

## Engineering Referral Response

<b>Application Number:</b>	DA2023/0885
<b>Proposed Development:</b>	Alterations and additions to a dwelling house
<b>Date:</b>	18/10/2023
<b>To:</b>	Stephanie Gelder
<b>Land to be developed (Address):</b>	Lot 1 DP 214956 , 30 Herbert Avenue NEWPORT NSW 2106

### 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 is on a low level property which cannot drain to the street. The stormwater management plans provide for an on site detention system and a level spreader. The design appears acceptable, however as per Appendix 2 of Council's *Water Management for Development Policy Version 2, 26 February 2021*, the applicant is required to seek a drainage easement through downstream properties before Council will accept an absorption system or OSD/ level spreader design. The owner/ applicant is required to contact the owners of No. 5, 7, 9 & 11 Elvina Avenue and obtain an easement through one of these properties. The owners of these properties need to be presented with the Appendix 2 form and either accept or decline the request. Evidence needs to be provided to Council. If a downstream owner agrees to a drainage easement, the Atlantis cell spreader system will not be required and stormwater can be discharged from the on-site detention system through the drainage easement.

### Engineering Comments 18.10.23

Easement refusal evidence from downstream property owners has been provided. I have no objections to the proposed development.

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

#### 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 **istruct consulting engineers**, project number **220603**, dated **03.07.2023**. Detailed drainage plans are to be prepared by a suitably qualified Civil Engineer, who has membership to Engineers Australia, National Engineers Register (NER) or Professionals Australia (RPENG) and registered in the General Area of Practice for civil engineering.

The drainage plans must address the following:

- i. Design of an on-site detention system with a minimum volume of 11 m<sup>3</sup> attenuating flows from the entire dwelling roof area and other impervious areas. Impervious area by-pass of the on-site detention system shall not exceed 5 m<sup>2</sup>.
- ii. Discharge from the on-site detention system shall be controlled using a 51 mm diameter orifice.
- ii. Stormwater discharge from the on-site detention system shall be dispersed using a minimum 5 metre long level spreader/ absorption system.

Detailed drainage plans, including engineering certification, are to be submitted to the Certifier for approval 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 in accordance with AS/NZS 3500 and Council's Water Management for Development Policy, prepared by an appropriately qualified and practicing Civil or Hydraulic Engineer who has membership to Engineers Australia, National Engineers Register (NER) or Professionals Australia (RPENG), 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 **an on-site detention system and level spreader/ absorption system**.

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

Reason: To ensure appropriate provision for disposal of 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 **Ascentgeo geotechnical consulting** dated **01.03.2023** 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.

## 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.

### **Property Boundary Levels**

The Applicant is to maintain the property boundary levels. No approval is granted for any change to existing property alignment levels to accommodate the development.

Details demonstrating compliance are to be submitted to the Principal Certifier.

Reason: To maintain the existing profile of the nature strip/road reserve.

## 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 Codes by a suitably qualified person. Details demonstrating compliance are to be submitted to the Principal Certifier prior to the issue of an Occupation Certificate.

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

### **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), and Civil 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 and level spreader/ absorption system as to user is to be submitted.

Details demonstrating compliance are to be submitted to the Principal Certifier prior to the issue of an Occupation Certificate.

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

### **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.