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#### PRELIMINARY GEOTECHNICAL ASSESSMENT:

### 126 Parkes Road, Collaroy Plateau

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 deck and extension to the downhill side of the house.
- **2.2** Construct a patio and extension to the uphill side of the house.
- **2.3** Apart from those for footings, no excavations are required. No fills are shown on the plans.
- 2.4 Details of the proposed development are shown on 2 drawings prepared by AH Design, Project number A-120, sheets numbered 1 to 2, dated 12/2/22.

## 3.0 Site Location

- **3.1** The site was inspected on the 14<sup>th</sup> March, 2022.
- 3.2 This residential property is on the downhill side of the road and has a SW aspect. It is located on the moderately graded middle 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 filling used for



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landscaping across the property and a ~1.0m cut for a granny flat. The proposed development will not alter the block further.

**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 site at an average angle of ~17°. At the road frontage, a concrete driveway runs to a carport attached to the NW side of the house. The fill for the road is supported by a stable mortared stack rock retaining wall reaching a maximum depth of ~0.8m. A portion of this wall was observed to be supported directly onto outcropping Medium Strength Sandstone. Between this wall and the house is a gently sloping lawn. The part twostorey brick and timber framed and clad house is supported on brick walls and brick piers. No significant signs of movement were observed in the supporting walls of the house and the supporting piers stand vertical. A gently sloping lawn-covered fill extends off the downhill side of the house. The fill is supported by a stable mortared stack rock retaining wall reaching ~0.8m high. This wall was observed to be entirely supported on Medium Strength Sandstone. This outcrop steps down the slope ~2.0m and was observed to be undercut to a maximum of ~1.0m in two locations (Photo 1). The undercut joint blocks have relatively thick cantilever arms relative to their overhang lengths and display no cracking as observed from above or below. Thus, also considering the rock strength, they are considered stable. Another outcrop steps ~2.0m down the slope below to a granny flat on the downhill side of the property. This outcrop displays no significant geological defects and is considered stable. A moderately sloping lawn extends to the lower common boundary. The area surrounding the house and driveway is mostly lawn and garden-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.

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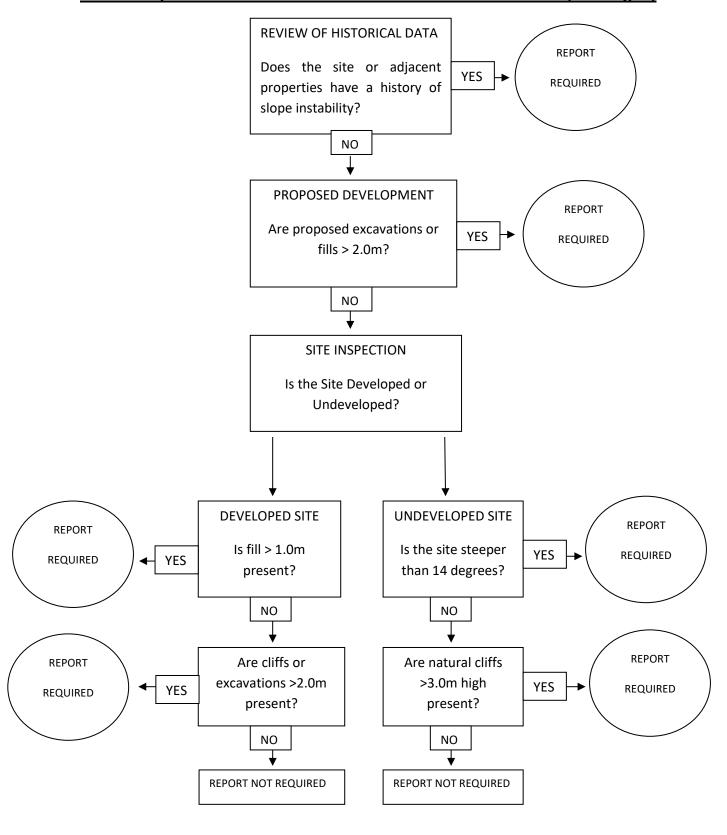


Photo 1



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# Preliminary Assessment Flow Chart - Norther 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.