

Engineering Referral Response

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| Application Number: | DA2022/2275 |
| Proposed Development: | Demolition works and construction of a dwelling house including swimming pool and garage |
| Date: | 27/03/2023 |
| To: | Stephanie Gelder |
| Land to be developed (Address): | Lot 8 DP 14630 , 103 Bynya Road PALM BEACH NSW 2108 |

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

It appears that the depth of the excavation for the proposed development is more than 1.5m. The applicant needs to provide geotechnical risk management report as set out in Council's Geotechnical Risk Management Policy for Pittwater relating to the potential impact of excavation on Land Stability.

Site is falling to rear, an onsite stormwater detention tank (OSD) is proposed in conjunction with level spreader for the disposal of stormwater. Before this, the stormwater drainage for the site shall demonstrate compliance with council's "Water Management for Development Policy", particularly Stormwater Drainage from Low Level Properties Technical Specification section 5.5.

It has been noted in the provided stormwater plan that the applicant was unsuccessful in acquiring easement from downstream property. The evidence shall be submitted with the application. For sample letter refer to Appendix 2, Easement Letter of council's Water Management for Development Policy.

For the purpose of designing OSD, whole site area needs to be considered. The roof area draining to rainwater tank, OSD tank and bypass area needs to be clearly shown in the catchment plan.

27/03/2023:

Amended stormwater plans are provided, which seems satisfactory.

A letter from Geotech Engineer, PSM Consult Pty Ltd, Ref: PSM1551-103L, Dated 5th Mar 2023 is provided, stating proposed excavations are within Acceptable Risk Management criteria.

NO objections to approval subject to conditions as recommended.

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:

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 PSM Consult Pty Ltd, Ref: PSM1551-100L, Dated 20th Dec 2022 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 Certifier 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 certification of drainage plans detailing the provision of on-site stormwater detention in accordance with Northern Beaches Council's WATER MANAGEMENT for DEVELOPMENT POLICY ", and generally in accordance with the concept drainage plans prepared by NB Consulting Engineers, Job No: 2206002, Drawing No: D01 to D06, Issue B, Dated 23/03/2023 . 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 (NPER) and registered in the General Area of Practice for civil engineering.

The drainage plans must address the following:

- i. Level spreader to be designed as per Appendix 4 of Council's Water Management for Development Policy.
- ii. Detailed drainage plans, including engineering certification, are to be submitted to the Certifier for approval prior to the issue of the Construction Certificate.

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

Vehicle Driveway Gradients

The Applicant is to ensure driveway gradients within the private property are not to exceed a gradient of 1 in 4 (25%) with a transition gradient of 1 in 10 (10%) for 1.5 metres prior to a level parking facility. Access levels across the road reserve are to comply with the allocated vehicle profile detailed in this consent.

Details demonstrating compliance are to be submitted to the Certifier for approval prior to the issue of

the Construction Certificate.

Reason: To ensure suitable vehicular access to private property.

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.

Details demonstrating compliance are to be submitted to the Certifier prior to the issue of the Construction Certificate.

Reason: To provide public and private safety.

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 Certifier prior to the issue of the Construction Certificate.

Reason: To facilitate suitable vehicular access to private property.

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.

Vehicle Crossings

The Applicant is to construct one vehicle crossing 3 metres wide in accordance with Northern Beaches Council Drawing No A4-3330/ 3NL 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 Certifier.

Reason: To facilitate suitable vehicular access to private property.

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

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

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

drainage plan by a Registered Surveyor) and Hydraulic Engineers' final certification and photographic evidence for the completed onsite stormwater detention system works. A guide to the process can be found on Council's website using the following link:

<https://files.northernbeaches.nsw.gov.au/sites/default/files/documents/pdfforms/legaldocumentsauthoris:-on-site-stormwater-detentionsystems/guide-submitting-ldaa-nov19.pdf>

The form for the application can be found on Council's website using the following link:

<https://files.northernbeaches.nsw.gov.au/sites/default/files/documents/pdfforms/legaldocumentsauthoris:-on-site-stormwater-detention-systems/4023-legal-documentsauthorisationoct19.pdf>

The Applicant shall create on the Title a positive covenant in respect to the ongoing maintenance and restriction as to user over the on-site stormwater detention system 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 the on-site stormwater detention system 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 and not altered.

Certification Elevated Parking Facility Work

The Applicant shall submit a Structural Engineers' certificate certifying that the elevated parking facility was constructed in accordance within this development consent and the provisions of Australian/New Zealand Standard AS/NZS 2890.1:2004 parking facilities - Off-street car parking, in particular Section 2.4.5 Physical controls. Details demonstrating compliance are to be submitted to the Principal Certifier prior to the issue of the Occupation Certificate.

Reason: Compliance with this consent.

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 Certifier prior to issue of the Occupation Certificate.

Reason: To ensure geotechnical risk is mitigated appropriately.