

**GEOTECHNICAL RISK MANAGEMENT POLICY FOR PITTWATER
FORM NO. 1 – To be submitted with Development Application**

Development Application for Margaret & Christian Harders
Name of Applicant

Address of site 18 Cabarita Road, Avalon Beach

Declaration made by geotechnical engineer or engineering geologist or coastal engineer (where applicable) as part of a geotechnical report

I, Garth Hodgson on behalf of Hodgson Consulting Engineers Pty Ltd
(insert name) (Trading or Company Name)

on this the 24th November, 2020 certify that I am a geotechnical engineer or engineering geologist or coastal engineer as defined by the Geotechnical Risk Management Policy for Pittwater - 2009 and I am authorised by the above organisation/company to issue this document and to certify that the organisation/company has a current professional indemnity policy of at least \$2million.

Please mark appropriate box

- ☐ Prepared the detailed Geotechnical Report referenced below in accordance with the Australia Geomechanics Society's Landslide Risk Management Guidelines (AGS 2007) and the Geotechnical Risk Management Policy for Pittwater - 2009
- ☐ I am willing to technically verify that the detailed Geotechnical Report referenced below has been prepared in accordance with the Australian Geomechanics Society's Landslide Risk Management Guidelines (AGS 2007) and the Geotechnical Risk Management Policy for Pittwater - 2009
- ☐ Have examined the site and the proposed development in detail and have carried out a risk assessment in accordance with paragraph 6.0 of the Geotechnical Risk Management Policy for Pittwater - 2009. I confirm the results of the risk assessment for the proposed development are in compliance with the Geotechnical Risk Management Policy for Pittwater - 2009 and further detailed geotechnical reporting is not required for the subject site.
- ☒ Have examined the site and the proposed development/alteration in detail and am of the opinion that the Development Application only involves Minor Development/Alterations that do not require a Detailed Geotechnical Risk Assessment and hence my report is in accordance with the Geotechnical Risk Management Policy for Pittwater - 2009 requirements for Minor Development/Alterations.
- ☐ Have examined the site and the proposed development/alteration is separate form and not affected by a Geotechnical Hazard and does not require a Geotechnical report or Risk Assessment and hence my Report is in accordance with the Geotechnical Risk Management Policy for Pittwater - 2009 requirements
- ☐ Provided the coastal process and coastal forces analysis for inclusion in the Geotechnical Report

Geotechnical Report Details:

Report Title: 18 CABARITA ROAD, AVALON BEACH. Geotechnical letter for proposed alterations and additions- QY 00168A

Report Date: 24th November, 2020

Author : Garth Hodgson

Author's Company/Organisation : HODGSON CONSULTING ENGINEERS PTY LTD

Documentation which relate to or are relied upon in report preparation:

Envirostructure, Project No: H81D-MODEL, Dwg Nos: 10.01, 11.01, 21.01, 30.02, 40.01, 70.01, Issue 2 and dated 27th October, 2020.

I am aware that the above Geotechnical Report, prepared for the abovementioned site is to be submitted in support of a Development Application for this site and will be relied on by Pittwater Council as the basis for ensuring that the Geotechnical Risk Management aspects of the proposed development have been adequately addressed to achieve an "Acceptable Risk Management" level for the life of the structure, taken as at least 100 years unless otherwise stated and justified in the Report and that reasonable and practical measures have been identified to remove foreseeable risk.

Signature 

Name Garth Hodgson

Chartered Professional Status MIE Aust

Membership No. 2211514

Company Hodgson Consulting Engineers Pty Ltd

The General Manager
Northern Beaches Council
Pittwater Area
PO Box 82
MANLY NSW 2095

Dear Sir,

18 CABARITA ROAD, AVALON BEACH.
Geotechnical letter for proposed alterations and additions

A Geotechnical Site Inspection was carried out at the subject address on the 28th October, 2020. No subsurface investigation was undertaken. The site is mapped by the Northern Beaches Council 'Pittwater LEP 2014' Geotechnical Hazard Map with the entire site in Hazard Category H1, Figure 1.



Figure 1

The proposed works will comprise of the enclosing of the existing balcony on the north western front corner of the existing residence and alteration and additions to the existing boatshed at the rear of the subject property including a new timber deck to the north west of the existing boatshed with the possibility of minimal excavation required for any new foundations. Details of the proposed alteration and additions are shown on the plans prepared by Envirotecture, Project No: H81D-MODEL, Dwg Nos: 10.01, 11.01, 21.01, 30.02, 40.01, 70.01, Issue 2 and dated 27th October, 2020.

The subject site is a trapezoidal shaped block on the low side of Cabarita Road. Vehicular access is via a short concrete driveway into the existing double garage. Pedestrian access is via gate to the west of the garage that opens to elevated pathway to the main entrance of the existing residence. The existing multi storey main residence steps down the site with the existing swimming pool approximately in the middle of the subject property and the boat shed at the bottom of the property. The property is located at the toe of the moderate to steep slope rising predominately to the south west at average angles of 15 to 25 degrees from the waters of Pittwater to the crest of a north-south running ridge above the subject property. The neighbouring properties have similar elevation and geomorphology to the subject property. No significant movement attributed slope instability was observed in the existing buildings.

The proposed timber deck for the boat shed will require minor excavation for new foundations. The depth to the underlying weathered rock is approximately 0.5 to 1.5 metres. We recommend for the best long term serviceability that any new foundations required are to be taken to the underlying weathered rock with allowable design bearing capacity of 450 kPa. However if the foundations can be placed on undisturbed natural clay material then the allowable bearing capacity is 100 to 150 kPa. As the new foundations get closer to the existing seawall then it is more likely that the material encountered will be unnatural fill material.

To ensure that the Form 3 occupational certificate can be issued then any new foundations are to be inspected by the Geotechnical engineer before concrete is placed.

The property appears stable by inspection and accordingly the proposed development will have an Acceptable Risk Level in accordance with the 2009 Geotechnical Risk Management Policy for Northern Beaches Council – Pittwater subject to good engineering practice for the structural design and construction methods.

HODGSON CONSULTING ENGINEERS PTY LTD.



Garth Hodgson MIE Aust
Member No. 2211514
Civil/Geotechnical & Structural
Engineer