

Engineering Referral Response

Application Number:	DA2018/1708
To:	Claire Ryan
Land to be developed (Address):	Lot 2 DP 589654 , 197 Sydney Road FAIRLIGHT NSW 2094 Lot 87 DP 1729 , 195 Sydney Road FAIRLIGHT NSW 2094

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

2nd Engineering referral response
The conditions have been provided as requested.

1st engineering referral response
The application has been assessed.
However, Development Engineer cannot support the application:

On site stormwater detention system (OSD):
The OSD has a "drowned" orifice at RL 46.52 which is connected to a 700 mm deep stormwater pit on Sydney Road.
The invert level of the pit is RL 46.41.
It is unacceptable to Council due to the affect on the rate of the discharge from the OSD system.

The applicant shall amend the OSD to ensure the design in comply with Council's Manly Specification for on site Stormwater Management 2003.

Stormwater pit on Sydney Road:
Development Engineer has inspected the stormwater pit on Sydney Road.
However, there is no outlet pipe can be found in the pit.
It is uncertain the pit can be the discharge point.
Council does not has the detail of the pit as it is owned by RMS.
The applicant shall clarify and demonstrate the pit can accommodate the additional discharge from the proposed development.
Alternatively, the applicant shall amend the design to discharge the on site stormwater into kerb &

gutter on Sydney Road.

As the above, Development Engineer cannot support the application.

Assessing Officer's Comment:

The above comments have been incorporated as reasons for refusal of the application.

Referral Body Recommendation

Recommended for refusal

Refusal comments

Recommended Engineering Conditions:

FEES / CHARGES / CONTRIBUTIONS

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

A Bond of \$20000 as security against any damage or failure to complete the construction of any vehicular crossings, kerb and gutter and any footpath works required as part of this consent. Reason: Biodiversity/Vegetation Conservation and Management

Reason: Protection of Council's Infrastructure

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

Infrastructure works on Council Roadway

An Application for Infrastructure works on Council Roadway, including engineering plans is 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, stormwater connection and driveway crossing 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 structural engineer. The design must include the following information:

- 1) a 6 m wide vehicular crossing is to be built in accordance with Council's Normal crossing profile
- 2) the concrete footpath shall be re-installed at the entire frontage of the property on Sydney Road
- 3) the drainage connection details between the property and the stormwater pit on Sydney Road
- 4) a written approval from Roads and Maritime Service for the stormwater connection must be provided
- 5) the redundant layback and driveway crossing shall be reinstated to kerb and gutter and footpath

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

Reason: To provide public and private safety.

On-site Stormwater Detention

An On-site Stormwater Detention system must be designed and constructed in accordance with Northern Beaches Council's current MANLY SPECIFICATION FOR ON-SITE STORMWATER MANAGEMENT 2003 and generally in accordance with the concept drainage plans prepared by

Integrated Group Service, project Number EN-N18_89, drawing number SW101- SW400, dated 10/9/2018.

Detailed drainage plans are to be prepared by a qualified experienced practicing Civil Engineer in the related field.

The drainage plans must address the following:

- i) The OSD system is to operate under the inlet control
- ii) the supporting calculation for determining the PSD must be provided

Detailed drainage plans, including engineering certification confirming the above requirements have been satisfied and complying with Council's requirements, 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 the disposal of storm water and storm water management arising from the development.

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.

Sub-Soil Seepage

All sub-soil seepage drainage shall be discharged via a suitable silt arrester pit, directly to the nearest stormwater drainage pit line on Sydney Road and is to be carried out in accordance with relevant Australian Standards. (Note: At the time of determination the following (but not limited to) Standards applied:

- Australian/New Zealand Standard AS/NZS 3500.3 - 2003 Plumbing and drainage - Stormwater drainage
- Australian/New Zealand Standard AS/NZS 3500.3 - 2003 / Amdt 1 - 2006 Plumbing and drainage - Stormwater drainage.)

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

Reason: To ensure appropriate drainage and Stormwater management on site to protect amenity of residents.

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 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

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.

Property Boundary Levels

The property boundary levels shall match the existing levels except where modified for the vehicular crossing. The applicant shall design and construct having regard for the existing levels. No approval is granted for any change to existing property alignment levels to accommodate the development. Details demonstrating compliance are to be submitted to the Principal Certifying Authority.

Reason: To maintain the existing profile of the nature strip/road reserve

Footpath Construction

The reconstruction of concrete footpath and any associated works along all areas of the site fronting along Sydney Road is/are required. These works are to be carried out by Council's authorised contractor at the applicant's expense and must be in accordance with Council's Standard and Specification.

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

Vehicle Crossings

The provision of one vehicle crossing 6 metres wide in accordance with Northern Beaches Council Drawing No A4-3330/1 N and specifications. 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 Council and a satisfactory "Vehicle Crossing Inspection" card issued.

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

Reason: To facilitate suitable vehicular access to private property.

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), hydraulic engineers certification and Compliance Certificate issued by an Accredited Certifier in Civil Works. 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.

Reason: To identify encumbrances on land.

Reinstatement of Kerb

All redundant laybacks and vehicular crossings shall be reinstated to conventional kerb and gutter, footpath or grassed verge as appropriate with all costs borne by the applicant. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of any interim / final Occupation Certificate.

Reason: To facilitate the preservation of on street parking spaces

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. (DACENF10)

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.