

## PRELIMINARY GEOTECHNICAL ASSESSMENT:

### 323 McCarrs Creek Road, Terrey Hills

<b>1.0</b>	<b>LANDSLIP RISK CLASS</b> (Highlight indicates Landslip Risk Class of property)
<input checked="" 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 two-storey extension to the S side of the house.
- 2.2 Install a new pool on the downhill side of the house.
- 2.3 Various other minor internal and external alterations.
- 2.4 Minor levelling may be required to install the proposed pool. No fills are shown on the plans.
- 2.5 Details of the proposed development are shown on 8 drawings prepared by Archit Project Design, Project number A22\_00167, drawings numbered A021, A030, A050, A052, A150, A051, A450 and A500 are Revision E, dated 06/12/2024

## 3.0 Site Location

- 3.1 The site was inspected on the 15<sup>th</sup> August, 2023, and previously on the 10<sup>th</sup> November, 2021.

**3.2** This large rural/residential property is on the low side of the road and has an E aspect. The block runs longways to the SE so the slope is a cross-fall. It is located on the gentle to moderately graded upper 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 an excavation for the parking area on the uphill side of the property. The proposed development may require minor levelling for the proposed pool.

**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**

At the road frontage, a concrete driveway runs down and across the slope to a parking area and stable barn on the uphill side of the property, and to a parking area at the S side of the house. The cut for the main parking area is supported by a stable keystone block retaining wall reaching ~1.2m high. Between the road frontage and the parking area is an area of undeveloped bush. Competent Medium Strength Sandstone outcrops through the slope in this area. Portions of the outcropping rock in this area were observed to be undercut but due to their sizes and locations are not considered to be a threat to life or property should they collapse. Between the driveway and the house is a gently sloping lawn. The single-storey brick house was undergoing renovations at the time of the inspection as part of a separately approved application. A gently sloping lawn extends off the downhill side of the house and barn to the lower boundary. Medium Strength Sandstone outcrops through the lawn in places. The lowest of these outcrops was observed to be undercut to a maximum of ~3m. However, due to its height and location, it is not considered to be a threat to life or property should it collapse. The area surrounding the house and driveway is mostly 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.



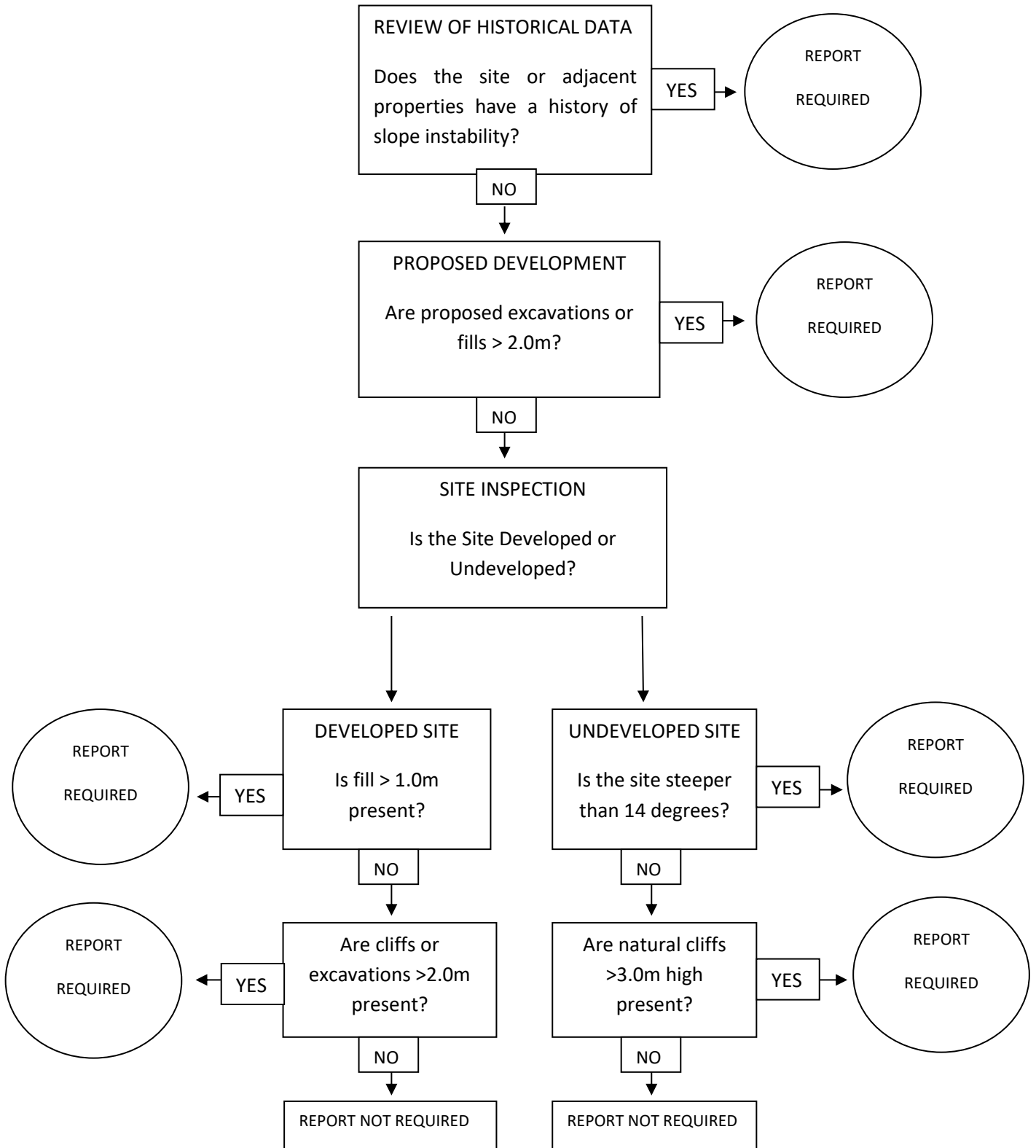
Nathan Gardner  
B.Sc. (Geol. & Geophys. & Env. Stud.)  
Engineering Geologist and Environmental Scientist.

Reviewed By:



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

## Preliminary Assessment Flow Chart – Norther 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.