

PRELIMINARY GEOTECHNICAL ASSESSMENT:

17 Pertaka Place, Narraweena

1.0	LANDSLIP RISK CLASS (<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

2.0 Proposed Development

- 2.1** Demolish the existing retaining wall at the road frontage and construct a new concrete block retaining wall in its place.
- 2.2** Apart from those for footings, no excavations are required. No fills are shown on the plans.
- 2.3** Details of the proposed development are shown on 4 drawing prepared by Freshwater Blue, drawings numbered 2024-DA01 to 2024-DA04, dated 5.4.24.

3.0 Site Location

- 3.1** The site was inspected on the 15th April, 2024.
- 3.2** This residential property is on the high side of the road and has a N aspect. It is located on the gentle to moderately graded middle reaches of a hillslope. Medium Strength Sandstone outcrops on the uphill side of the property in several locations. 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 by a fill for the lawn

aera on the downhill side of the property and a cut for a patio area and house. The proposed development will not alter significantly 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 rises across the property at gentle angles before increasing in grade near the upper boundary. At the road frontage, a concrete driveway runs up the slope to a garage attached to the E side of the house. In between the road frontage and the house is a level lawn area. The fill for the level lawn area is supported by a ~0.8m high keystone block retaining wall. This wall is tilting downslope to a maximum angle of ~15°. This wall is to be demolished and rebuilt as part of the proposed works. The part two-storey timber clad house is supported on external brick walls. The visible brick walls show no significant signs of movement. The ~3.0m cut for the house has been taken directly through outcropping Medium Strength Sandstone. The cut for the patio and fill for the lawn above is supported by a ~1.5m high stable keystone block retaining wall. Medium Strength Sandstone bedrock outcrops and steps up some ~3.5m above this lawn to the upper common boundary. It is undercut to ~1.5m. Given the thickness of the supporting cantilever arms with no visible defects, the undercut rock is considered to be stable. The land surface surrounding the house is mostly lawn covered with some paving. No significant signs of movement associated with slope instability were observed on the grounds. No cliffs were observed on the property or in the near vicinity. No geotechnical hazards that could impact on the subject property were observed on the surrounding neighbouring properties as viewed from the subject property and the street.

5.0 Recommendations

The proposed development and site conditions were considered and applied to the current council requirements. See the required inspection below that is to be carried out during construction and is a requirement for the final geotechnical certification. Apart from the inspection, it is not expected additional geotechnical input will be required provided good design and building practices are followed.

6.0 Inspection

The client and builder are to familiarise themselves with the following required inspection as well as council geotechnical policy. We cannot provide geotechnical certification for the owners or the regulating authorities if the following inspection has not been carried out during the construction process.

- All footings are to be inspected and approved by the geotechnical consultant while the excavation equipment and contractors are still onsite and before steel reinforcing is placed or concrete is poured.

White Geotechnical Group Pty Ltd.



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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.
