

PRELIMINARY GEOTECHNICAL ASSESSMENT:

18 Monserra Road, Allambie Heights

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** Construct a new storage area by excavating to a maximum depth of ~1.5m under the house.
- 2.2** Construct a new first floor addition.
- 2.3** Construct a new deck and pergola on the uphill side of the house.
- 2.4** Extend the NE side of the house.
- 2.5** Extend the balcony on the downhill side of the house.
- 2.6** Various other internal and external modifications.
- 2.7** No fills are shown on the plans.
- 2.8** Details of the proposed development are shown on 28 drawings prepared by Rapid Plans, project number RP0118MAR, drawings numbered DA1002 to 1016, 2001 to 2004, 3001, 4001, 4002, and 5001 to 5006, are dated 9/7/2018.

3.0 Site Location

3.1 The site was inspected on the 3rd July, 2018.

3.2 This residential property is on the high side of the road and has a SE aspect. It is located on the gently graded middle reaches of a hillslope. Medium Strength Hawkesbury Sandstone bedrock outcrops in the foundation space of the house. 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 excavations for the garage and pool. An excavation to a maximum depth of ~1.5m will be required to construct the proposed storage area under the house.

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

From the road frontage to the upper boundary, the natural slope rises at an average angle of ~8°. At the road frontage, a concrete driveway runs to a garage under the house. Between the road frontage and the house is a gently sloping lawn. The single-storey brick and weatherboard clad house is supported on brick walls and brick piers. No significant signs of movement were observed in the supporting brick walls and the most of the supporting brick piers stand vertical. Water was observed to be pooling within the foundation space of the house and some of the brick piers were observed to be tilting slightly. The owner informs us that the tilting piers and pooling water will be remediated as part of the proposed works. A pool has been cut into the slope on the uphill 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. The area surrounding the house 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.

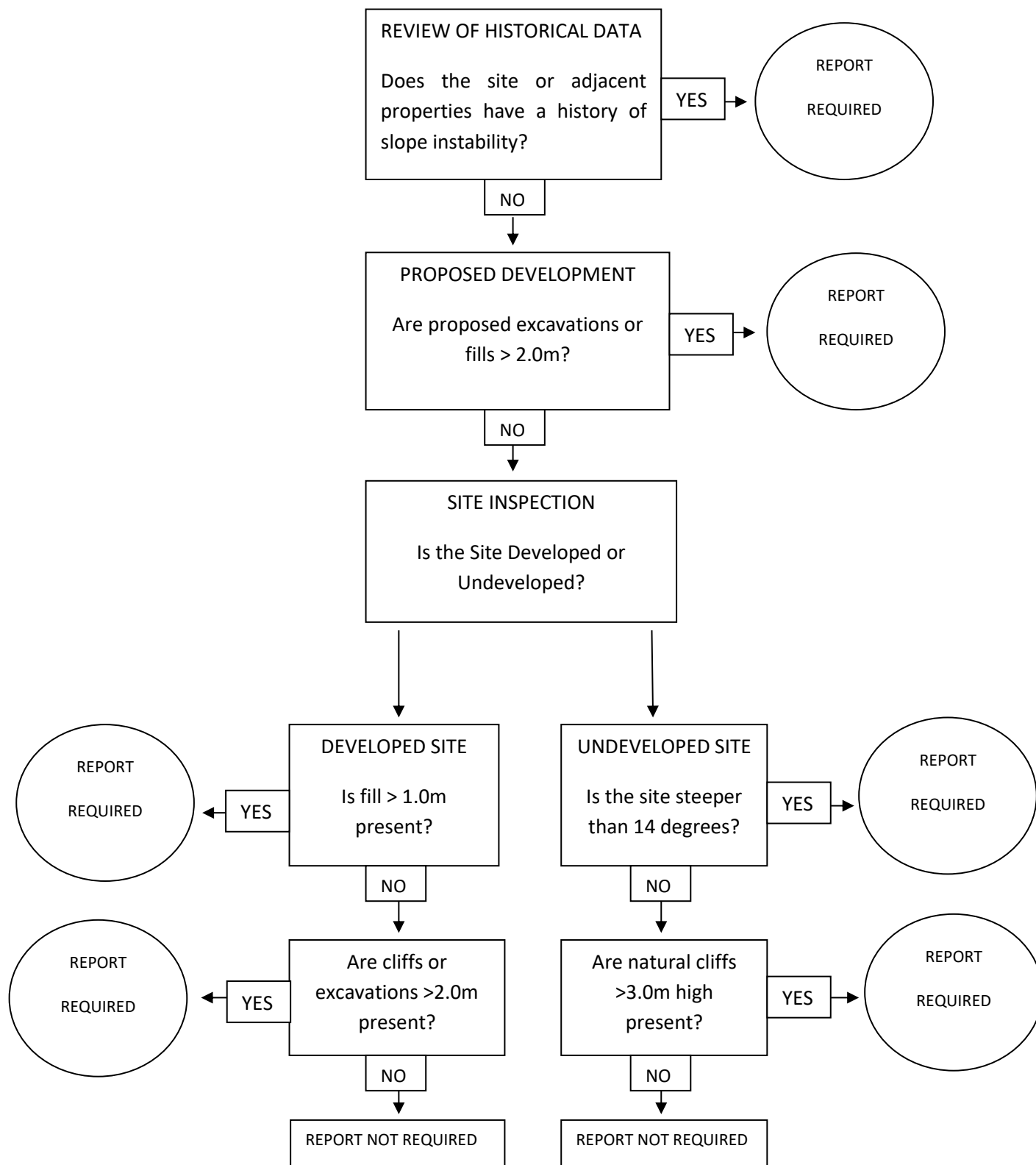
Provided good engineering and building practice are followed, no further Geotechnical assessment is recommended for the proposed development.

White Geotechnical Group Pty Ltd.



Ben White M.Sc. Geol.,
AusIMM., CP GEOL.
No. 222757
Engineering Geologist.

Preliminary Assessment Flow Chart – Warringah Council



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.
