

Engineering Referral Response

Application Number:	DA2019/0364
To:	Ashley Warnest
Land to be developed (Address):	Lot 171 DP 16902 , 51 Plateau Road AVALON BEACH NSW 2107

Reasons for referral

This application seeks consent for the following:

- New Dwellings or
- Applications that require OSD where additional impervious area exceeds 50m² or
- Alterations to existing or new driveways or
- Where proposals affect or are adjacent to Council drainage infrastructure incl. watercourses and drainage channels or
- Torrens, Stratum and Community Title Subdivisions or
- All new Commercial and Industrial and RFB Development with the exception of signage or
- Works/uses in flood affected areas

And as such, Council's development engineers are required to consider the likely impacts on drainage regimes.

Officer comments

The site is located in Geotechnical Hazard H1 Area, an "Acceptable Risk Management" level is achievable in accordance with the geotechnical report. The submitted driveway is acceptable. No development objection subject to conditions.

Referral Body Recommendation

Recommended for approval, subject to conditions

Refusal comments

Recommended Engineering Conditions:

CONDITIONS TO BE SATISFIED PRIOR TO THE ISSUE OF THE CONSTRUCTION CERTIFICATE

Stormwater Disposal

Stormwater shall be disposed of to an existing approved system or in accordance with Northern Beaches Council's PITTWATER DCP21 clause B5.10

A certificate is to be provided to the Principal Certifying Authority with the Construction Certificate application by a qualified experienced practicing Civil Engineer, with Corporate membership of the

Institute of Engineers Australia (M.I.E.) or who is eligible to become a Corporate member and has appropriate experience and competence in the related field that the existing approved system can accommodate the additional flows or provide drainage plans demonstrating compliance with Council's requirements.

Details demonstrating compliance are to be submitted to the Principal Certifying Authority for approval prior to the issue of the Construction Certificate.

Reason: To ensure appropriate provision for disposal and stormwater management arising from development.

Geotechnical Report Recommendations have been Incorporated into Designs and Structural Plans

The recommendations of the risk assessment required to manage the hazards as identified in the Geotechnical Report prepared by Jack Hodgson Consultants Pty. LTd. dated 10th April 2019 are to be incorporated into the construction plans. Prior to issue of the Construction Certificate, Form 2 of the Geotechnical Risk Management Policy for Pittwater (Appendix 5 of P21 DCP) is to be completed and submitted to the Accredited Certifier. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of the Construction Certificate.

Reason: To ensure geotechnical risk is mitigated appropriately.

Submission Roads Act Application for Civil Works in the Public Road

An Application for Works within Council Roadway, including engineering plans shall be submitted to Council for approval under the provisions of Sections 138 and 139 of the Roads Act 1993. The application is to include four (4) copies of Civil Engineering plans for the design of the retaining walls through the nature strip and driveway crossing, which are to be generally in accordance with the Development Application and Council's specification for engineering works - AUS-SPEC #1. A qualified structural engineer shall prepare the engineering plan. The design must include the following information:

- Retaining wall at the boundary alignment must be located within the property.
- The design plan shall show all public utility services affecting the proposed driveway. Any relocation and/or adjustment, requires written approval from the public authority. All cost associated with the relocation or adjustments are to be borne by the property owner.
- Submission of full Structural details of the driveway, retaining wall and associated works.
- The provision of normal low vehicle crossing 6.0 metres wide in accordance with Northern Beaches Council Drawing No A4-3330/3 and specifications.
- Restore the existing redundant lay back and crossing to grass verge.

The fee associated with the assessment and approval of the application is to be in accordance with Council's Fee and Charges. Prior to the issue of the Construction Certificate Council's S138 Road Acts approval shall be submitted to the Principal Certifying Authority

Reason: To provide public and private safety.

Structural Adequacy and Excavation Work

Excavation work is to ensure the stability of the soil material of adjoining properties, the protection of adjoining buildings, services, structures and / or public infrastructure from damage using underpinning,

shoring, retaining walls and support where required. All retaining walls are to be structurally adequate for the intended purpose, designed and certified by a Structural Engineer, except where site conditions permit the following:

(a) maximum height of 900mm above or below ground level and at least 900mm from any property boundary, and

(b) Comply with AS3700, AS3600 and AS1170 and timber walls with AS1720 and AS1170.

Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of the Construction Certificate.

Reason: To provide public and private safety.

Shoring of Adjoining Property

Should the proposal require shoring to support an adjoining property or Council land, owner's consent for the encroachment onto the affected property owner shall be provided with the engineering drawings.

Council approval is required if temporary ground anchors are to be used within Council land. A Temporary Ground Anchors (Road Reserve) Application is to be submitted with Council for assessment and approval subject to Council's Fees and Charges. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of the Construction Certificate

Reason: To ensure that owners consent is obtained for ancillary works, and to ensure the protection of adjoining properties and Council land.

Application for Construction Management Plan

An application for Traffic Management Plan for the proposed driveway work within the public road is to be submitted to Council for approval. The Traffic Management Plan shall be prepared to RMS standard by an appropriately certified person. An approval is to be submitted to the Principal Certifying Authority prior to the issue of the Construction Certificate.

Reason: To ensure appropriate measures have been considered for site access, storage and the operation of the site during all phases of the construction process in a manner that respects adjoining owner's property rights and protects amenity in the locality, without unreasonable inconvenience to the community

Retaining wall

A retaining wall design and certificate shall be prepared by an qualified Structural Engineer, including but not limited to all reinforced concrete, structural steel support construction, sub-soil drainage line and any proposed retaining walls; must be submitted to the Principal Certifying Authority prior to the issue of the Construction Certificate

Reason: Public and Private Safety

CONDITIONS TO BE COMPLIED WITH DURING DEMOLITION AND BUILDING WORK

Road Reserve

The public footways and roadways adjacent to the site shall be maintained in a safe condition at all times during the course of the work.

Reason: Public Safety.

Civil Works Supervision

All civil works approved in the within the public road are to be supervised by an appropriately qualified

and practicing Civil Engineer. Details demonstrating compliance are to be submitted to the Principal Certifying Authority

Reason: To ensure compliance of civil works with Council's specification for engineering works.

CONDITIONS WHICH MUST BE COMPLIED WITH PRIOR TO THE ISSUE OF THE OCCUPATION CERTIFICATE

Stormwater Disposal

The stormwater drainage works shall be certified as compliant with all relevant Australian Standards and Codes by a suitably qualified person. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of any interim / final Occupation Certificate.

Reason: To ensure appropriate provision for the disposal of stormwater arising from the development.

Retaining wall

The retaining wall works shall be certified as compliant with all relevant Australian Standards and Codes by a Structural Engineer. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of any final Occupation Certificate.

Reason: Public and Private Safety

Geotechnical Certification Prior to Occupation Certificate

Prior to issue of the Occupation Certificate, Form 3 of the Geotechnical Risk Management Policy is to be completed and submitted to the Principal Certifying Authority.

Reason: To ensure geotechnical risk is mitigated appropriately.