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#### PRELIMINARY GEOTECHNICAL ASSESSMENT:

## 29 Palomar Parade, Freshwater

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 driveway and suspended parking platform on the uphill side of the property.
- 2.2 Re-landscape the slope between the proposed driveway and the house by filling to a maximum height of ~1.3m.
- **2.3** Apart from those for footings, no excavations are shown on the plans.
- 2.4 Details of the proposed development are shown on 9 drawings prepared by Brianna Emily Design, drawings numbered DA00 to DA08, Issue A, dated 18/10/21.

#### 3.0 Site Location

- **3.1** The site was inspected on the 25<sup>th</sup> November, 2021, and previously on the on the 4<sup>th</sup> November, 2016.
- 3.2 This residential property is on the low side of the road and has a NW aspect. It is located on the gentle to steeply graded lower reaches and toe of a hillslope. The



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Sydney 1:100 000 Geological sheet indicates the site is underlain by Alluvial Stream and Estuarine Sediment (Qha). This is described as silty to peaty quartz sand, silt and clay with ferruginous and humic cementation in places and common shell layers. Hawkesbury Sandstone bedrock outcrops on the neighbouring property to the NE and above the property. The natural surface of the block has been altered with excavations and filling for the existing driveway and parking area, and with an excavation to create a level platform for the uphill side of the house. The proposed development will require filling to a maximum depth of ~1.3m for proposed landscaping.

**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 the natural slope briefly falls at an average angle of 20° for ~10 metres before quickly reducing to gentle angles across the lower half of the property. From the S side of the road frontage, a concrete driveway runs across and down the slope to a parking area. A cut and fill has been made into the slope for the driveway and parking area. The cut is supported by two, old, stepped stack rock retaining walls that currently appear stable. The fill is supported by an old dimensioned sandstone retaining wall that is currently considered stable. A cut has been made in the slope to create a level platform for the uphill side of the house. The cut is supported by a concrete block retaining wall reaching ~1.1m high. The part two-storey timber framed and clad house is supported on brick walls, brick piers, and timber and steel posts. The external supporting walls of the house display no significant signs of movement and the visible supporting piers and posts stand vertical. A gently sloping lawn extends off the downhill side of the house to the lower common boundary. The area surrounding the house 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.



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#### 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.

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Bullet

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Engineering Geologist.

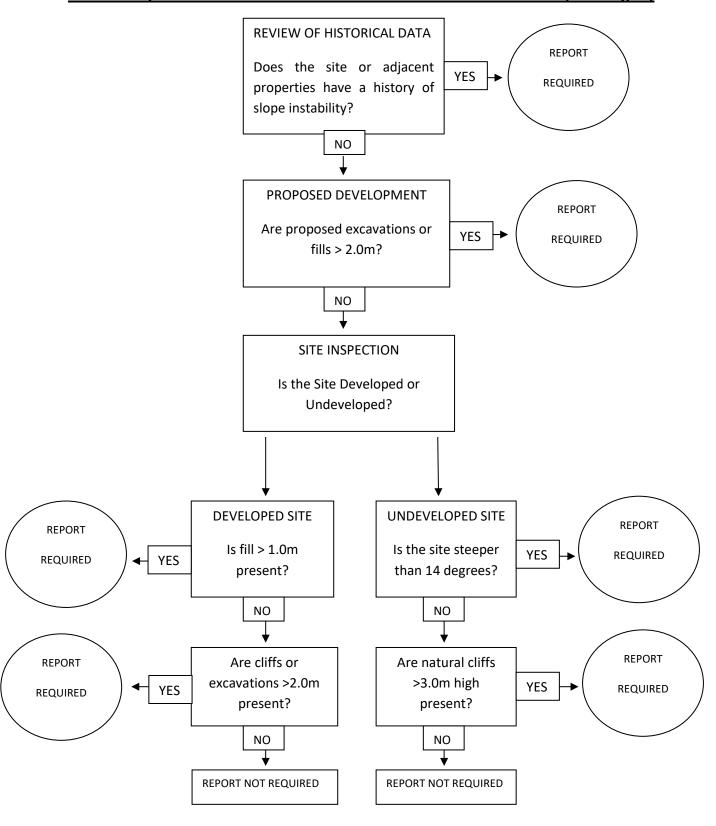


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# **Preliminary Assessment Flow Chart – Northern Beaches Council (Warringah)**





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#### **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.