

J5632. 15<sup>th</sup> August, 2024. Page 1.

## PRELIMINARY GEOTECHNICAL ASSESSMENT:

# 59 Lantana Avenue, Wheeler Heights

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** Subdivide the property into two lots.
- **2.2** Construct a parking area N of the existing 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 survey drawings prepared by Bee & Lethbridge, Reference number 23285, sheets numbered 1 and 2, dated 25/07/24.

#### 3.0 Site Location

- **3.1** The site was inspected on the 12<sup>th</sup> August, 2024.
- 3.2 This battle axe-shaped residential property is on the high side of the road and has a NW aspect. The block runs lengthways to the S so the slope is a cross-fall. It is located on the gently graded middle reaches of a hillslope. Medium Strength Sandstone is exposed at a cut for the driveway, and outcrops across the property in



J5632.

15<sup>th</sup> August, 2024.

Page 2.

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 with a low cut for the driveway. The proposed development will not alter the surface further as part of 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

The natural slope rises across the property at an average angle of ~6°. At the road frontage, a concrete and gravel driveway runs to a stable carport N of the house. A cut for the driveway and fill for the uphill neighbouring property is supported by stable stack sandstone block and timber retaining walls reaching ~1.3m high. The sandstone block wall was observed to be at least partially supported on a cut through Medium Strength Sandstone. A gentle lawn extends between the N common boundary and the house. Sandstone was observed to be outcropping across the slope in this location. The two-story brick house is supported on brick walls. No significant signs of movement were observed in the visible supporting walls. Two stable sheds have been constructed downhill from the existing house. A gently graded lawn extends between the S side of the house and the S common boundary. 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 or large rock faces 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



J5632. 15<sup>th</sup> August, 2024. Page 3.

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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J5632. 15<sup>th</sup> August, 2024. Page 4.

#### **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.