

PRELIMINARY GEOTECHNICAL ASSESSMENT

SECTION 96

FOR

24 LEINSTER AVENUE, KILLARNEY HEIGHTS

1.0	LANDSLIP RISK CLASS (<i>Highlight indicates Landslip Risk Class of property</i>)
☐	<i>A Geotechnical Report not normally required</i>
☒	<i>B Geotechnical Engineer (Under Council Guidelines) to decide if Geotechnical Report is required</i>
☐	<i>C Geotechnical Report is required</i>
☐	<i>D Geotechnical Engineer (Under Council Guidelines) to decide if Geotechnical Report is required</i>
☐	<i>E Geotechnical Report required</i>

2.0 PROPOSED DEVELOPMENT

- 2.1 Replace the existing retaining wall around the pool.
- 2.2 Replace the deck on the NE side of the existing house.
- 2.3 Various internal and external modifications.
- 2.4 An excavation to a maximum depth of ~0.8m will be required for the replacement retaining wall. No other excavations or fills are shown on the plans.
- 2.4 Details of the proposed development are shown on 20 drawings prepared by Rapid Plans, project number RP0914BLA, drawings numbered DAMod1001 to DAMod1013, DAMod2011 to DAMod2004, DAMod3001, DAMod4001 & DAMod4002 dated 13/7/17.

3.0 SITE LOCATION

- 3.1 The site was inspected on the 15th May, 2015.
- 3.2 This residential property is on the low side of the road and has a northerly aspect. It is positioned over a moderately graded section of the middle reaches of a hill slope. Hawkesbury sandstone bedrock does not outcrop on the site but is visible at the surface on the reserve to the east. The natural surface of the block has been altered during its development to date with cut

and fills to create the driveway and carport and platforms cut into the slope for the house and pool. The proposed development will not alter the natural surface significantly.

3.3 The site shows no indications of historical movement that could have occurred since it was developed. We are aware of no history of instability on the property.

4.0 SITE DESCRIPTION

The slope drops from the road at average angles of some 15° across the site. The surface contours are controlled by the underlying sandstone bedrock that steps down the site forming sub horizontal benches between the steps. Where the rock benches are not visible they are naturally covered with shallow sandy soil over sandy clay. On this site any rock that may have been exposed at the surface was covered with the development of the block with the construction of the house and pool structure, paving and the mortared stack rock walls that terrace the slope. The stack rock walls show some cracking through the mortar but show no indications of movement that could result in instability or failure. The pool, near the downhill boundary shows no signs of movement. The part three storey house steps down the slope. No signs of movement were observed in the external supporting walls. No large rock faces or cliffs were observed on the property or in the immediate vicinity. No geotechnical hazards were observed on the neighbouring properties that could impact on the subject property.

5.0 RECOMENDATIONS

The proposed development and site conditions were considered and applied to the Council Flow Chart.

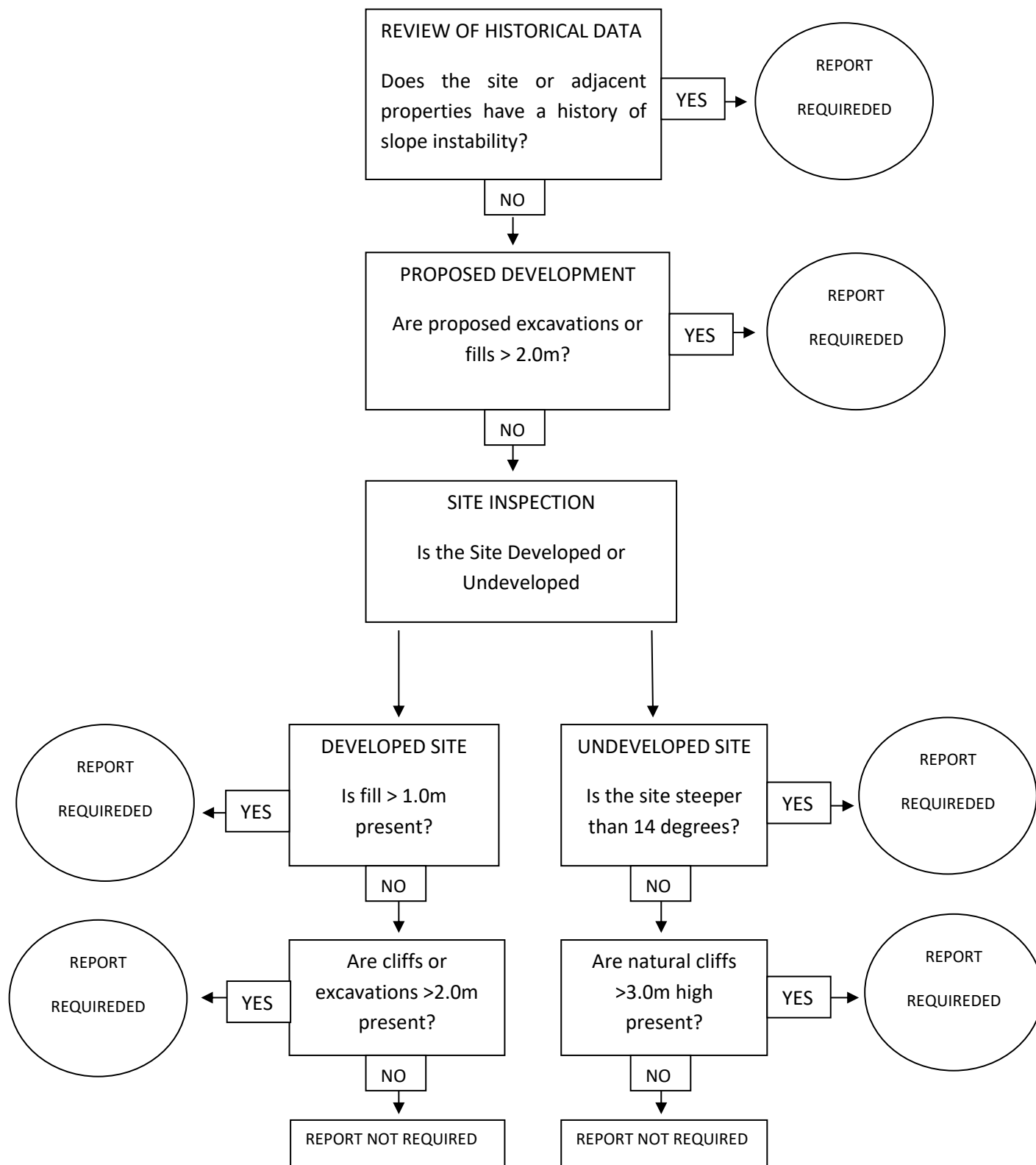
Provided good engineering and building practice are followed no further Geotechnical assessment is recommended.

White Geotechnical Group Pty Ltd.



Ben White M.Sc. Geol.,
AusIMM., CP GEOL.
No. 222757
Engineering Geologist.

Preliminary Assessment Flow Chart – Warringah Council



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.

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2.0 PROPOSED DEVELOPMENT

- 2.1 Replace the existing timber decking and landing.
- 2.2 Repair or replace three existing retaining walls, rerouting a small section of the low wall above the pool.
- 2.3 The ground work consists of repairing or replacing existing retaining walls. The repaired or replacement walls will follow the line of the existing with the acceptance of a low excavation of < 1.0m to reroute a small section of the wall above the pool. No other excavations or fills are shown on the plans.
- 2.4 Details of the proposed development are shown on 8 drawings prepared by Rapid Plans, numbered RP0914BLA 1003, 1006, 2001 to 2003, 3001 & 4001 to 4002 dated 27/11/2014.

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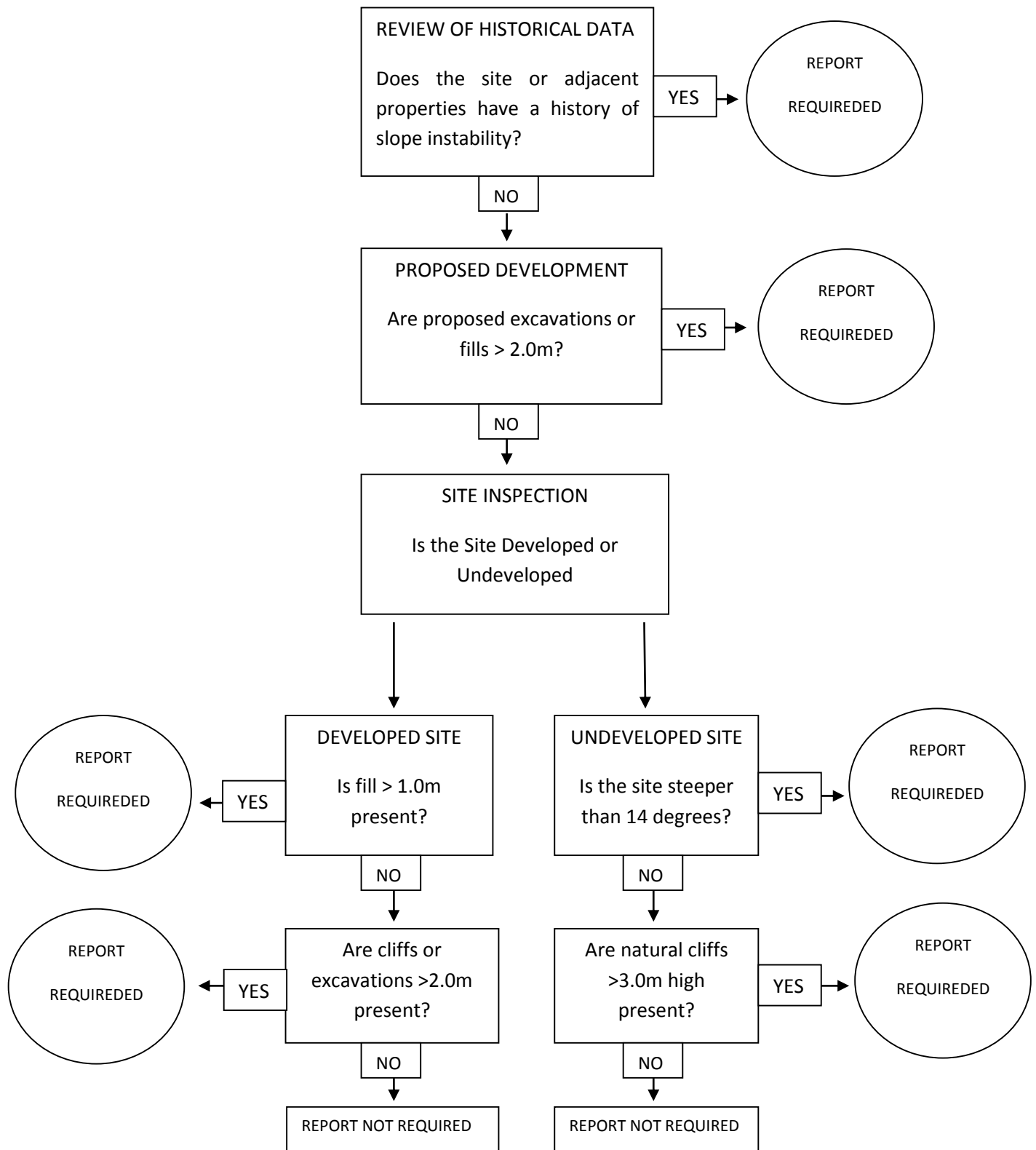
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