

## **PRELIMINARY GEOTECHNICAL ASSESSMENT:** **7 Ethel Street, Balgowlah**

### **1.0 Proposed Development**

- 1.1 Add a new first floor addition to the existing house with two new decks.
- 1.2 Other minor internal and external alterations and additions.
- 1.3 Details of the proposed development are shown on 1 drawing prepared by Add-Style Home Additions, drawing number 3444 DA 1, Issue C, dated 26/2/24.

### **2.0 Site Location**

- 2.1 The site was inspected on the 15<sup>th</sup> March, 2024.
- 2.2 This residential property is near level with the road and has a SW aspect. The block runs longways to the S so the slope is a cross-fall. It is located on the gently graded upper reaches and crest of a hillslope. No rock outcrops on the property. The Sydney 1:100 000 Geological Sheet indicates the site is underlain by Hawkesbury Sandstone that is described as a medium to coarse grained quartz sandstone with very minor shale and laminite lenses. Sandstone bedrock is expected to underlie the surface at relatively shallow depths. The natural surface of the block has been altered with fills for lawn and garden areas across the property. The proposed development will not alter the surface further for the proposed works.
- 2.3 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.

### 3.0 Site Description

The natural slope falls across the property at gentle angles. At the road frontage, a concrete driveway runs to a parking area on the NW side of the house. Fill provides a level platform for a lawn and garden area beside the parking area. A stable low brick retaining wall supports the fill. The single storey house is supported on brick and sandstone block walls. The external supporting walls show no significant signs of movement. A deck and gently sloping lawn area extend off the S side of the house. A stable low timber retaining wall supports fill for the lawn area. The area surrounding the house is mostly lawn or garden covered with some paved areas. 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 vicinity. The adjoining neighbouring properties were observed to be in good order as seen from the road and the subject property.

### 4.0 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.

### 5.0 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 1.0 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 1.0 of this assessment are incorrect we are to be informed immediately and before this assessment is lodged with the DA.