

## Engineering Referral Response

<b>Application Number:</b>	DA2019/1363
<b>To:</b>	Penny Wood
<b>Land to be developed (Address):</b>	Lot 2 DP 1082108 , 24 A Hay Street COLLAROY NSW 2097

### 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 applicant proposed a new driveway crossing and garage on Bedford Crescent.

The proposed driveway will be built on Council's road embankment.

In general, the driveway shall be a self supported structure which does not add any additional load on the existing embankment.

Also, an additional geotechnical information shall be required on the embankment before any commencement of work.

Development Engineering has no objection to the application subject to the conditions of consent. However, the application may be sent to Transport & Civil Infrastructure Assets for assessment.

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 (Crossing / Kerb)

The applicant is to lodge a Bond of \$ 20000 as security against any damage or failure to complete the construction of any vehicular crossings, kerb and gutter, any footpath works and removal of any

redundant driveways required 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**

### **Stormwater Disposal**

The applicant is to demonstrate how stormwater from the new development within this consent is disposed of to an existing approved system or in accordance with Northern Beaches Council's WARRINGAH WATER MANAGEMENT POLICY PL850.

Details by an appropriately qualified and practicing Civil Engineer demonstrating that the existing approved stormwater system can accommodate the additional flows, or compliance with the Council's specification are to be submitted to the Certifying Authority for approval prior to the issue of the Construction Certificate.

Reason: To ensure appropriate provision for disposal and stormwater management arising from 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 driveway and retaining structure 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:

- The width and location of the access driveway at Bedford Crescent must be designed in accordance with section 3.2 of Australian/New Zealand Standard AS/NZS 2890.1:2004 Parking facilities - Off-street car parking.
- A turning path is to be submitted to demonstrate the accessibility from Bedford crescent to the access driveway.
- Safety devices must be installed on the proposed driveway.
- No load bearing on the existing wall from the proposed slab/ structure. Alternative, the design must either replace existing retaining wall to maintain support of road or reinforce existing wall to extend life (100 years)
- The crossing slab between the kerb and gutter and the existing retaining wall must be on ground slab
- The design must demonstrate that the kerb and gutter system along Bedford crescent has sufficient capacity to cater for the 1 in 20 year ARI stormwater event. The proposed driveway layback and vehicle crossing in Bedford Crescent does retain the gutter flow within the road carriageway.

The application is to include a geotechnical report that is prepared by an appropriately qualified Geotechnical Engineer to assess the existing retaining wall and the related area between the retaining

to the property boundary along Bedford Crescent. The report must include:

- a full assessment of the existing retaining wall including the stability assessment of the wall
- a proposal either to replace the existing sandstone wall to maintain support for road or reinforce the existing wall to extend the design life to 100 years. Any structural design must be prepared by a qualified structural engineer.
- the proposed excavation, including any recommendations for shoring works that may be required to ensure the stability of the excavation
- the provision of appropriate protection for the retaining wall during and after completion of construction works.

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.

### **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.

### **Pre-commencement Dilapidation Report**

The applicant must prepare and submit a pre-commencement dilapidation report providing an accurate record of the existing condition of adjoining public property and public infrastructure (including roads, gutter, footpaths, etc). A copy of the report must be provided to Council, any other owners of public infrastructure and the owners of adjoining and affected private properties.

The pre-construction / demolition dilapidation report must be submitted to Council for written approval and the written approval is then to be submitted to the Certifying Authority prior to the issue of the any Construction Certificate and the commencement of any works including demolition.

Reason: Protection of Council's Infrastructure during construction.

## **CONDITIONS THAT MUST BE ADDRESSED PRIOR TO ANY COMMENCEMENT**

### **Public Liability Insurance - Works on Public Land**

Any person or contractor undertaking works on public land must take out Public Risk Insurance with a minimum cover of \$20 million in relation to the occupation of, and approved works within Council's road

reserve or public land, as approved in this consent. The Policy is to note, and provide protection for Northern Beaches Council, as an interested party and a copy of the Policy must be submitted to Council prior to commencement of the works. The Policy must be valid for the entire period that the works are being undertaken on public land.

Reason: To ensure the community is protected from the cost of any claim for damages arising from works on public land.

## **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 and construction certificate 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 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 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 5 metres wide in accordance with Northern Beaches Council Drawing No A4-3330/3 NL 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**

### **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 Certifying Authority prior to the issue of any interim / final Occupation Certificate.

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

**Post-Construction Road Reserve Dilapidation Report**

The applicant must bear the cost of all restoration works to Council's road, footpath and drainage assets damaged during the course of this development.

A Post Construction Dilapidation Report after the completion of all building works is to demonstrate that there is no damage to Council infrastructure prior to the refund of any security deposits.

Reason: To ensure security against possible damage to Council property.

**Certification Elevated Parking Facility Work**

The Applicant shall submit a Structural Engineers' certificate certifying that the elevated parking facility was constructed in accordance within this development consent and the provisions of Australian/New Zealand Standard AS/NZS 2890.1:2004 parking facilities - Off-street car parking, in particular 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.