

## **PRELIMINARY GEOTECHNICAL ASSESSMENT:**

### **20 Ballyshannon Road, Killarney Heights**

<b>1.0</b>	<b>LANDSLIP RISK CLASS</b> ( <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

## **1.0 Proposed Development**

- 1.1** Construct an additional level over the existing footprint of the house.
- 1.2** Apart from those for footings, no excavations are required. No fills are shown on the plans.
- 1.3** Details of the proposed development are shown on 1 drawing by ADD-STYLE Home Additions, project number 0319 DA1, issue B, dated 21.5.21.

## **2.0 Site Location**

- 2.1** The site was inspected on the 11<sup>th</sup> June, 2021.
- 2.2** This residential property is on the high side of the road and has a S aspect. It is located on the moderately graded upper reaches of a hillslope. Competent Medium Strength Hawkesbury Sandstone can be seen outcropping above the house. Where sandstone bedrock is not exposed, it is expected to underlie the surface at relatively shallow depths. The current development of the block has altered the natural surface

with cuts for the driveway, house, and the pool. The proposed development will not alter the surface further.

**2.3** 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.

### **3.0 Site Description**

The natural slope rises across the property at an average angle of 12°. At the road frontage, a concrete driveway runs to a garage underneath the downhill side of the house. The driveway and garage have been cut into the slope. The cut for the driveway and house is supported by a stable ~0.6m high masonry retaining wall. Between the road frontage and the house is a gently sloping lawn area. The lawn is supported by a stable ~0.6m high tiered sandstone flagging wall. The part two-story rendered brick house is supported on brick walls. The brick walls show no significant signs of movement. 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. A ~2.0m high sandstone rock face rises immediately above the pool. The outcrop was observed to be slightly undercut but is considered stable. A series of stable rendered concrete block walls reaching up to ~1.0m high support the cut for the pool area and terracing of the slope. A timber deck on the uphill common boundary is supported directly on the outcropping sandstone bed. The area surrounding the house is mostly paved and 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.

### **4.0 Recommendations**

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

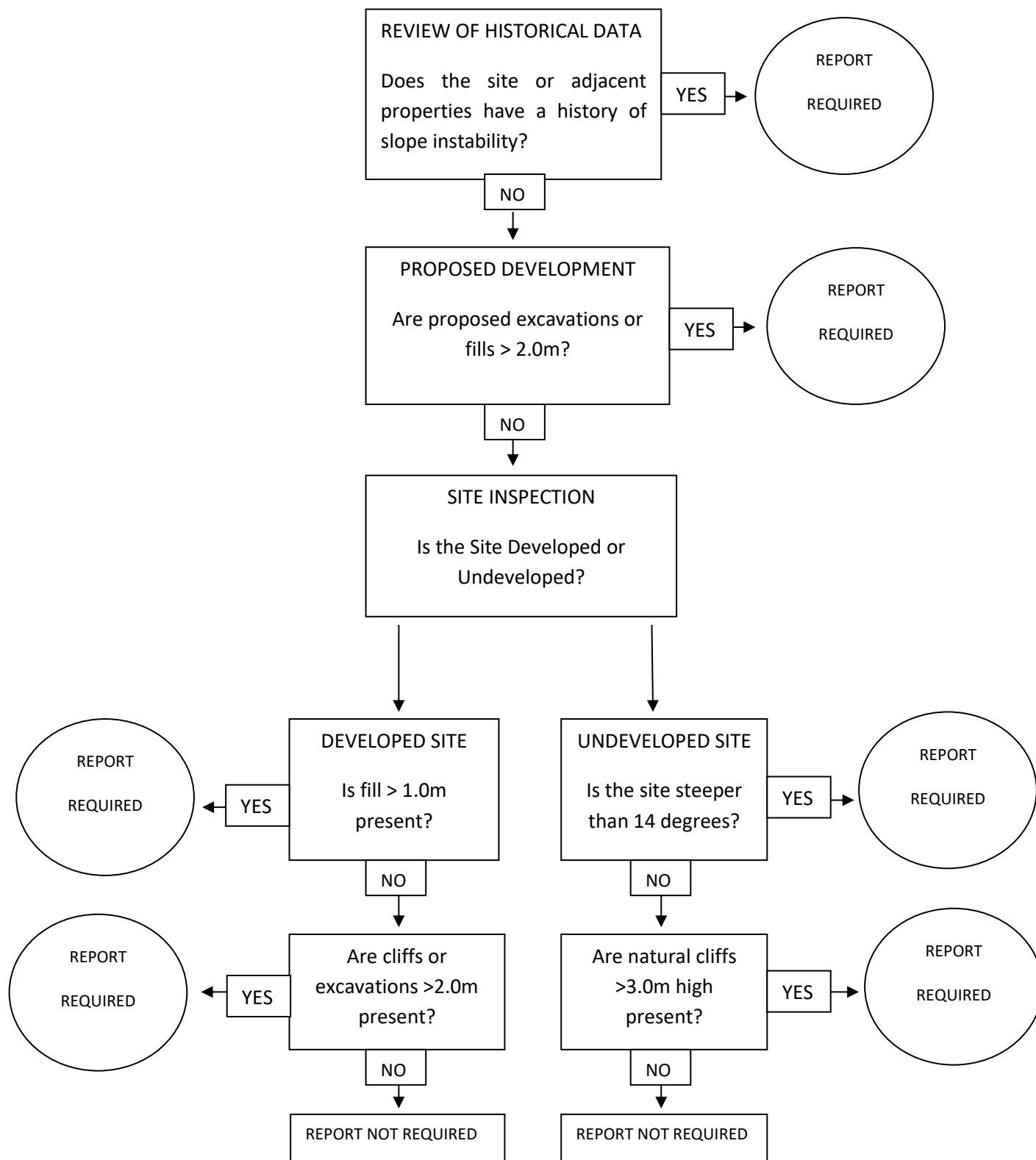
Provided good engineering and building practice are followed no further Geotechnical assessment is recommended.

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.

---