

## Engineering Referral Response

<b>Application Number:</b>	Mod2023/0211
<b>Proposed Development:</b>	Modification of Development Consent DA2019/0916 granted for Demolition works and construction of a dwelling house including swimming pools
<b>Date:</b>	15/09/2023
<b>To:</b>	Maxwell Duncan
<b>Land to be developed (Address):</b>	Lot 28 DP 8075 , 32 Bower Street MANLY NSW 2095

### 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

Council is not supportive of the proposed method of stormwater discharge for the following reasons:

1. The proposed discharge point is in a prominent area with high pedestrian and recreational traffic and the design will be pose a safety hazard to the public.
2. Visual pollution of the proposal.
3. Proposal does not address scour issues.

Council advice is as follows:

A. The applicant has the option to connect to an existing Council pipe or culvert. Advice from Councils Stormwater Operations & Planning section indicates that the 900 RCP that is assumed to be on the public walkway below 32 Bower Street diverts on to the beach to avoid hard sandstone. This will rule out connection to the pipe as Council will not accept pipe connections on the beach. The applicant may if they wish undertake investigation works at their expense to confirm the location of the pipe. If the proposed private pipe could connect to the 900 pipe, this would be acceptable to Council.

B The applicant has the option to connect to Council Asset SPC40030 (Culvert). This option would require a sub-surface connection with a geotechnical study and detailed design.

C. If the applicant cannot connect to a pipe system, Councils Low Level Property requirements come into effect. This would require an on-site detention system and a Level Spreader. Please refer to Councils Water Management for Development Policy Version 2 26 February 2021. The requirements for a Level Spreader are shown in Appendix 4. Council would be supportive of this measure subject to a detailed and compliant design.

### **Engineering Comments 03.09.2023**

The applicant has chosen to connect to Councils 900 RCP. This is acceptable subject to detailed design and a Section 138 application. I have no further objections to the proposed development subject to the addition of the specified extra conditions and the removal of Condition of Consent No. 8 (Stormwater Disposal). All other engineering conditions of consent should be retained.

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 \$40,000.

#### **Crossing / Kerb & Gutter / Footpath Works**

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 a bond of \$20,000.

Reason: Protection of Council's infrastructure.

## **CONDITIONS TO BE SATISFIED 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 Council's stormwater pipe.

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.

### **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 Civil Engineering plans for the design of **private pipe connection from property to Council's stormwater infrastructure (900 RCP)** which are to be generally in accordance with the Council's specification for engineering works - AUS-SPEC #1. The plans shall be prepared by a qualified Civil Engineer. The design must include the following information:

1. Provide longitudinal section with all proposed invert levels and ground levels for proposed 300 mm pipe connection from Pit 18 to Council's 900 RCP.
2. Council does not support direct connection to its stormwater pipes for connecting pipes larger than 150 mm diameter. The connection shall be made using a junction pit.
3. Provide detailed design of proposed junction pit in accordance with Council's Standard Drawings, Drawing No. S1006. Use a solid cover.
4. The private connection to Council's 900 RCP shall be as far downstream as possible (90 degree connection) given site restraints. The connection shall be made under a paved surface and not on the beach sand.
5. The pipe connection to the proposed pit shall be as high as possible to limit hydraulic losses and subject to minimum cover requirements of Location 2 (a) (ii) (B) brick or unreinforced concrete for light vehicular loading of AS/NZS 3500.3:2003 or as amended.

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 Principal Certifier prior to the issue of the Construction Certificate

Reason: To ensure engineering works are constructed in accordance with relevant standards and Council's specification.

### **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.

### **Pre-Commencement Dilapidation Report**

The applicant must prepare and submit a 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 dilapidation report must be submitted to Council for written approval and the written approval is then to be submitted to the Certifier 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 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 Certifying Authority prior to the issue of the Occupation Certificate.

Reason: Protection of Council's infrastructure.

### **Certification of Civil Works and Works as Executed Data in accordance with Road Act Approval**

The Applicant shall submit a certification by a suitably qualified Civil Engineer, who has membership to Engineers Australia, National Engineers Register (NER) or Professionals Australia (RPENG) that the completed works have been constructed in accordance with this consent and the approved Section 138 and/or Construction Certificate plans. Works as Executed data certified by a registered surveyor in relation to boundaries and/or relevant easements, prepared in accordance with Council's 'Guideline for preparing Works as Executed data for Council Assets' in an approved format shall be submitted to the Principal Certifier for approval prior to the issue of the Occupation Certificate.

Reason: To ensure compliance of works with Council's specification for engineering works.