

## Engineering Referral Response

<b>Application Number:</b>	DA2021/0416
<b>Date:</b>	18/06/2021
<b>To:</b>	Gareth David
<b>Land to be developed (Address):</b>	Lot 20 DP 11186 , 71 Alexandra Crescent BAYVIEW NSW 2104

### Reasons for referral

This application seeks consent for the following:

- New Dwellings or
- Applications that require OSD where additional impervious area exceeds 50m<sup>2</sup> 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 exceeds 50 square metres of increase in impervious area and as such on-site stormwater detention (OSD) in accordance with Council's Water Management Policy Clause 9.3.1 is required for the proposal.

The submitted Geotechnical report does not address all the required points listed in clause 6.5 of Council's Geotechnical Risk Management Policy. In this regard the report is to include all details relevant to this clause and must state that "The site is suitable (or can be made suitable) for the development and that the site and the development proposal can achieve the Acceptable Risk Management required by this Policy provided that.....".

The proposed driveway crossing must include long sections from the invert of the gutter to the proposed garage on both sides. The sections are to include proposed and existing levels and the profile is to be in accordance with Council's standard drawing A4/3330/6 MH which can be found on Council's website.

Development Engineers cannot support the application due to insufficient information to address clauses B3, B5 and B6 of Pittwater DCP.

### Amended plans and information submitted 8/6/21 and 11/6/21

The revised Geotechnical report addresses the relevant DCP controls. The submitted stormwater plan is satisfactory. The driveway grades have been assessed and are satisfactory using Council's maximum high profile.

No objection 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 Statiker dated 7 June 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 Certifying Authority prior to the issue of the Construction Certificate.

Reason: To ensure geotechnical risk is mitigated appropriately.

**Traffic Management and Control**

The Applicant is to submit an application for Traffic Management 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 Policy, and generally in accordance with the concept drainage plans prepared by Statiker, drawing number SW-00, 01 and 02 Rev 1, dated 04.06.2021. Detailed drainage plans are to be prepared by a suitably qualified Civil Engineer, who has membership to the Institution of Engineers Australia, National Engineers Register (NER) and registered in the General Area of Practice for civil engineering.

The drainage plans must address the following:

1. An access grate at each corner of the tank is to be provided for future maintenance.
2. An equivalent area to the increase in impervious area is to be directed to the OSD tank.
3. The existing outlet to the kerb is to be maintained.
4. All other stormwater collected from the existing site drainage system is to be connected to the outlet pipe from the site.

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.

### **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.

### **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.

## **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.

### **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 metres wide in accordance with Northern Beaches Council Drawing No A4-3330/6 MH 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 kerb and 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 Council. The application shall 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) and Hydraulic Engineers' certification.

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 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 lodgment 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 over the on-site storm water disposal structures is to be submitted.

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

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

### **Retaining walls in Road Reserve**

Any retaining wall works in the road reserve shall be certified as compliant with all relevant Australian Standards and Codes by a Structural Engineer. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of the Occupation Certificate.

Reason: Public and Private Safety

### **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.