

PRELIMINARY GEOTECHNICAL ASSESSMENT:

24 Karina Crescent, Belrose

1.0	LANDSLIP RISK CLASS (Highlight indicates Landslip Risk Class of property)
<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 upper floor addition.
- 2.2** Various other internal alterations.
- 2.3** No significant excavations or fills are shown on the plans.
- 2.4** Details of the proposed development are shown on 8 drawings by Blue Sky Building Designs, Project number 2019059, drawings numbered A101 to 108, dated 23/1/20.

3.0 Site Location

- 3.1** The site was inspected on the 13th February, 2020.
- 3.2** This residential property is level with the road and has an E aspect. The block runs longways to the NE so the slope is a cross-fall. It is located on the gently graded upper middle reaches of a hillslope. Medium Strength Hawkesbury Sandstone bedrock outcrops beyond the N boundary and on the neighbouring property below. 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 for landscaping on the S side of the property and with an excavation for a pool on the N side 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 site at an average angle of $\sim 6^\circ$. At the road frontage, a concrete driveway runs to a garage on the lower ground floor of the house. Between the road frontage and the house is a gently sloping lawn-covered fill. The fill is supported by a stable mortared sandstone block retaining wall reaching $\sim 1.4\text{m}$ high. The part two-storey rendered masonry house is supported on masonry walls. The supporting walls display no significant signs of movement. A pool has been cut into the slope on the N 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. Another gently sloping lawn extends below the pool to the N boundary. The area surrounding the house and driveway is mostly lawn-covered with some paved areas. 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.

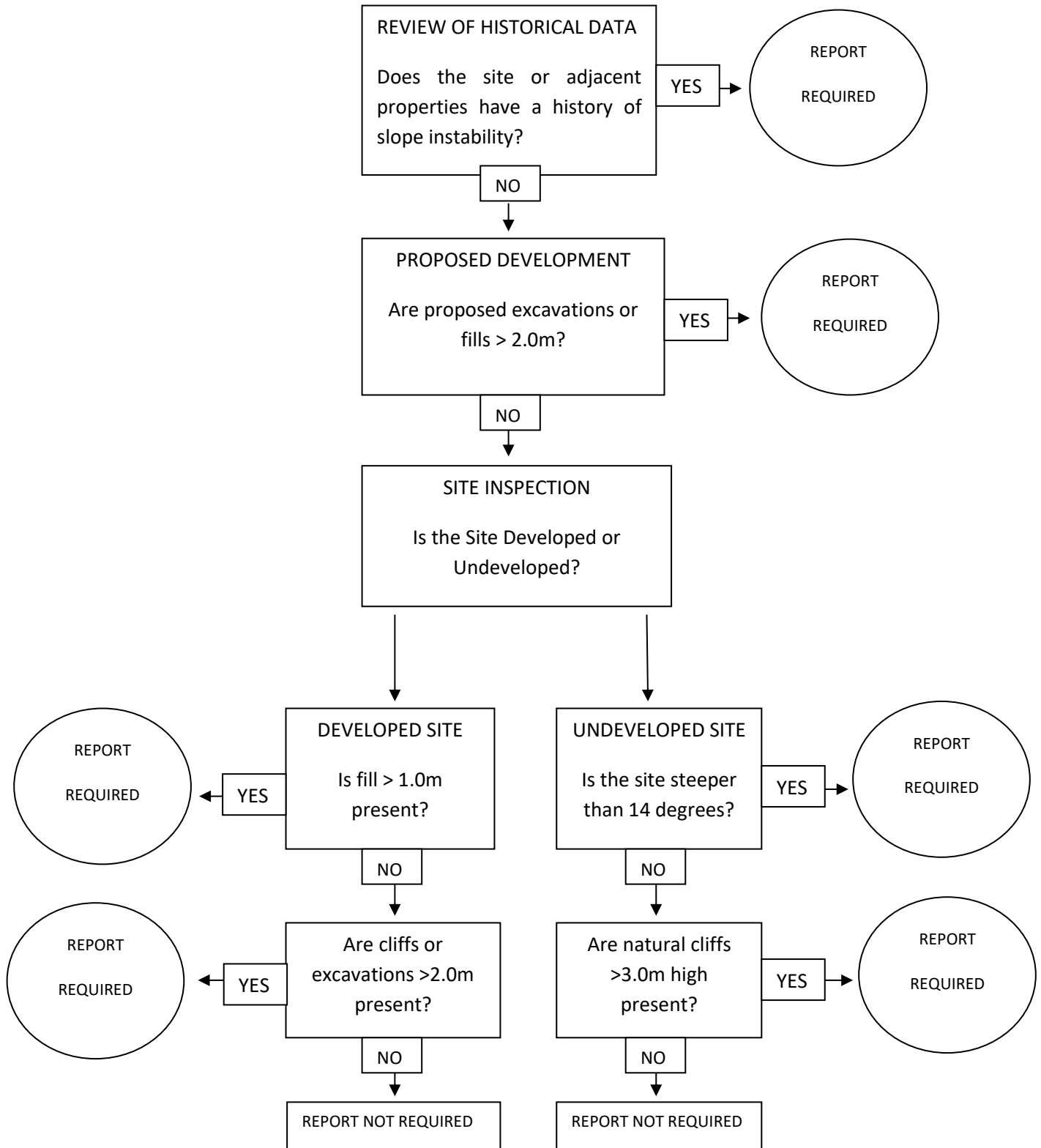
Provided good engineering and building practice are followed, no further Geotechnical assessment is recommended for the proposed development.

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.
