

PRELIMINARY GEOTECHNICAL ASSESSMENT: **59 Francis Street, Manly**

1.0 Proposed Development

- 1.1** Extend the house on the downhill side.
- 1.2** Add a new first floor addition to the house.
- 1.3** Other minor internal and external alterations to the house.
- 1.4** Extend the balcony on the downhill side of the house.
- 1.5** Install a new pool with deck by excavating to a maximum depth of ~0.9m.
- 1.6** No significant fills are shown on the plans.
- 1.7** Details of the proposed development are shown on 19 drawings prepared by Eoin Architects, drawings numbered DA001, DA003, DA101 to DA106, DA201.1, DA201.2, DA202, DA203, DA301, DA302, DA605, DA606, and DA610 to DA612, Issue E, dated 08/10/21.

2.0 Site Location

- 2.1** The site was inspected on the 2nd November, 2021.
- 2.2** This residential property is on the low side of the road and has a NW aspect. The block runs longways to the N so the slope is a cross fall. It is located on the gentle to moderately graded middle 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 laminite lenses. Sandstone bedrock is expected to underlie the surface at relatively shallow depths. The natural surface of the block has been altered

with minor filling for garden areas. The proposed development will require an excavation to a maximum depth of ~0.9m for the proposed pool.

2.3 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.

3.0 Site Description

The natural slope falls across the property at an average angle of ~14° before quickly easing to angles of <5°. Fill provides a level platform for the road and is battered at stable angles across the road reserve. The two storey brick and timber clad house is supported by brick walls. The external supporting walls show no significant signs of movement. A suspended timber balcony extends off the downhill side of the house. The steel posts supporting the balcony stand vertical. A near level lawn extends off the downhill side of the house. A concrete block retaining wall up to ~2.5m high located along the S and W common boundaries supports fills on the S and W neighbouring properties. The wall displays two stepped cracks (Photos 1 to 3), although the cracked portions of the wall are only up to ~1.8m high. See 'Section 4.0 Recommendations'. The area surrounding the house is mostly lawn covered or paved. 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.

4.0 Recommendations

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

The cracked concrete block retaining wall (Photos 1 to 3) is to be monitored by the owners on an annual basis or after heavy rainfall and prolonged rainfall, whichever occurs first. A photographic record of these inspections is to be kept. Should further movement occur the

wall is to be remediated so it meets current engineering standards. We can carry out these inspections upon request. The retaining wall is located along part of the S and W common boundaries at the SW corner of the property and is set back ~4.5m to ~11m from the proposed pool. See the site plan attached for the location of the retaining wall in relation to the proposed works.

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

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Photo 1

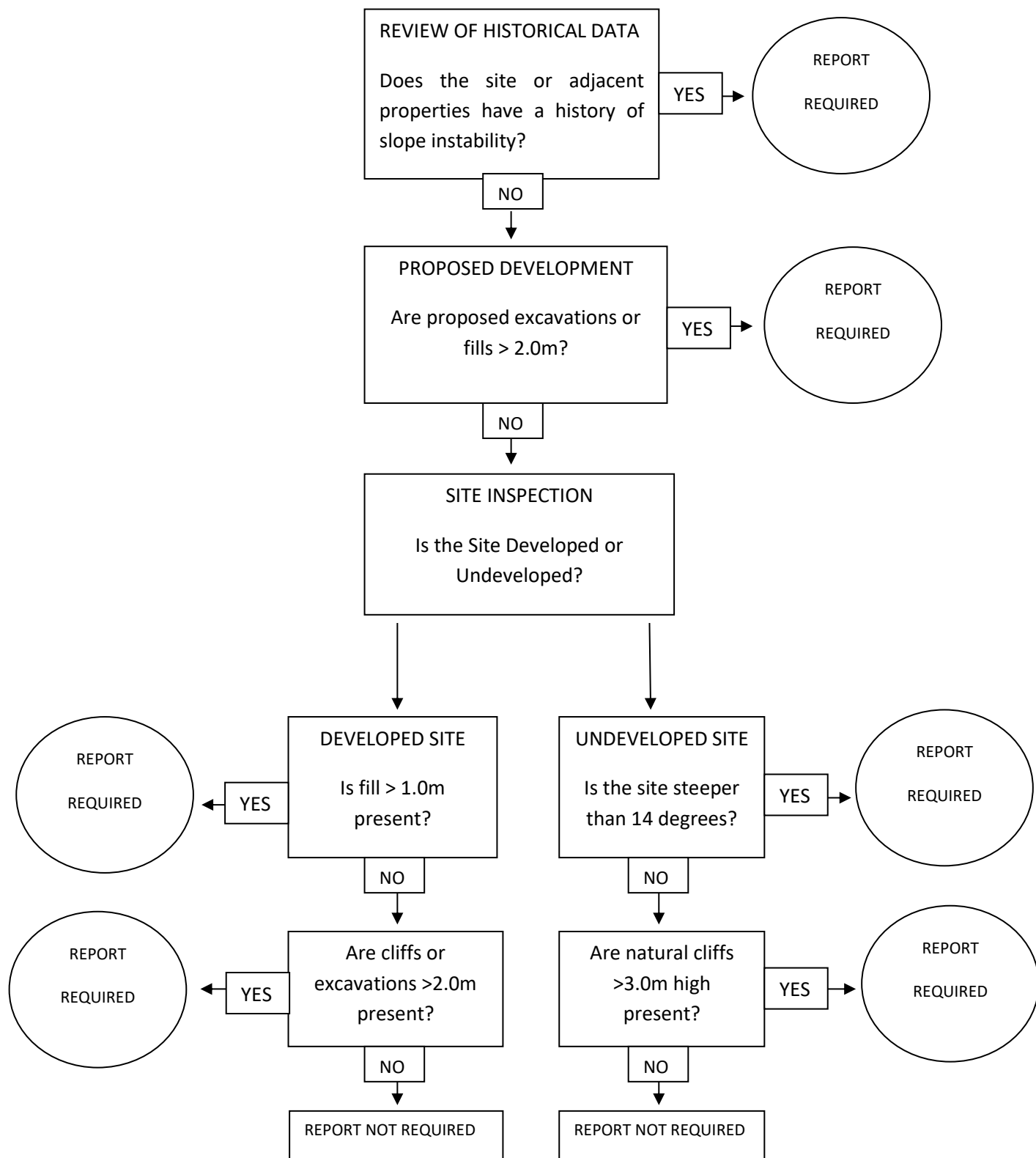


Photo 2



Photo 3

Preliminary Assessment Flow Chart – Northern Beaches Council (Manly)

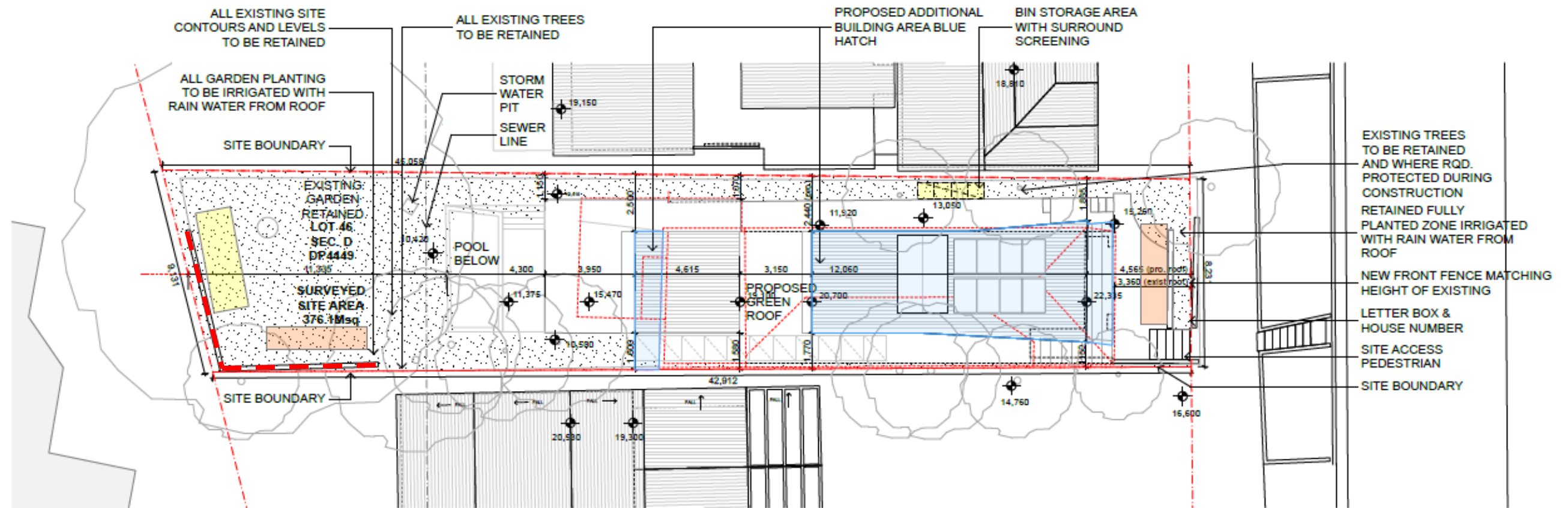


Information about your Preliminary Assessment

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.



1 Site Plan - Proposed
1:200

Location of perimeter retaining wall in relation to the proposed works.

ISSUE			DATE	DESCRIPTION	ARCHITECT			FOR DEVELOPMENT APPLICATION PURPOSES ONLY - NOT FOR CONSTRUCTION				SHEET TITLE		ISSUE
A			17.08.21	PROGRESS DRAFT ISSUE	EOIN			PROJECT: HOUSE RENOVATION, ALTERATIONS & ADDITIONS - LOT 46 SEC D DP 4449				NORTH		
B			27.09.21	DRAFT DA ISSUE	EOIN			59 FRANCIS STREET, MANLY, NSW 2095				NORTH		
C			12.09.21	DRAFT DA ISSUE FOR BASIX	EOIN			CLIENTS				NORTH		
D			27.09.21	DRAFT DA ISSUE	EOIN			PETER GLAS & VANESSA MATTHIJSSEN				NORTH		
E			26.10.21	DA ISSUE	EOIN			PROJECT NUMBER				SHEET NUMBER		
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