

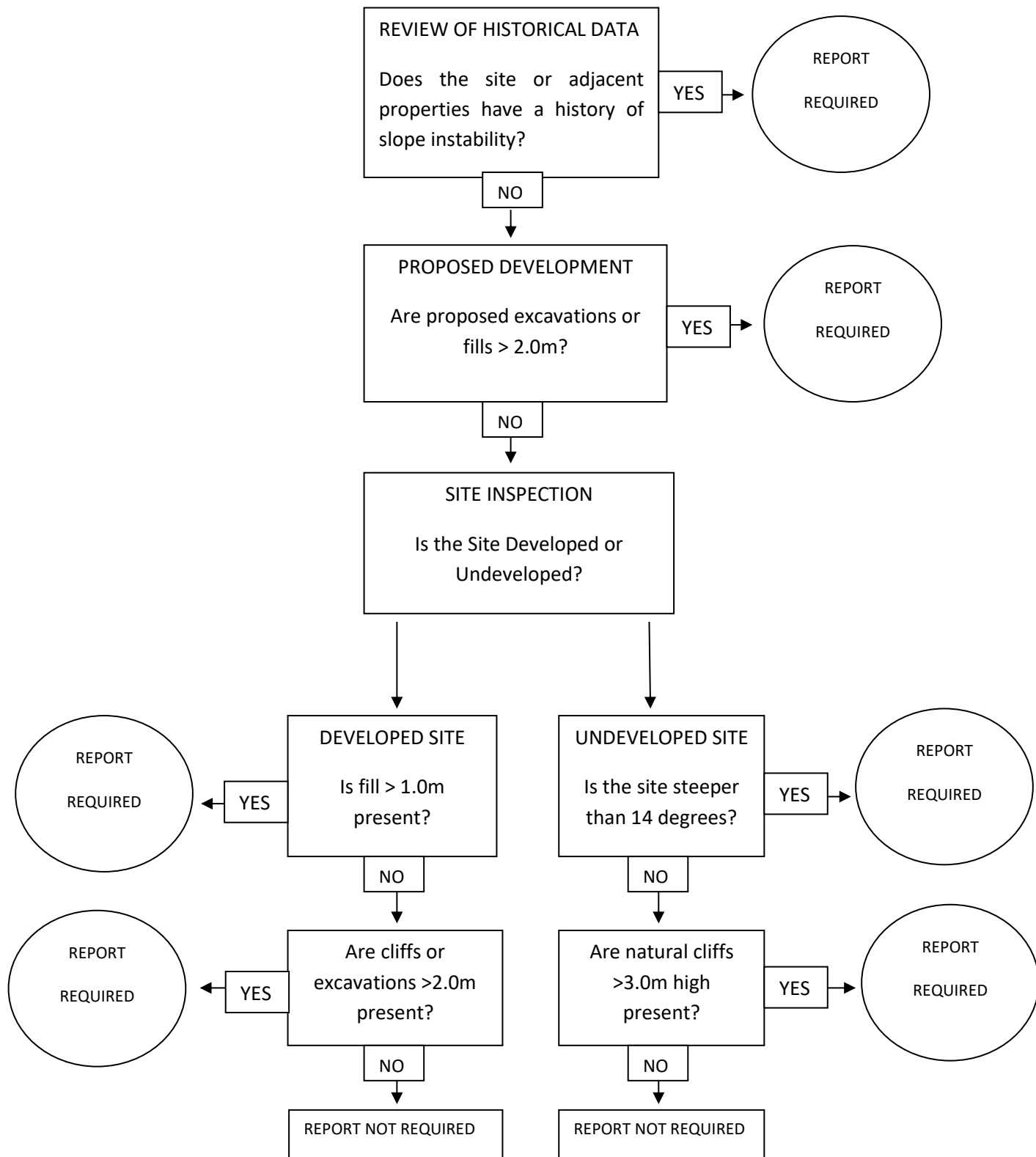
Provided good engineering and building practice are followed, no further Geotechnical assessment is recommended for the proposed development.

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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.
