

# **Engineering Referral Response**

Application Number:	DA2021/2490
Date:	07/07/2022
То:	Thomas Prosser
Land to be developed (Address):	Lot 2 DP 1214257, 34 Plateau Road BILGOLA PLATEAU NSW 2107

#### 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

The proposed development is for a dwelling house at the front, rear dwelling is retained and double vehicular driveway access.

No detail plans for the proposed dwelling has been provided or available in trim.

Only one access driveway per allotment is permissible, The proposed development does not comply with B6.1 "Access driveways and Works in the Public Road Reserve". The plan are to be amended to show a single access for proposed development site.

A concept stormwater management for the proposed development has not been submitted. The concept stormwater management plan shall demonstrate that stormwater from the new development is designed in accordance with Clause B5.5 controls of Northern Beaches Council's "Water Management for Development Policy".

### DATED 22/04/2022

The property slopes to the rear properties. Stormwater plans provides for a detention drainage system with a dispersion drainage system (Level Spreader). Applicant's geotechnical reports recommends drainage to the road. Council's Water Management for Development Policy, in particular Stormwater Drainage from Low Level Properties clause 5.5.1.1. recommends various stages for stormwater drainage disposal assessment, which does not appear to have been considered and/or undertaken.



Written evidence for negotiation for drainage easements rights/refusal in accordance with stage1 of Clause 5.5.1.1.1 of Northern Beaches Council's "Water Management for Development Policy" has not been submitted with the application,.

The existing rear dwelling obtains access and currently park on Council land. Please refer this matter to Building Compliance.

The access is reliant on existing shared driveway with right of carriageway and was created as part of the subdivision. The existing shared driveway access is considered safe and provides for vehicles to exit in a forward direction. The additional access with a suspended driveway over the road reserve is not safe since vehicles would need to reverse onto road traffic. Furthermore suspended slab and additional access over the road reserve is not supported since it may impacts on public authority services both present and future. Council Pittwater DCP Clause B 6.1 Access driveway and works on the public road does not permit dual access to property with less than 30 metres road frontage. The existing car space can be widened to provide for additional parking. Council Road Assets have not supported the application. As result the application in its current form is not supported.

### DATED 06/07/2022

The submitted amended plan shows a separate and direct access to the development. A Road Act approval with detail engineering plans will be required to be submitted to Council for approval as conditions of consent. The applicant has provided evidence that drainage easement rights could not be achieved.

No Development Engineering objections subject to recommended conditions.

The proposal is therefore unsupported.

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 Security Bond (Road works)

The applicant is to lodge a bond with Council of \$5000.00 as security against any damage or failure to complete the construction of road pavement/shoulder reconstruction works as part of this consent.

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.

## 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 White geotechnical group dated 12 November 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.

## Traffic Management and Control Plan

The Applicant is to submit an application for Traffic Management and control Plan to Council for approval prior to issue of the Construction Certificate. The Traffic Management Plan shall be prepared to RMS standards by an appropriately certified person.

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.

## **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, drawing number (220338) D01 to D04 issue A, dated 11/04/2022. 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.

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 the disposal of stormwater and 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 infrastructure works on Council's 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 retaining wall piers structural suspended slab over the road reserve which are to 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 design must include the following information:

- 1. Retaining wall/piers at the boundary alignment must be located within the property. No pier or retaining wall is permitted with the road reserve
- 2. The design plan shall show all public utility services affecting the proposed driveway. Any relocation and/or adjustment, requires written approval from the public authority. All cost associated with the relocation or adjustments are to be borne by the property owner.
- 3. Submission of detail Structural design plans of the driveway, retaining wall/pier and associated structures.
- 4. The provision of normal low vehicle crossing 4.2 metres wide and variable in accordance with



Northern Beaches Council Drawing No A4-3330/3 and specifications.

- 5. The vehicular crossing within the public road shall be in plain concrete.
- 6. Pedestrian access shall be incorporated within the driveway and any steps required shall be located within the private property.
- 7. The parking area and driveway must comply with AS/NZS 2890.1: 2004
- 8. Detail driveway levels and Civil plans, which must include cross-sectional details of existing and proposed levels commencing form the center line of Plateau Road to the proposed car parking area.
- 9. The application is to include a geotechnical report that is prepared by an appropriately qualified Geotechnical Engineer to assess the proposed road works and design within the road reserve. The report must include a full assessment of any existing and proposed structures including the stability assessment of the road embankment.

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.

### 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.

# 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.



# **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 4.2 metres wide and variable in accordance with Northern Beaches Council Drawing No A4-3330/3 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

**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.

### **Certification Elevated Parking Facility Work**

The Applicant shall submit a Structural Engineers' certificate certifiying that the elevated parking facility and driveway was constructed in accordance within this development consent, S138 Road Acts approval and the provisions of Australian/New Zealand Standard AS/NZS 2890.1:2004 parking facilities - Off-street car parking, including Section 2.4.5 Physical controls. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of the final Occupation.



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 Certifying Authority prior to issue of the Occupation Certificate.

Reason: To ensure geotechnical risk is mitigated appropriately.