

Engineering Referral Response

Application Number:	DA2019/1072
Date:	23/06/2020
To:	Renee Ezzy
Land to be developed (Address):	Lot 1 DP 219265 , 1797 Pittwater Road MONA VALE NSW 2103 Lot 2 DP 219265 , 38 Park Street MONA VALE NSW 2103 Lot 4 DP 76695 , 1795 Pittwater 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

Comments 23/6/2020.

The applicant has submitted additional survey information to establish invert levels of the stormwater inlet pits at the opposite side of Pittwater Road. This is the proposed connection point for the stormwater line as detailed in the stormwater drainage plans prepared by Barrenjoey Consulting Engineers.

The connection point works in terms of minimum fall and levels. The stormwater drainage plan has also detailed service locations and there appears to be no conflicts however more detailed investigations prior to the issue of the construction certificate will be required.

Transport NSW (RMS) will also need to provide an approval under section 138 of the Roads Act 1993 , to authorise the stormwater drainage works across Pittwater road and connection to the existing RMS road inlet pit. This requirement will be a condition of the consent requiring concurrence from the RMS prior to issue of the Construction certificate.

The development plans have been amended detailing a driveway access of park street . Accordingly the stormwater drainage concept plans prepared by Barrenjoey Consulting Engineers are to be amended to reflect the changes.

Also the previous comments re the OSD storage requirements and other items need to be addressed

Previous Comments

The stormwater drainage plans have been assessed and the the following information/amendments are require:

- 1) The proposed stormwater crossing of Pittwater Road/Road reserve is to be supported with a long section detailing the location of all services in relation to the pipe crossing.
- 2) The discharge line from the basement is to be connected directly to a Council pit as discharge to the kerb and gutter is not permitted . The discharge connection point is to be detailed on the stormwater drainage plan.
- 3) A review of the DRAINS model indicates that the High early discharge pit has been modeled incorrectly leading to a shortfall in the detention volume required.
The detention tank volume is accordingly to be increased from 32 cumecs to 38 cumecs .

The proposal is therefore supported.

Note: Should you have any concerns with the referral comments above, please discuss these with the Responsible Officer.

Recommended Engineering Conditions:

FEES / CHARGES / CONTRIBUTIONS

Construction, Excavation and Associated Works Bond (Drainage works)

The applicant is to lodge a bond of \$50000 as security against any damage or failure to complete the construction of stormwater drainage works in Pittwater Road as part of this consent. The bond amount is to cover the construction of a 375mm RCP drainage line connection to the existing inlet pit on the opposite side of Pittwater road.

Details confirming 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.

Construction, Excavation and Associated Works (Security Bond protection of Council roads)

A bond of \$20000 as security against damage to Council's roads fronting the site caused by the transport and disposal of materials and equipment to and from the site.

Details confirming 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.

Construction, Excavation and Associated Works Bond (Maintenance for civil works)

The developer/applicant must lodge with Council a maintenance bond of \$10000 for the construction of 375mm RCP line in Pittwater Road. The maintenance bond will only be refunded upon completion of the six month maintenance period, if work has been completed in accordance with the approved plans and to the satisfaction of Council. The maintenance bond is to be paid prior to Council issuing practical completion.

Reason: To ensure adequate protection of Council infrastructure.

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

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 Crozier Geotechnical Consultants dated September 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.

On-site Stormwater Detention Details

The Applicant is to provide a engineering certification and drainage plans detailing the provision of on-site stormwater detention in accordance with Northern Beaches Council's **PITTWATER DCP21**, and generally in accordance with the concept drainage plans prepared by Barrenjoey Consulting Engineers Job No 190803, drawing number SW1DA-E, SW2DA-c, SW3DA-D, SW4DA-D, dated 29/5/20. Detailed drainage plans are to be prepared by a suitably qualified Civil Engineer, who has membership to the Institution of Engineers Australia, National Professional Engineers Register (NER Civil) or RPENG (Civil).

Detailed drainage plans, including engineering certification, are to be submitted to the Certifying Authority for approval prior to the issue of the Construction Certificate.

All stormwater drainage works in Pittwater Road are to be approved by Transport NSW (RMS)

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

Submission Roads Act Application for Civil Works in the Public Road

The Applicant is to submit an application for approval for the construction of a 375mm RCP stormwater line within Pittwater Road as detailed on the concept plan prepared by Barrenjoey Consulting Engineers Job No 190803, drawing number SW1DA-E, SW2DA-c, SW3DA-D, SW4DA-D, dated 29/5/20. Engineering plans for the stormwater drainage works within the road reserve and this development consent are to be submitted to TransportNSW (Road and Maritime Services (RMs)) 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 stormwater drainage works which are to be generally in accordance with RMS's specifications for engineering works. The plan shall be prepared by a qualified civil engineer.

THE RMS approval is to be submitted to the Certifying Authority and Council prior to the issue of the Construction Certificate

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

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.

Pre-commencement Dilapidation Report

The applicant must prepare and submit a pre-commencement dilapidation report providing an accurate record of the existing condition of adjoining public property and public infrastructure (including roads, gutter, footpaths, etc). A copy of the report must be provided to Council, any other owners of public infrastructure and the owners of adjoining and affected private properties.

The pre-construction / demolition dilapidation report must be submitted to Council and the Certifying Authority prior to the issue of the any Construction Certificate and the commencement of any works including demolition.

Reason: Protection of Council's Infrastructure during construction.

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 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.

Progress Certification (Road & Subdivision)

The applicant shall provide written certification is to be provided by a suitably qualified engineer upon completion and/or as and when requested by the Council / Roads Authority] for the following stages of works:

- (a) Laying of stormwater pipes and construction of pits in Pittwater Road.

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.

Civil Works Supervision

The Applicant shall ensure all stormwater drainage works approved in the **Section 138 Road Act 1993 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.

Footpath Construction

The applicant shall reconstruct or damaged and even sections of the existing footpath in Park Street.
The works shall be in accordance with the following:

- (a) All footpath works are to be constructed in accordance with Councils standard engineering details.
- (b) Council is to inspect the formwork prior to pouring of concrete to ensure the works are in accordance with Councils specifications.

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 (Infrastructure works to be handed over to Council)

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

- (a) Installation of Silt and Sediment control devices
- (b) Prior to backfilling of pipelines
- (c) Prior to pouring of stormwater gully pits
- (d) Prior to pouring of kerb and gutter

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.

Reason: To ensure new Council infrastructure is constructed in accordance with Auspec 1 Council's design and specification standards.

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 Roads 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 Applicant is to construct one vehicle crossing 5.5 metres wide (Park Street) in accordance with Northern Beaches Council Drawing No A4-3330/ Normal Low 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

Reinstatement of Kerb

The Applicant shall reinstate all redundant laybacks and vehicular crossings 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 the final Occupation Certificate.

Reason: To facilitate the preservation of on street parking spaces.

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 Disposal Structures

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 disposal 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 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 the on-site stormwater disposal system is maintained to an appropriate operational standard.

Post-Construction Dilapidation Report (Major Development)

The applicant must bear the cost of all restoration works to Council's road, footpath and drainage assets damaged during the course of this development.

A Post Construction Dilapidation Report after the completion of all building works is to demonstrate that there is no damage to Council infrastructure prior to the refund of any security deposits.

Reason: To ensure security against possible damage to Council property.

Geotechnical Certification Prior to Occupation Certificate

The Applicant is to submit the completed Form 3 of the Geotechnical Risk Management Policy (Appendix 5 of P21 DCP) to the Principal Certifying Authority prior to issue of the Occupation Certificate.

Reason: To ensure geotechnical risk is mitigated appropriately.