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### PRELIMINARY GEOTECHNICAL ASSESSMENT:

## 21 Rangers Retreat Road, Frenchs Forest

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 Install a new pool on the downhill side of the property by excavating to a maximum depth of ~1.7m.
- 2.2 Construct a new storeroom on the lower ground floor of the house by excavating to a maximum depth of ~1.5m.
- **2.3** Extend the downhill side of the house.
- **2.4** Various other internal and external alterations.
- **2.5** No significant fills are shown on the plans.
- 2.6 Details of the proposed development are shown on 6 drawings prepared by Buena Vista Home Designs, drawing number 0687/19, sheets numbered DA-05 and 06 are Revision A, dated 23/7/19, and sheets numbered DA-01 to 04 are Revision B, dated April 2019.



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#### 3.0 Site Location

**3.1** The site was inspected on the 12<sup>th</sup> August, 2019.

3.2 This triangular-shaped residential property is on the low side of the road and has a SE aspect. The block is located on the gently graded upper middle reaches of a hillslope. No rock outcrops on the property. The Sydney 1:100 000 Geological sheet indicates the site is underlain by a shale band within the Hawkesbury Sandstone that is described as a medium to coarse grained quartz sandstone with very minor shale and laminite lenses. The bedrock is expected to underlie the surface at relatively shallow depths. The natural surface of the block has been altered little with the development to date. The proposed development will require an excavation to a maximum depth of ~1.7m to install the proposed pool and another excavation to a maximum depth of ~1.5m to construct the proposed storeroom on the lower ground floor of the house.

**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 slope falls across the site at an average angle of ~5°. At the road frontage, a concrete driveway runs to a garage on the lower ground floor of the house. Between the road frontage and the house is a gently sloping lawn. The part two-storey rendered masonry house is supported on masonry walls. The external supporting walls of the house display no significant signs of movement. Another gently sloping lawn falls from the downhill side of the house to the lower corner of the property. The area surrounding the house is mostly lawn covered with some areas of paving. No signs of movement associated with slope instability were observed on the grounds. No cliffs or large rock faces were observed on the property or in the near



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vicinity. 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.

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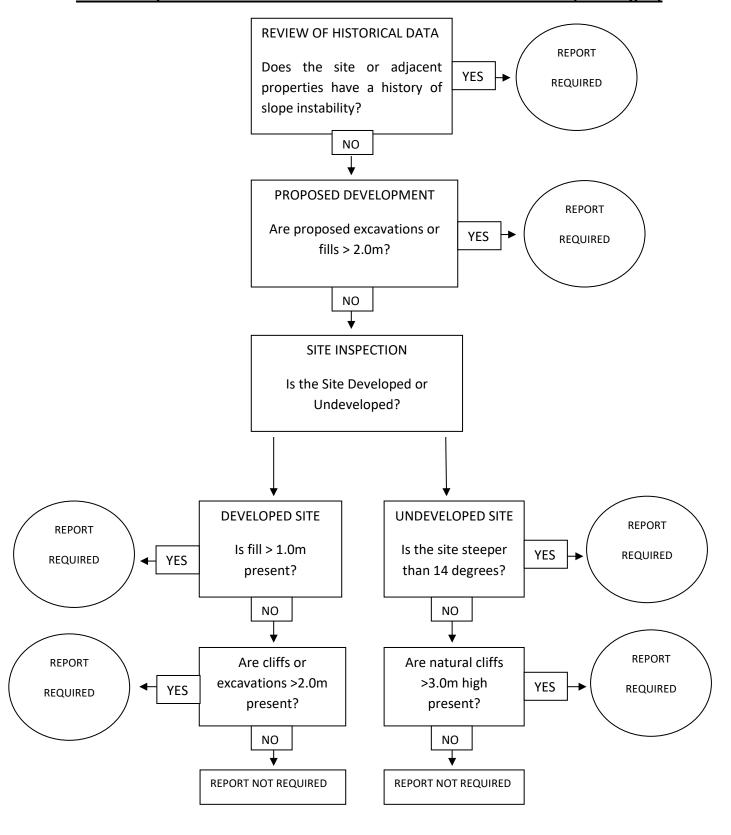
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Engineering Geologist.



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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.