

PRELIMINARY GEOTECHNICAL ASSESSMENT:

49 Cashel Crescent, Killarney Heights

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 Construct a new carport on the downhill side of the house.
- 2.2 Construct a new deck on the downhill side of the house.
- 2.3 Construct a new first floor addition.
- 2.4 Various other internal and external alterations.
- 2.5 Apart from those for footings, no excavations are required. No fills are shown on the plans.
- 2.6 Details of the proposed development are shown on 10 drawings prepared by Freshwater Blue, drawings numbered 2019-00 to 09, Issue A, dated 12/12/19.

3.0 Site Location

- 3.1 The site was inspected on the 6th December, 2019.
- 3.2 This residential property is located off the turning circle at the end of the street. It has a W aspect. It is located on the gently graded upper 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 excavations for landscaping and a pool on the uphill 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 rises across the property at an average angle of $\sim 5^\circ$. At the road frontage, a concrete driveway runs to a garage attached to the N side of the house. Between the road frontage and the house is a gently sloping lawn. The single-storey rendered 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. The slope on the uphill side of the house has been terraced with a series of stable rendered masonry retaining walls. The terraces are lawn and garden covered. A pool has been cut into the slope near the upper boundary. The water level of the pool indicates no ground movement has occurred in the shell of the pool since its construction. A stable timber framed outbuilding has been constructed in the SE corner of the property. The area surrounding the house, driveway, and pool is mostly paved or lawn-covered. No signs of movement associated with slope instability were observed on the grounds. No cliffs or large rock faces were observed on the property or in the near vicinity. 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.

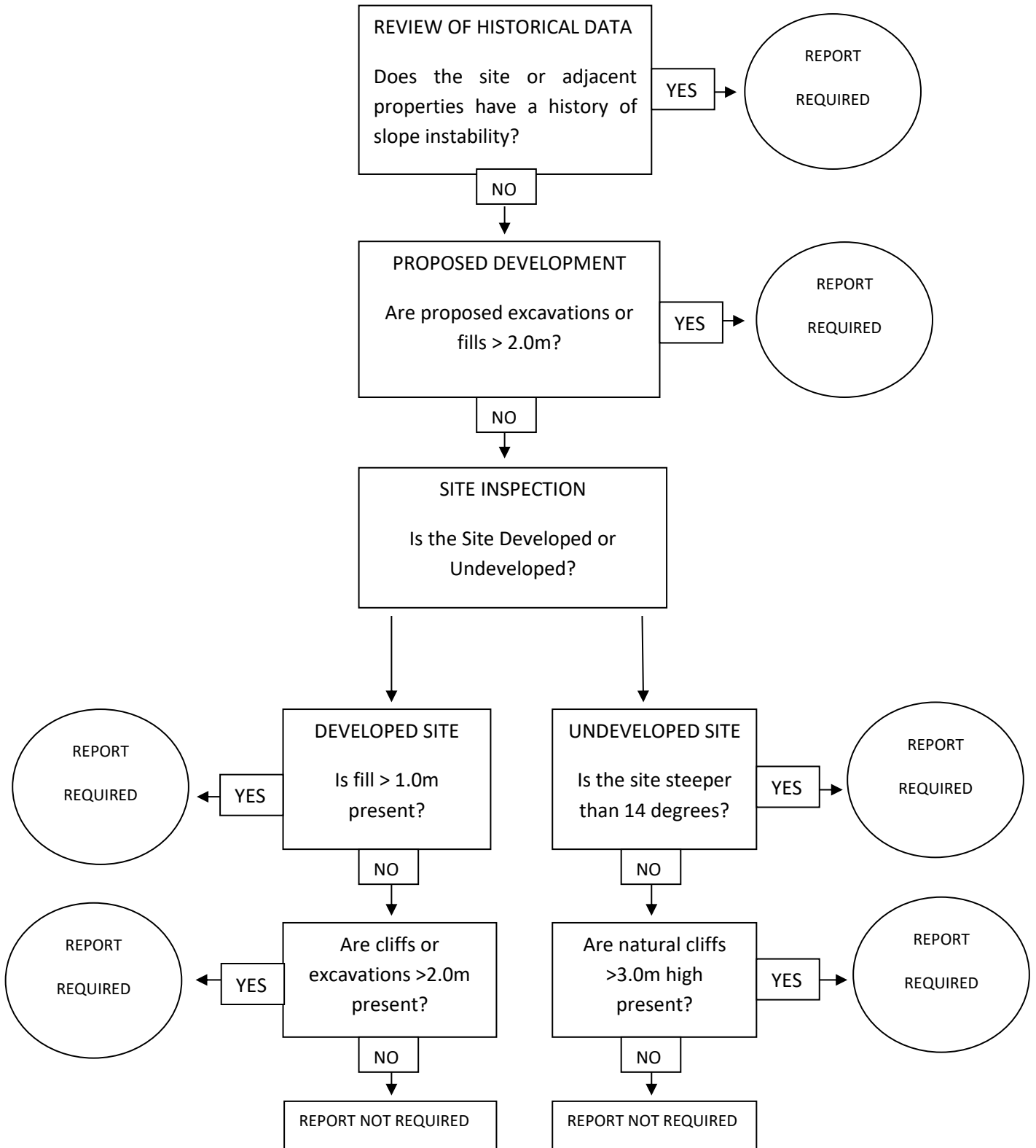
Provided good engineering and building practice are followed, no further Geotechnical assessment is recommended for the proposed development.

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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.