

## PRELIMINARY GEOTECHNICAL ASSESSMENT:

### 8 Lee Road, Beacon Hill

<b>1.0</b>	<b>LANDSLIP RISK CLASS</b> (Highlight indicates Landslip Risk Class of property)
<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 deck on the N side of the house and construct a new sunroom in the same location.
- 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 drawings prepared by Sally Gardner Design & Draft, Job number 25-0327, drawings numbered A1 to A4, dated 23/5/25.

### 3.0 Site Location

- 3.1** The site was inspected on the 3<sup>rd</sup> June, 2025.
- 3.2** This corner residential property is on the high side of Cousins Road and is level with Lee Road. The property has a W aspect. It is located on the gentle to moderately graded upper middle reaches of a hillslope. Medium Strength Hawkesbury Sandstone bedrock outcrops and steps up 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 for landscaping across the downhill side of the property and with excavations for the house and pool. The proposed development will not alter the surface further for the proposed works.

**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 to Lee Road, a brick-paved and concrete driveway runs to a garage under the downhill side of the house and to a gravel parking area against the downhill side of the house. The remaining portion of the slope between the road frontage and the house is a terraced lawn area. The terraces are supported with stable timber retaining walls reaching ~0.9m high. A similar stable retaining wall along the upper common boundary supports the cut to create a level platform for the house. The part three-storey house is supported on rendered brick walls and brick piers. The supporting walls display no significant signs of movement and the supporting piers stand vertical. Some of the supporting walls and piers were observed to be supported on competent Medium Strength Sandstone within the foundation space of the house. A pool has been cut into the slope on the N side of the property. No signs of movement were observed in the concrete shell of the pool. Fill has been placed across the downhill side of the property to create a level lawn and garden area. The fill is supported by a series of retaining walls composed of stacked rocks, stacked concrete cylinders, and concrete blocks. The stacked rock and stacked concrete cylinders are in a rough but stable condition and are up to 2m high. These types of retaining walls require occasional maintenance in the form of restacking. The concrete block retaining wall is ~0.7m high and is considered to be stable. A few of these walls were observed to be supported on competent Medium Strength Sandstone at the road frontage to Cousins Road. The area surrounding the house, driveway, and pool is mostly lawn and garden-covered with some paved areas. No

significant signs of movement associated with slope instability were observed on the grounds. 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.