PRELIMINARY GEOTECHNICAL ASSESSMENT:

61 Smith Avenue, Allambie Heights

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 Construct a new garage on the uphill side of the house.

2.2 Construct a new deck on the downhill side of the house.

2.3 Various other internal and external alterations.

2.4 Minor levelling may be required to construct the proposed garage.

2.5 Details of the proposed development are shown on 5 drawings prepared by Sean Gilmore Architect, drawings numbered DA 01/a to 05/a, Issue A, dated October 2019.

3.0 Site Location

3.1 The site was inspected on the 25th October, 2019.

3.2 This residential property is on the low side of the road and has an E aspect. It is located on the gentle to moderately graded lower 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 used for landscaping across the property. Minor levelling may be required to construct the proposed garage.

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 property at an average angle of ~12° to the top of a rock face that approximates the lower common boundary. At the road frontage, a concrete driveway runs to a carport on the uphill side of the house. Between the road frontage and the house is a gently sloping lawn. Competent Medium Strength Sandstone was observed to be outcropping through this lawn. The part two-storey brick and timber framed and clad house is supported on brick walls and brick piers. The external supporting brick walls display no signs of movement and the supporting brick piers stand vertical. Two level platforms extend off the downhill side of the house under the deck. The upper platform is supported by a ~1.0m high stable brick retaining wall. The lower platform is supported by a stable stack rock retaining wall ~1.6m high. Both of these walls were observed to be supported directly off outcropping sandstone. No undercutting or other significant geological defects were observed in the rock face and it is considered stable. Another near-level terrace extends off the base of the outcrop. The terrace is supported by a stable stack rock retaining wall ~1.4m high. A concrete-paved area surrounded by garden beds extends from the base of this wall to the top of a large rock face at the lower common boundary. The rock face is obscured by a dense covering of vegetation and could not be accessed at the time of the inspection. As such the rock face has not been assessed in terms of risk to the neighbouring property below and due to access difficulties, this assessment is beyond the scope of this report. The area surrounding the house is mostly paved or lawn 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

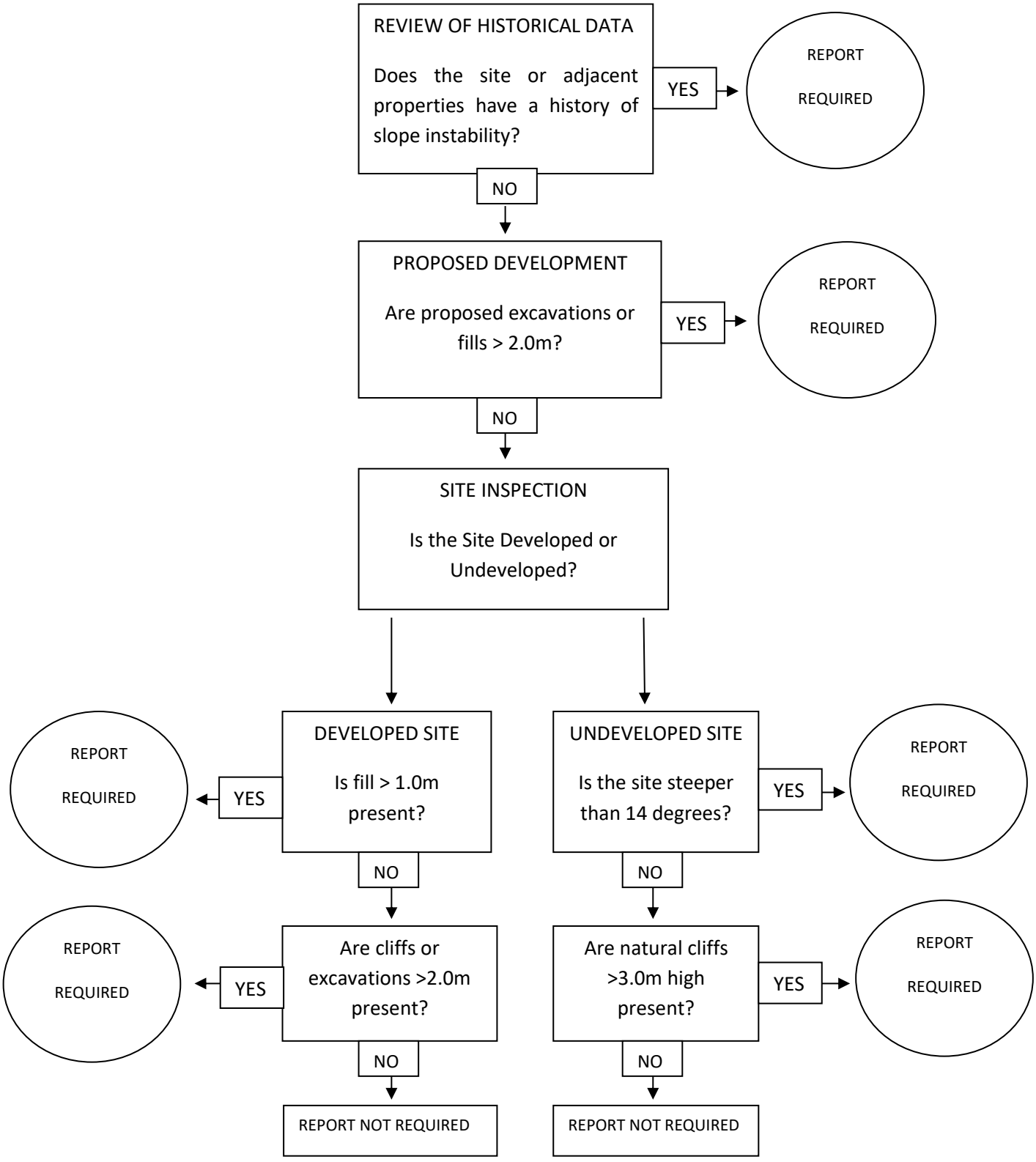
The proposed development and site conditions were considered and applied to the Council Flow Chart.

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

White Geotechnical Group Pty Ltd.

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

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.