

PRELIMINARY GEOTECHNICAL ASSESSMENT:

20 McDonald Street, Freshwater

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 carport on the N side of the house and construct a new garage in the same location.
- 2.2 Construct new paved areas on the downhill side of the house.
- 2.3 Construct a new upper floor addition.
- 2.4 Various other minor internal and external alterations.
- 2.5 Apart from those for footings, no excavations are required. No fills are shown on the plans.
- 2.6 Details of the proposed development are shown on 23 drawings prepared by Just Architects, Job number A-149, drawings numbered 1.01 to 1.11, 2.01, 2.02, 3.01 to 3.03, and 4.01 to 4.07, Issue D, dated 11/11/24.

3.0 Site Location

- 3.1 The site was inspected on the 14th October, 2024.

3.2 This residential property is accessed from a Right of Carriageway (ROW) off the E side of McDonald Street. The property has a SE aspect. The site runs longways to the S so the slope is a cross-fall. It is located on the gentle to moderately graded upper reaches of a hillslope. Medium Strength Hawkesbury Sandstone bedrock outcrops adjacent to the ROW. 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 an excavation for the pool and with filling for landscaping across the downhill side of the property. 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, a concrete and bitumen ROW runs to a carport attached to the N side of the house. The carport will be demolished as part of the proposed works. The part two-storey house is supported on rendered brick walls. The supporting walls display some minor stepped and horizontal cracking that has been painted over on the W side of the house. We do not attribute this cracking to ground movement. The supporting walls display no other significant signs of movement. A pool has been constructed in the SE corner of the property. No signs of movement were observed in the pool and it is considered stable. A lawn-covered and brick-paved fill extends off the downhill side of the house and around the pool. The fill is supported by a concrete block retaining wall reaching ~2-3m high that approximates the lower common boundary. The wall has a dense covering of vegetation so its stability could not be assessed. The area surrounding the house, carport, 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 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 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.



Nathan Gardner B.Sc. (Geol. & Geophys. & Env. Stud.)
AIG., RPGeo Geotechnical & Engineering.
No. 10307
Engineering Geologist & Environmental Scientist.

Reviewed By:



Dion Sheldon
BEng (Civil)(Hons),
Geotechnical Engineer.



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.