

Engineering Referral Response

Application Number:	DA2019/0107
To:	David Auster
Land to be developed (Address):	Lot 4 DP 203378 , 44 Rose Avenue WHEELER HEIGHTS NSW 2097

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

Reference is made to Development Engineering Referral Response dated 6/3/19 and 15/4/19 and additional information provided by the Applicant.

Stormwater:

The proposed stormwater connection to the existing drainage easement requires variation to the terms of the easement. This shall be appropriately conditioned as deferred commencement.

Access Driveway:

Please refer to comments and/or conditions from Traffic Engineering section in regard to any potential treatments of the access ramp to the basement carpark.

No objections are raised to the proposed development, subject to conditions.

Referral Body Recommendation

Recommended for approval, subject to conditions

Refusal comments

Recommended Engineering Conditions:

DA2019/0107

DEFERRED COMMENCEMENT CONDITIONS

Stormwater Drainage Easement

As the natural fall of the land is towards the rear of the site the disposal of stormwater drainage is to be in accordance with the drainage plan submitted by Civil & Structural Engineering Design Services, drawing number W-11-266888-1B and 2B, amendment B, dated 23/04/19. A stormwater drainage easement is to be created 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.

Variation to Existing Stormwater Drainage Easement

The terms of the existing stormwater drainage easement within 43 Lantana Avenue is to be varied to benefit the subject development in accordance with the requirements of the NSW Land Registry Services. The applicant must provide Council with evidence that the existing easement is varied to benefit the subject development 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 (Footpath)

The applicant is to lodge a Bond of \$15,000 as security against any damage or failure to complete the construction of footpath works as part of this consent. Details demonstrating payment of the bond are to be submitted to the Certifying Authority prior to the issue of the Construction Certificate.

Reason: Protection of Council's infrastructure.

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

Pump-Out System Design for Stormwater Disposal

The design of the pump-out system for stormwater disposal will be permitted for drainage of hard surfaces areas such as driveways and basement pavement areas only, and must be designed in accordance with AS/NZS 3500. The Applicant is to provide engineering details demonstrating compliance with this requirement and certified by an appropriately qualified and practising hydraulic engineer. Details demonstrating compliance are to be submitted to the Certifying Authority prior to the issue of the Construction Certificate.

Reason: To ensure adequate provision is made for the discharge of stormwater from the excavated parts of the site.

Submission of Engineering Plans

Engineering plans are to be submitted to the Certifying Authority for approval. The submission is to

include four (4) copies of Civil Engineering plans for the design of interallotment stormwater drainage pipeline which are to be generally in accordance with the civil design approved with the Development Application and Council's specification for engineering works - AUS-SPEC #1 and or Council's Minor Works Policy.

It shall be ensured that the interallotment drainage line is designed to have adequate capacity to cater for any emergency overflows in the case of blockage of the internal OSD system.

Details demonstrating compliance are 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.

Submission Roads Act Application for Civil Works in the Public Road

The Applicant is to submit an application for approval for Infrastructure works on Councils roadway. Engineering plans for the new development works within the road reserve within this development consent 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 1.5 metre wide footpath to connect to the existing footpath at 34 Rose Avenue which shall be generally in accordance with the Council's specification for engineering works - AUS-SPEC #1. 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 engineering works are constructed in accordance with relevant standards and Council's specification.

On-site Stormwater Detention

The Applicant is to provide a certification of drainage plans detailing the provision of on-site stormwater detention in accordance with Northern Beaches Council's Warringah Water Management Policy PL850, and generally in accordance with the concept drainage plans prepared by Civil & Structural Engineering Design Services, drawing number W-11-266888-1B and 2B, amendment B, dated 23/04/19. Detailed drainage plans are to be prepared by a suitably qualified Civil Engineer, who has membership to Engineers Australia, National Engineers Register (NER) and registered in the General Area of Practice for civil engineering.

The drainage plans must address the following:

- i. Emergency overflows from the OSD system shall be directed to the interallotment drainage line.
- ii. An additional pit shall be provided at the north-east corner of the site to capture any emergency overflows before connecting to Pit 1 of the interallotment drainage line.
- iii. It shall be ensured that the interallotment drainage line is designed to have adequate capacity to cater for any emergency overflows in the case of blockage of the internal OSD system.

Detailed drainage plans, including engineering certification, are to be submitted to the 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.

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, the Applicant shall provide the adjoining(s) with engineering drawings of the proposed shoring works for their consideration and approval.

An application to Council for approval under Section 138 of the Roads Act 1993 is required if temporary ground anchors are to be used within Council's road reserve. Owner's approval is to be submitted to the 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

The Applicant is to submit an application for driveway levels with Council in accordance with Section 138 of the Roads Act 1993. 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 facilitate suitable vehicular access to private property.

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

Reason: Public Safety.

Civil Works Supervision

The Applicant shall ensure all civil works approved in the Construction Certificate for interallotment drainage and Section 138 approval are supervised by an appropriately qualified and practising Civil Engineer. Details demonstrating compliance are to be submitted to the Principal Certifying Authority and/or Roads Authority.

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

Vehicle Crossings

The Applicant is to construct a normal low standard vehicle crossing 5.5 metres wide in accordance with Northern Beaches Council Drawing No A4-3330/3 NL and the driveway levels application approval. 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. A copy of the vehicle crossing inspection form is to be submitted to the Principal Certifying Authority.

Reason: To facilitate suitable vehicular access to private property.

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

Stormwater Disposal

The Applicant shall submit a certificate from a suitably qualified person that the stormwater drainage

works have been constructed/installed in accordance with all relevant Australian Standards and Codes. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of the final Occupation Certificate.

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

Positive Covenant for the Maintenance of Stormwater Pump-out Facilities

The Applicant shall lodge the Legal Documents Authorisation Application with the original completed request forms (NSW Land Registry standard forms 13PC and/or 13RPA) to Council and a copy of the Works-as-Executed plan (details overdrawn on a copy of the approved drainage plan), hydraulic engineers' certification.

The Applicant shall create on the Title a positive covenant in respect to the ongoing maintenance of the pump-out facility on the property being developed. Northern Beaches Council shall be nominated in the instrument as the only party authorised to release, vary or modify the instrument. Northern Beaches Council's delegate shall sign these documents prior to the submission to the NSW Land Registry Services. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of the final Occupation Certificate.

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 final Occupation Certificate.

Reason: To ensure adequate provision is made for the stormwater pump out system to be maintained to an appropriate operational standard.

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

The Applicant shall lodge the Legal Documents Authorisation Application with the original completed request forms (NSW Land Registry standard forms 13PC and/or 13RPA) to Council and a copy of the Works-as-Executed plan (details overdrawn on a copy of the approved drainage plan), hydraulic engineers' certification.

The Applicant shall create on the Title a restriction on the use of land and a positive covenant in respect to the ongoing maintenance and restriction of the on-site stormwater detention structures within this development consent. The terms of the positive covenant and restriction 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 the NSW Land Registry Services. Northern Beaches Council shall be nominated as the party to release, vary or modify such covenant.

A copy of the certificate of title demonstrating the creation of the positive covenant and restriction as to user for on-site storm water detention is to be submitted.

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

Reason: To ensure the on-site stormwater detention system is maintained to an appropriate operational standard.

Certification of Civil Works and Works as Executed Data on Council Land

The Applicant shall submit a suitably qualified Civil Engineer's certification that the completed works have been constructed in accordance with this consent and the approved Section 138 plans. Works as Executed data certified by a registered surveyor prepared in accordance with Council's 'Guideline for preparing Works as Executed data (details overdrawn on a copy of the approved civil plans) for Council Assets' in an approved format shall be submitted to Council for approval prior to the release of any security deposits.

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