

## **PRELIMINARY GEOTECHNICAL ASSESSMENT:**

### **22 Rathowen Parade, Killarney Heights**

<b>1.0</b>	<b>LANDSLIP RISK CLASS</b> (Highlight indicates Landslip Risk Class of property)
<input checked="" 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** Construct a new granny flat on the W side of the property.
- 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 5 drawings prepared by RK Designs, Project number 21-34, sheets numbered 0 to 4, Issue A, dated 9/4/21.

## **3.0 Site Location**

- 3.1** The site was inspected on the 25<sup>th</sup> May, 2021.
- 3.2** This residential property is on the corner of Rathowen Parade and Kilkenny Avenue. It is on the downhill side of Rathowen Parade and is level with Kilkenny Avenue. The property has a N aspect. It is located on the moderately graded upper middle reaches of a hillslope. Medium Strength Hawkesbury Sandstone bedrock outcrops on the W side of 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 excavations for the driveway and house and with filling used for landscaping on the W 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**

The natural slope falls across the site at an average angle of  $\sim 15^\circ$ . At the road frontage to Kilkenny Avenue, a concrete driveway runs to a garage under the downhill side of the house. The cut for the driveway is supported by a stable brick retaining wall reaching  $\sim 1.7\text{m}$  high. Between the road frontage to Kilkenny Avenue and the house is a gently sloping lawn and garden area. The part two-storey brick house is supported on brick walls. The supporting walls display no significant signs of movement. Some of the supporting walls and piers were observed to be supported directly onto outcropping sandstone. An excavation has been made in the slope for the uphill side of the house. The cut batter is sloped at stable angles and is lined with rocks that armour the batter surface. The slope on the W side of the property is terraced with two stable stack rock retaining walls. Medium Strength Sandstone outcrops through this slope in places. The area surrounding the house and driveway is mostly lawn-covered. 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.

#### **5.0 Recommendations**

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

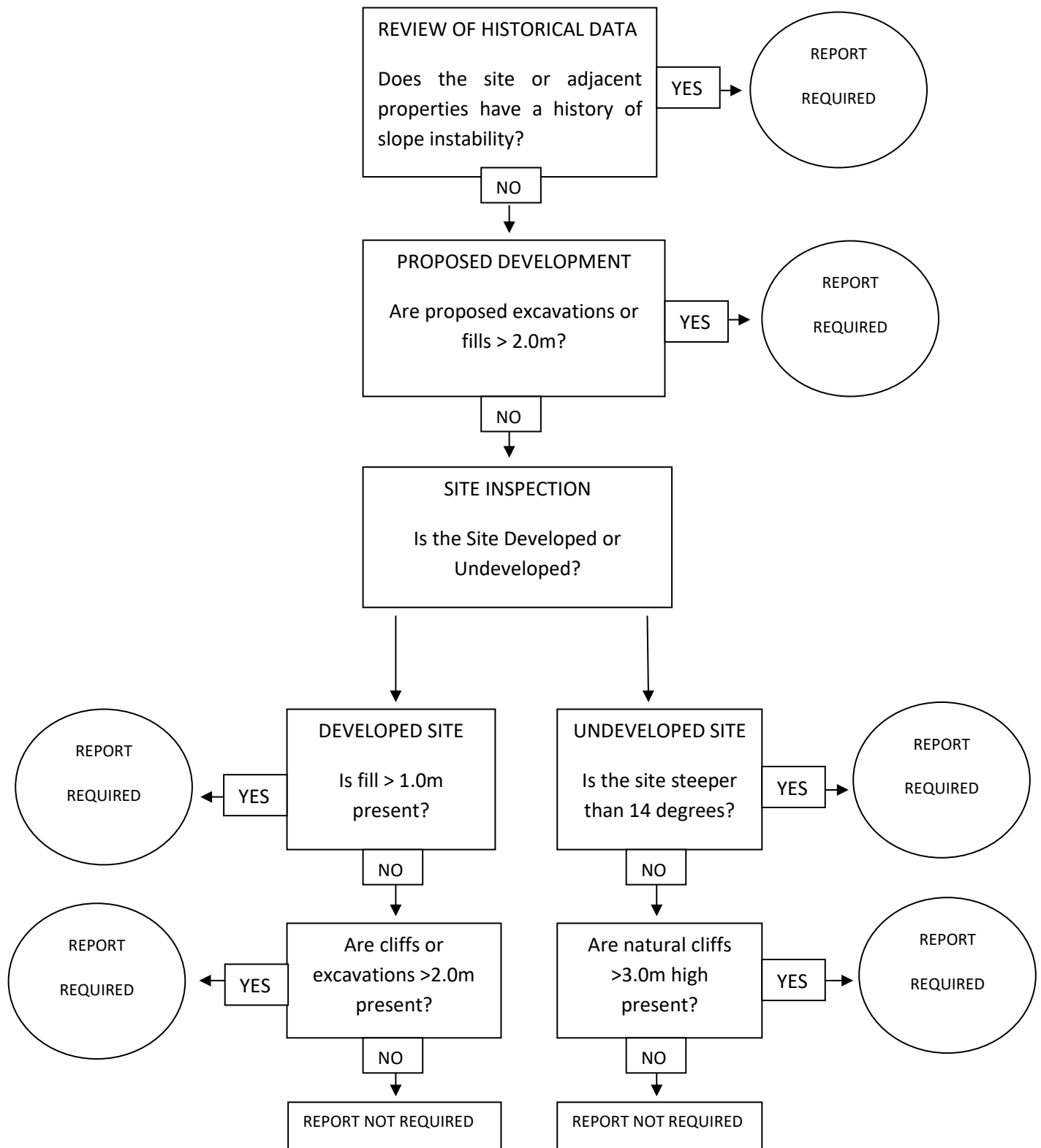
Provided good engineering and building practice are followed, no further Geotechnical assessment is recommended for the proposed development.

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**Preliminary Assessment Flow Chart – Northern Beaches Council (Warringah)**



## 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.

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