

Engineering Referral Response

Application Number:	DA2019/0479

То:	Nick England
Land to be developed (Address):	Lot A DP 405025 , 79 Barrenjoey Road MONA VALE NSW 2103

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 proposed access and parking for the development is to comply with Council's Traffic Engineering comments and any conditions by RMS.

The proposed development is flood affected and as such on-site stormwater detention (OSD) in accordance with Council's DCP is not required. The submitted drainage design indicates the connection of stormwater from the site into an inter-allotment drainage system through the adjoining property(s) to the south west of the site. No evidence of any easement rights have been provided with the application. Also there is no evidence that there is any pipeline within the easement with sufficient capacity to cater for the proposal. In this regard the applicant must provide Council with evidence of the drainage easement rights and capacity check of the pipeline within the easement prior to the full assessment of the application.

It appears that portions of the site are to be filled as part of the works. The proposed extent of fill exceeds 1 metre in height and as such a Geotechnical report in accordance with Council's Geotechnical Risk Management Policy is required for the proposal.

The proposed development cannot be supported due to insufficient information to assess:-

- the management of stormwater in accordance with Clause B5.10 of Pittwater 21 DCP 2014
- the proposed landfill in accordance with Clause B8.1 of Pittwater 21 DCP 2014

Additional Information Received 15/08/2019

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The Water Cycle Management Plan and Flood Management Report has been reviewed and the document does not provide evidence of the drainage easement rights or capacity check of any pipeline within the easement. The above comments still apply.

It is considered that this report must be reviewed by the Flood Assessment Officer and Council's Water Management Officer in Coast & Catchment.

Additional commentary provided by applicant 27/09/2019

The applicant has indicated that they are liaising with their adjoining property owners to negotiate an easement and will accept a deferred commencement condition for the creation of an easement prior to activation of the consent. The OSD system although not required due to flood affectation has been provided to limit the flow from the site into the easement which is acceptable. A review of the submitted bulk excavation plan indicates that the fill will not exceed 1 metre and as such a Geotechnical report addressing the DCP is not required.

No objection to approval, subject to conditions as recommended.

Referral Body Recommendation

Recommended for approval, subject to conditions

Refusal comments

Recommended Engineering Conditions:

DEFERRED COMMENCEMENT CONDITIONS

Stormwater Drainage Easement

The disposal of stormwater drainage is to be generally in accordance with the drainage plan submitted by Eclipse Consulting Engineers, drawing number 9892 C13 - B dated 27/09/2019. The easement is to be created either via a transfer granting easement or under Sections 88B and/or 88K of the Conveyancing Act 1919. The applicant must provide Council with evidence of the creation of the easement in order to activate the consent.

Reason: To ensure adequate provision is made for stormwater drainage from the site in a proper manner that protects adjoining properties.

FEES / CHARGES / CONTRIBUTIONS

Construction, Excavation and Associated Works Bond (Crossing / Kerb)

A Bond of \$10,000 as security against any damage or failure to complete the construction of any footpath works required as part of this consent.

Reason: Protection of Council's Infrastructure.

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

On-site Stormwater Detention Compliance

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Drainage plans by a suitably qualified Hydraulic Engineer are to be submitted, detailing the provision of On-site Stormwater Detention in accordance with Northern Beaches Council's Pittwater 21 DCP 2014 Clause B5.7 and the concept drawings by Eclipse Consulting Engineers, drawing number 9892 C01, C03, C04, C05, C07 and C08 Issue B dated 27.09.2019. Details demonstrating compliance are to be submitted to the Certifying Authority for approval prior to the issue of the Construction Certificate.

Reason: To ensure engineering works are constructed in accordance with relevant standards and Council's specification.

Submission Roads Act Application for Civil Works in the Public Road

An Application for Works to be approved within Council Roadway, including engineering plans are to 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 footpath along the frontage of the site which are to be generally in accordance with the Development Application and Council's specification for engineering works - AUS-SPEC #1 and/ or Council's Minor Works Policy. The plan shall be prepared by a qualified Civil Engineer. The fee associated with the assessment and approval of the application is to be in accordance with Council's Fee and Charges.

An approval is to be submitted to the Certifying Authority prior to the issue of the Construction Certificate.

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

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.

Construction Management Program

An application for Traffic Management Plan 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

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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

CONDITIONS THAT MUST BE ADDRESSED PRIOR TO ANY COMMENCEMENT

Public Liability Insurance - Works on Public Land

Any person or contractor undertaking works on public land must take out Public Risk Insurance with a minimum cover of \$20 million in relation to the occupation of, and approved works within Council's road reserve or public land, as approved in this consent. The Policy is to note, and provide protection for Northern Beaches Council, as an interested party and a copy of the Policy must be submitted to Council prior to commencement of the works. The Policy must be valid for the entire period that the works are being undertaken on public land.

Reason: To ensure the community is protected from the cost of any claim for damages arising from works on public land.

CONDITIONS TO BE COMPLIED WITH DURING DEMOLITION AND BUILDING WORK

Civil Works Supervision

All civil works approved in the Construction Certificate are to be supervised by an appropriately qualified and practising 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.

Footpath Construction

The applicant shall reconstruct the footpath for the entire frontage of the site 2.1 metres wide up to the existing bus shelter to the north of the site. The works shall be in accordance with the following:

- (a) All footpath works are to be constructed in accordance with Council's Specification.
- (b) Council is to inspect the formwork prior to pouring of concrete to ensure the works are in accordance with Council's specification for footpath.

Details demonstrating compliance are to be submitted to the Principal Certifying Authority.

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

Notification of Inspections

Council's Development Engineer is to be given 48 hours notice when the works reach the following stages:

(a) Prior to pouring footpath

NOTE: Any inspections carried out by Council do not imply Council approval or acceptance of the work, and do not relieve the developer/applicant from the requirement to provide an engineer's certification. Council approval or acceptance of any stage of the work must be obtained in writing, and will only be issued after completion of the work to the satisfaction of Council and receipt of the required certification.

Reason: To ensure new Council infrastructure is constructed to Council's requirements.

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Traffic Control During Road Works

Lighting, fencing, traffic control and advanced warning signs shall be provided for the protection of the works and for the safety and convenience of the public and others in accordance with RMS Traffic Control At Work Sites Manual (http://www.rms.nsw.gov.au/business-industry/partners-suppliers/documents/technical-manuals/tcws-version-4/tcwsv4i2.pdf) and to the satisfaction of the Principal Certifying Authority. Traffic movement in both directions on public roads, and vehicular access to private properties is to be maintained at all times during the works

Reason: Public Safety

Vehicle Crossings

The provision of two vehicle crossings 9.5 and 12 metres wide in accordance with RMS requirements in their letter dated 25 June 2019. An Authorised Vehicle Crossing Contractor shall construct the vehicle crossing and associated works within the road reserve in plain concrete. All redundant laybacks and crossings are to be restored to footpath/grass. Prior to the pouring of concrete, the vehicle crossing is to be inspected by the Roads Authority.

Details demonstrating compliance are to be submitted to the Principal Certifying Authority.

Reason: To facilitate suitable vehicular access to private property.

Maintenance of 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.

Protection of Adjoining Property - Excavation

Where excavations extend below the level of the base of the footings of a building on an adjoining allotment of land, the person causing the excavation must preserve and protect the building from damage and, if necessary, underpin and support the adjoining building in an approved manner.

Reason: To ensure private and public safety

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

Authorisation of Legal Documentation Required for Onsite Detention

The original completed request forms (NSW Land Registry standard forms 13PC and/or 13RPA) must be submitted to Council, with a copy of the Works-as-Executed plan (details overdrawn on a copy of the approved drainage plan) and hydraulic engineers certification. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of any interim / final Occupation Certificate.

Reason: To create encumbrances on the land.

Registration of Encumbrances for On-site Stormwater Detention

A copy of the certificate of title demonstrating the creation of the positive covenant and restriction for on-site storm water detention as to user is to be submitted. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of any interim / final Occupation Certificate.

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Reason: To identify encumbrances on land.

On-Site Stormwater Detention Compliance Certification

Upon completion of the on-site stormwater detention (OSD) system, certification from a consulting engineer and a "work as executed" (WAE) drawing certified by a registered surveyor and overdrawn in red on a copy of the approved OSD system plans are to be provided to Council.

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 stormwater disposal is constructed to Council's satisfaction.

Positive Covenant and Restriction as to User for On-site Stormwater Detention

A positive covenant shall be created on the title of the land requiring the proprietor of the land to maintain the on-site stormwater detention structure in accordance with the standard requirements of Council. The terms of the positive covenant are to be prepared to Council's standard requirements at the applicant's expense and endorsed by Northern Beaches Council's delegate prior to lodgement with NSW Land Registry Services. Northern Beaches Council shall be nominated as the party to release, vary or modify such covenant.

A restriction as to user shall be created on the title over the on-site stormwater detention system, restricting any alteration to the levels and/or any construction on the land. The terms of such restriction are to be prepared to Council's standard requirements at the applicant's expense and endorsed by Council prior to lodgement with NSW Land Registry Services. Northern Beaches Council shall be nominated as the party to release, vary or modify such restriction.

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 the on-site detention and/or pump system is maintained to an appropriate operational standard.

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