

Engineering Referral Response

Application Number:	DA2021/2435
Date:	29/04/2022
To:	Adam Mitchell
Land to be developed (Address):	Lot 18 DP 6195 , 40 Hillcrest Avenue 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

25/02/2022:

Application seeks approval for alterations and additions including

- Demolishing the existing driveway and construct new driveway by excavating to a depth of ~2.5m
- Extending existing cabana on the uphill side by excavating to a depth of ~1.4m
- Extend the existing house on the NE side
- Reduce the footprint of the existing pool and install a new spa. Construct a new deck over the footprint of the existing pool pavement.

Geotech

Geotechnical assessment by White Geotechnical Group Pty Ltd, Ref J3740, Dated 7th Dec 2021 is provided. As per the report an acceptable risk can be achieved for the proposed development.

Stormwater

Proposed stormwater concept plan by Housed Architects, dated 17/11/2021, have partial writing on it, which makes it unclear to understand.

Also a pit is shown (unclear if its existing or proposed) partially on public road reserve and partially within the site.

This pit to be totally within the site.

Access

Site is currently accessed via a concrete driveway.

Proposal is to demolish the existing driveway and construct a new driveway by excavating to a depth of ~2.5m, proposal also includes landscaping, retaining structures, access stairs with gate within public road reserve.

Proposed works within public road reserve require assessment/approval from Council's Road asset team.

No longitudinal section of proposed driveway is provided.

For Planner

Please seek comments from Council's Road Team for the proposed works within public road reserve.

29/04/2022:

Updated driveway and stormwater plans are provided.

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****Stormwater Disposal**

The applicant is to submit Stormwater Engineering Plans for the new development within this development consent, prepared by an appropriately qualified and practicing Civil Engineer, indicating all details relevant to the collection and disposal of stormwater from the site, buildings, paved areas and where appropriate adjacent catchments. Stormwater shall be conveyed from the site to existing approved system.

Details demonstrating compliance 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 the development.

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 White Geotechnical Group Pty Ltd, Ref J3740, Dated 7th Dec 2021 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.

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 Certifying Authority 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, 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.

Submission of 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 and 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 the driveway and the retaining walls within public road reserve which are to be generally in accordance with the Council's specification for engineering works - AUS-SPEC ONE. The plans shall be prepared by a qualified Structural Engineer.

The design must include the following information:

- 1) A vehicle crossing 4.5 metres wide should be constructed in accordance with Northern Beaches Council's standard Drawing No A4-3330/1N.
- 2) Longitudinal section of driveway from street gutter invert with existing and proposed levels and grades.
- 3) Structural details of the "return" on the proposed retaining wall across the public road reserve shall be provided.
- 4) Provision of any vehicle gate or pedestrian gate on the public road reserve is not permitted.
- 5) Details of pedestrian access (stairs) to site are to be provided
- 6) All driveways gradients and safe sight distances etc. shall be designed comply with AS 2890.1:2004 (Off-street Parking Standards).

- 7) Any adjustment to existing services are to be approved by the relevant service authority with all costs associated borne by the applicant.
- 8) All vehicles are to be wholly contained on site before being required to stop.
- 9) To ensure there are no adverse impacts arising from construction works, the applicant must engage a suitably qualified and practicing Civil or Structural Engineer specializing in geotechnical and the hydrogeological field to design.
- 10) 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.

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 specifications.

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.

Civil Works Supervision

The Applicant shall ensure all civil works approved in the 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.

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

Stormwater Disposal

The stormwater drainage works shall be certified as compliant with all relevant Australian Standards and Council's Water Management for Development Policy by a suitably qualified person. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of any final Occupation Certificate.

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

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.

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.