

## Engineering Referral Response

<b>Application Number:</b>	DA2019/0394
<b>To:</b>	Claire Ryan
<b>Land to be developed (Address):</b>	Lot 1 DP 202857 , 7 Trentwood Park AVALON BEACH NSW 2107

### 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 proposal to construct a dwelling on a proposed lot of a recently approved subdivision has been assessed and the following comments apply.

#### Stormwater

The submitted hydraulic plan has not included the calculation of any bypass flows that are not connected into the proposed on-site stormwater detention (OSD) system. As a result it is anticipated that the flows in the 1 in 100 year storm event are likely to exceed the allowable discharge of 30 litres per second to the kerb for the entire site. As such it is considered that the applicant's Hydraulic Engineer must submit a revised stormwater design to connect to Council's piped drainage system in Trentwood Park. The proposed OSD tank may need to be re-positioned to accommodate this requirement.

#### Access

The proposed driveway access to the property does not permit vehicles to enter and exit in a forward direction which is unacceptable due to the length and grade of the driveway.

#### Geotechnical Report

The submitted Geotechnical report addresses the relevant DCP controls.

Development Engineers cannot support the application due to insufficient information to address clauses B5 and B6 of Pittwater 21 DCP 2014.

### Additional Information received 28/06/2019 and 30/08/2019

The amended stormwater plan submitted for the proposed subdivision of proposed lot 2 into 2 lots indicates a connection of drainage from the site to the existing piped drainage system in Trentwood Park. The submitted drainage plan for this application relies upon this connection once the subdivision has been created and as such is considered acceptable.

The traffic report for the reversing of vehicles from the site is also acceptable.

Provided that this approval is deferred subject to the creation of the lot, no objection to approval, subject to conditions as recommended.

### **Referral Body Recommendation**

Recommended for approval, subject to conditions

### **Refusal comments**

### **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 White Geotechnical Group report number J1457A dated 31 January 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 Certifying Authority prior to the issue of the Construction Certificate.

Reason: To ensure geotechnical risk is mitigated appropriately.

### **On-site Stormwater Detention Compliance**

Drainage plans detailing the provision of On-site Stormwater Detention in accordance with Northern Beaches Council's Pittwater 21 DCP 2014 Clause B5.7 and the concept drawing by Barrenjoey Consulting Engineers Pty Ltd, drawing number 171001L1 SW1 Issue DAprelimB dated 24/06/2019. Details demonstrating compliance are to be submitted to the Certifying Authority for approval 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**

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 Council's Minor Works Policy. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior

to the issue of the Construction Certificate.

Reason: To ensure suitable vehicular access to private property

### **Shoring of Adjoining Property**

Should the proposal require shoring to support an adjoining property or Council land, owner's consent for the encroachment onto the affected property owner shall be provided with the engineering drawings.

Council approval is required if temporary ground anchors are to be used within Council land. A Temporary Ground Anchors (Road Reserve) Application is to be submitted with Council for assessment and approval subject to Council's Fees and Charges. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of the Construction Certificate

Reason: To ensure that owners consent is obtained for ancillary works, and to ensure the protection of adjoining properties and Council land.

## **CONDITIONS TO BE COMPLIED WITH DURING DEMOLITION AND BUILDING WORK**

### **Maintenance of Road Reserve**

The public footways and roadways adjacent to the site shall be maintained in a safe condition at all times during the course of the work.

Reason: Public Safety.

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

### **Authorisation of Legal Documentation Required for Onsite Detention**

The original completed request forms (NSW Land Registry standard forms 13PC and/or 13RPA) must be submitted to Council, with a copy of the Works-as-Executed plan (details overdrawn on a copy of the approved drainage plan), hydraulic engineers certification and Compliance Certificate issued by an Accredited Certifier in Civil Works. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of any interim / final Occupation Certificate.

Reason: To create encumbrances on the land.

### **Registration of Encumbrances for On-site Stormwater Detention**

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 any interim / final Occupation Certificate.

Reason: To identify encumbrances on land.

### **Positive Covenant and Restriction as to User for On-site Stormwater Detention**

A positive covenant shall be created on the title of the land requiring the proprietor of the land to maintain the on-site stormwater detention structure in accordance with the standard requirements of Council. The terms of the positive covenant 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 NSW Land Registry Services. Northern Beaches Council shall be nominated as the party to release,

vary or modify such covenant.

A restriction as to user shall be created on the title over the on-site stormwater detention system, restricting any alteration to the levels and/or any construction on the land. The terms of such restriction are to be prepared to Council's standard requirements at the applicant's expense and endorsed by Council prior to lodgement with NSW Land Registry Services. Northern Beaches Council shall be nominated as the party to release, vary or modify such restriction.

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

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

**Geotechnical Certification Prior to Occupation Certificate**

Prior to issue of the Occupation Certificate, Form 3 of the Geotechnical Risk Management Policy is to be completed and submitted to the Principal Certifying Authority.

Reason: To ensure geotechnical risk is mitigated appropriately.