

Engineering Referral Response

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| Application Number: | DA2018/1669 |
| To: | Benjamin Price |
| Land to be developed (Address): | Lot B DP 368451 , 21 Whistler Street MANLY NSW 2095 |

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 Development Engineering referral

The submitted stormwater plan has been assessed.
However, it is considered to be unsatisfactory.
First, the permissible site discharge of the post development is larger than that of the pre-development.
And then the total by pass areas of the OSD is greater than 20% of the total site areas.
As the above, the proposed OSD does not comply with Council's Manly Specification for on site stormwater Management 2003.

A condition has been placed to address the above design issues.
As such, Development Engineering has no objection to the application subject to the following conditions of consent.

1st Engineering referral

Development Engineer has assessed the application.
However, Development Engineering cannot support the application as the following items:

1) stormwater/ On site stormwater detention system (OSD).
The applicant proposed an OSD system on the roof of the building.
However, the submitted details are insufficient for assessment.

Development Engineer cannot provide an appropriate assessment of the design.
For instance, the dimension and volume of the OSD , location of the overflow weir and discharge rate of the OSD have not been provided.
And 1/3 of the building areas (western side of the building), which the details of drainage is missing..

The applicant must submit the stormwater management plan in accordance with Council's Manly Specification for on site stormwater management 2003 for assessment, in particular the section 11.

2) car lift

The applicant must provide an appropriate waiting areas of car lift within the property.

It prevents any traffic delay/ congestion on Whistler Street when any vehicle entry/ exit the property.

3) Underground water and Sub Soil drainage

Council was notified by another development on Whistler street.

A steady groundwater table has been found at RL 1.5 m which is similar to the proposed basement Level in this development.

Please be advised that Council does not permit any direct discharge from the rising main to the street kerb.

The applicant shall consider alternative method to manage the underground water and subsoil drainage.

As the above, Development Engineer cannot support the application due to lack of information.

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

Tanking of Basement Level

The basement area is to be permanently tanked. The applicant is to submit the details of the tanking prepared by an qualified Engineer in accordance with the recommendation of a geo-technical report.

Where temporary dewatering works are required on the development site during construction, the developer/applicant must apply for and obtain a bore license from the NSW Office of Water. The bore license must be obtained prior to commencement of dewatering works. All requirements of the NSW Office of Water are to be complied with and a copy of the approval must be submitted to the Principal Certifying Authority.

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

Reason: To prevent ingress of sub-surface flows into the basement area and to comply with State Government Requirements

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

Burgess, Arnott & Grava Pty Ltd, drawing number 2018-116, dated 10/10/2018.

Detailed drainage plans are to be prepared by a qualified experienced practicing Civil Engineer. The drainage plans must address the following:

- a) The permissible site discharge of the post development must be less than the permissible site discharge of the pre- development
- b) The total area by pass the OSD system must not greater than the 20 % of the total site area.
- c) The storage area of the OSD must be permanently water proofed. The water proof details must be prepared by a suitably qualified Engineer

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.

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.

Vehicle Crossings Application

A Driveway Levels and Formwork Inspections Application shall be made with Council subject to the payment of the fee in accordance with Council's Fees and Charges. The fee includes all Council inspections relating to the driveway construction and must be paid.

Approval of the application by Council is to be submitted to the Principal Certifying Authority prior to the issue of the Construction Certificate.

Reason: To facilitate suitable vehicular access to private property.

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 TO BE COMPLIED WITH DURING DEMOLITION AND BUILDING WORK

Vehicle Crossings

The provision of one vehicle crossing 3.5 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.

Maintenance of Sediment

Sedimentation and erosion controls are to be effectively maintained at all times during the course of construction and shall not be removed until the site has been stabilised or landscaped to the Principal Certifying Authority's satisfaction.

Reason: To ensure sediment controls are effective

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. Additionally a Compliance Certificate is to be issued by an Accredited Certifier in Civil Works registered with the Institute of Engineers Australia, stating that the works are in accordance with the approved plans.

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.

Certification of Tanking of Basement

The applicant shall submit a suitably qualified engineer's certification that the completed tanking of basement areas had been undertaken in accordance with this consent and the approved Construction Certificate plans.

Detail demonstrating compliance is to be submitted to the Principle Certifying Authority Prior to the issue of the Occupation Certificate.

Reason: To ensure compliance of works