

## **PRELIMINARY GEOTECHNICAL ASSESSMENT:**

### **74 Cumberland Avenue, Collaroy**

|                                     |  |
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| <b>1.0</b>                          | <b>LANDSLIP RISK CLASS</b> ( <i>Highlight indicates Landslip Risk Class of property</i> )                |
| <input type="checkbox"/>            | <i>A - Geotechnical Report not normally required</i>   |
| <input 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 checked="" 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** Add a new first floor to the existing house.
- 2.2** No excavations or fills are shown on the plans.
- 2.3** Details of the proposed development are shown on 6 drawings prepared by Site Specific Designs, project number 2020 17, drawings numbered DA 00 to DA 05, dated 14/12/20.

## **3.0 Site Location**

- 3.1** The site was inspected on the 21<sup>st</sup> January, 2021.
- 3.2** This residential property is on the high side of the road and has a SE aspect. It is located on the moderately graded middle 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 cuts for the house, courtyard, garage and pool, and filling for the garden areas downhill and NE of the pool. 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 falls across the property at an average angle of  $\sim 13^\circ$ . At the road frontage, a concrete driveway runs to garage cut into the slope. The brick walls supporting the garage show no significant signs of movement. Beside the driveway is a gently sloping lawn. The cut for the driveway and road is supported by a low timber retaining wall. Stable sandstone retaining walls up to  $\sim 1.2\text{m}$  high support filled garden areas uphill of the lawn area. NE of the garage is a pool in good condition. The part two storey brick and sandstone dressed house is supported by brick walls and a concrete slab. The external supporting walls show no significant signs of movement. A concrete paved courtyard extends off the uphill side of the house. The cut for the courtyard is supporting by a sandstone flagging retaining wall up to  $\sim 1.3\text{m}$  high. 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.

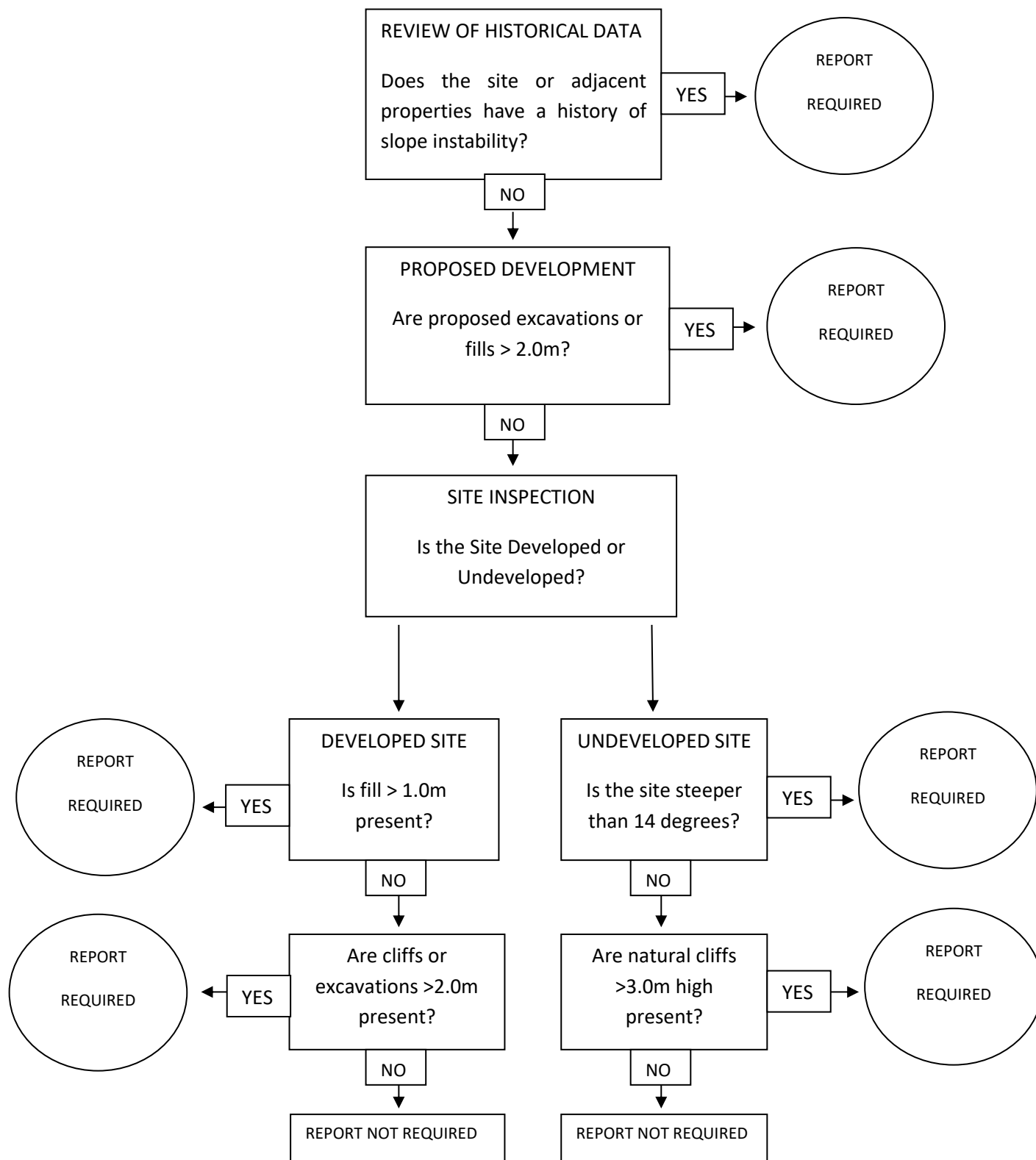
Provided good engineering and building practice are followed, no further Geotechnical assessment is recommended for the proposed development.

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.

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