PRELIMINARY GEOTECHNICAL ASSESSMENT:

9 Vines Avenue, Forestville

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 Add an additional level to the existing house.

2.2 Demolish the existing carport and construct a new garage.

2.3 Apart from footing excavations no other excavations are required. The plans show filling to a maximum height of ~0.6m will be placed under the proposed garage slab.

2.4 Details of the proposed development are shown on 4 drawing prepared by Neil Harvey, job number 1991, drawings numbered DA-1, DA-4 to 6 dated 15th May, 2017.

3.0 Site Location

3.1 The site was inspected on the 2nd June, 2017.

3.2 This residential property is on the low side of the road and has a NW aspect. It is located on the gently graded upper reaches 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 laminate lenses. Hawkesbury sandstone outcrops on the neighbouring property on the uphill side of the road. Sandstone bedrock is expected to underlie the surface at relatively shallow depths. The current development of the block has altered the natural surface with an excavation for the pool.

The proposed development will alter the surface further with shallow filling and footing excavations.

3.3 The site shows no indications of historical movement 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 down the property at angles that do not exceed ~5°. The surface features of the block are expected to be controlled by the underlying sandstone bedrock that steps down the property forming sub horizontal benches between the steps. The steps are not visible at the surface and are infilled and covered with a layer of sandy soil and clay. At the road frontage a concrete driveway runs to a carport beside the subject house. The single storey brick and clad house displays no significant signs of movement in the external supporting walls. From what could be seen in the foundation space of the house, the supporting brick piers stand vertical. A timber deck and concrete pool are located on the downhill side of the house. Some of the supporting timber posts of the deck are tilting to a maximum angle of ~2° downslope but are considered stable. No visible signs of movement were observed in the concrete pool shell. The land surface surrounding the driveway, house, deck and pool is mostly lawn covered or concrete paved. No signs of movement related to 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 Council Flow Chart.

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

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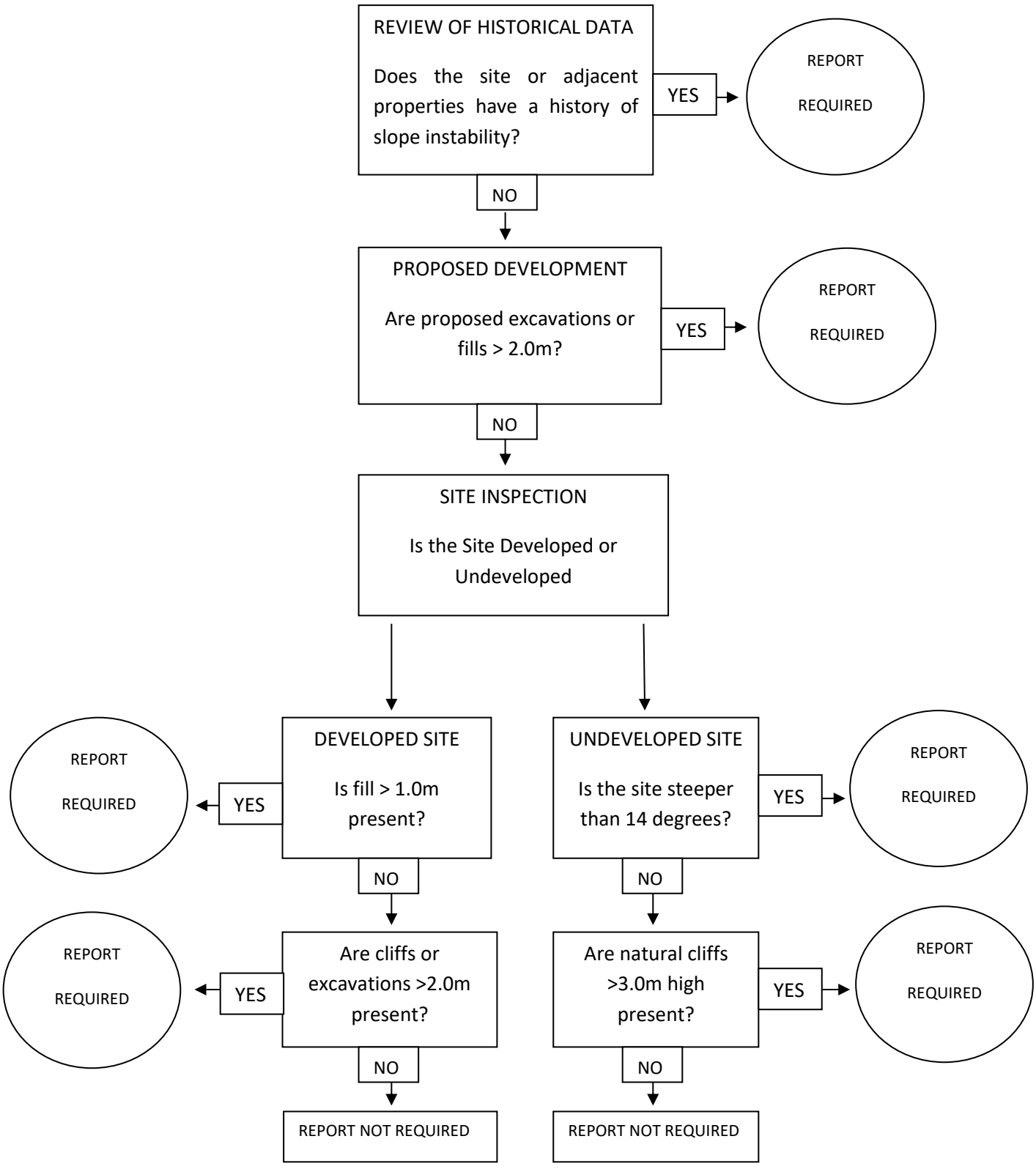
Preliminary Assessment Flow Chart – Warringah Council



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.

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.
