

## Engineering Referral Response

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|----------------------------------------|---------------------------------------------------------------------|
| <b>Application Number:</b>             | DA2024/0362                                                         |
| <b>Proposed Development:</b>           | Construction of a garage, driveway, inclinator and associated works |
| <b>Date:</b>                           | 02/07/2024                                                          |
| <b>To:</b>                             | Megan Surtees                                                       |
| <b>Land to be developed (Address):</b> | Lot 113 DP 6937 , 91 Florida Road PALM BEACH NSW 2108               |

### 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

#### 02/07/2024:

Stormwater Plans with provision of an underground stormwater detention tank and further its connection to Council pit are provided and are satisfactory.

#### 23/05/2024:

Development Application is for carparking arrangement, underground garage with access steps and an inclinator off Florida Road.

#### Access

New 5m wide vehicle crossing and new stonewall works to match with existing wall off Florida Road are proposed. these works will be assessed under S138A Application-Infrastructure works on Council Roadway. No objections to these works.

#### Stormwater

Provided Statement of Environmental Effects report states that, there is an existing concealed on-site stormwater detention (OSD) system which is larger than required and facilitates the existing house and addition.

Existing OSD system is located closer to main dwelling at higher level and can not be connected to proposed garage and driveway which are proposed at bottom of lot.

Proposed hardstand is greater than 60sqm, according to Council's Water Management for Development Policy, detention system is required.

Stormwater plans showing details of On-site stormwater detention system discharging to existing connection in Florida Road are to be provided.

OSD to be provided in accordance with Clause 9.0 of Council's Water Management for Development Policy. All discharge control devices and pits are to be located externally to all structures and buildings so that 24-hour access to the OSD system is possible and that overflows from the system can be safely directed away.

#### **Geotech**

Area where garage and driveway are proposed is not mapped on Geotechnical Hazard map. Excavations nearly 4m deep are proposed and Geotech report by Alliance Geotechnical & Environmental Solutions, Report No.: 17640-GR-1-1, Dated 14th Feb 2024 with form 1 and 1A is 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:**

### **FEES / CHARGES / CONTRIBUTIONS**

#### **Construction, Excavation and Associated Works Security Bond(s)**

The applicant is to lodge a bond with Council for the following:

#### **Drainage Works**

As security against any damage or failure to complete the construction of stormwater drainage works required as part of this consent a bond of \$2000.

Reason: Protection of Council's infrastructure.

### **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 Woolacotts Consulting Engineers, Job NO 24-205, Drawing Numbers SW1 (Issue C, Dated 24/06/2024), SW2 (Issue B, Dated 21/06/2024) , ES1 (Issue D, Dated 25/06/2024). 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. OSD to be provided in accordance with Clause 9.0 of Council's Water Management for Development Policy.
- ii. All discharge control devices and pits are to be located externally to all structures and buildings so that 24-hour access to the OSD system is possible and that overflows from the system can be safely directed away.

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.

### **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 Alliance Geotechnical & Environmental Solutions, Report No.: 17640-GR-1-1, Dated 14th Feb 2024 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.

### **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 copy of Civil Engineering plans for the design of the vehicular crossing and associated retaining structure in Florida Road, 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) Engineering details for the vehicle crossing to be prepared by a qualified practicing Civil Engineer with corporate membership of the Institute of Engineers Australia (M.I.E) and has appropriate experience and competence in the related field.
- 2) Engineering details for the retaining structure to be prepared by a qualified practicing Structural Engineer with corporate membership of the Institute of Engineers Australia (M.I.E) and has appropriate experience and competence in the related field.
- 3) Vehicle crossing to be 5 metres wide at the kerb and the driveway profile to be in accordance with Northern Beaches Council's standard vehicle crossing profile.
- 4) Engineers design certificate for the design of the driveway and any supporting retaining structure.
- 5) At a minimum, the drawings must show the works in plan view, longitudinal section, details at a relevant scale including all existing levels, any existing services/ infrastructure to be retained in the area of works.
- 6) Longitudinal section of driveway from street gutter invert to parking space within site with existing and proposed levels and grades.
- 7) All driveways gradients and safe sight distances etc. shall be designed comply with AS 2890.1:2004 (Off-street Parking Standards).
- 8) Existing services plan to be provided and any adjustment to existing services are to be approved by the relevant service authority with all costs associated borne by the applicant

- 9) Driveway crossing to permit minimum 2.0m clear pedestrian passage from kerb.
- 10) Provision of any stormwater grate on the public road reserve is not permitted.
- 11) Form 2 of the Geotechnical Risk Management Policy for Pittwater (Appendix 5 of P21 DCP) is to be completed and submitted.
- 12) Details of provisions of Physical controls as per Australian/New Zealand Standard AS/NZS 2890.1:2004 parking facilities - Off-street car parking, in particular Section 2.4.5
- 13) Details of rectification works to existing stone rubble wall.
- 14) 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.
- 15) Vehicular layback to be re-constructed.

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

### **Stormwater Drainage Application**

The applicant is to provide a stormwater drainage application under Section 68 of the Local Government Act 1993 to Council for approval. The submission is to include Civil Engineering plans for the design of the site stormwater connection to Council pit along frontage of site in Florida Road, which are to be generally in accordance with the civil design approved with the Development Application and Council's specification for engineering works - AUS-SPEC #1. The form can be found on Council's website at [www.northernbeaches.nsw.gov.au](http://www.northernbeaches.nsw.gov.au) > Council Forms > Stormwater Drainage Application Form.

The fee associated with the assessment and approval of the application is to be in accordance with Council's Fees and Charges. Details demonstrating compliance are to be submitted to the Principal Certifier prior to the issue of the Construction Certificate.

Reason: To ensure appropriate provision for disposal and maintenance stormwater management and compliance with the BASIX requirements, arising from the development.

### **Pre-Construction Stormwater Assets Dilapidation Report**

The Applicant is to submit a pre-construction / demolition Dilapidation Survey of Council's Stormwater Assets prepared by a suitably qualified person in accordance with Council's Guidelines for Preparing a Dilapidation Survey of Council Stormwater Asset, to record the existing condition of the asset prior to the commencement of works. Council's Guidelines are available at: <https://files.northernbeaches.nsw.gov.au/sites/default/files/documents/general-information/engineering-specifications/2009084729guidelineforpreparingadilapidationsurveyofcouncilstormwaterassets2.pdf>

The pre-construction / demolition Dilapidation Report must be submitted to Council for approval and the Principal Certifier prior to the issue of the Construction Certificate.

Reason: Protection of Council's infrastructure.

## 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.

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

### Post- Construction Stormwater Assets Dilapidation Report (Council stormwater assets)

The Applicant shall submit a post-construction Dilapidation Survey of Council's Stormwater Assets is to be prepared by a suitably qualified person in accordance with Council's Guidelines for Preparing a Dilapidation Survey of Council Stormwater Asset in order to determine if the asset has been damaged by the works. Council's Guidelines are available at <https://files.northernbeaches.nsw.gov.au/sites/default/files/documents/general-information/engineering-specifications/preparingdilapidationsurveyforcouncilstormwaterassets.pdf>

The post-construction / demolition dilapidation report must be submitted to Council for review and approval. Any damage to Council's stormwater infrastructure is to be rectified prior to the release of any Drainage security bonds. Council's acceptance of the Dilapidation Survey is to be submitted to the Principal Certifier prior to the issue of the Occupation Certificate.

Reason: Protection of Council's infrastructure.

### 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 by a registered surveyor), 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 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.