

Water Management Referral Response

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| Application Number: | DA2017/1294 |
| To: | Adam Mitchell |
| Land to be developed (Address): | Lot A DP 356986 , 9 Lawrence Street FRESHWATER NSW 2096 Lot CP SP 1172 , 15 Lawrence Street FRESHWATER NSW 2096 |

Reasons for referral

Council's Water Management Officers are required to consider the likely impacts.

Officer comments

No objection to approval subject to conditions as recommended, on the basis that the Development Engineers are satisfied with the proposed dual use of the bioretention/onsite detention basin. Should the design change, these referral comments may no longer be valid and as such a new referral required.

Referral Body Recommendation

Recommended for approval, subject to conditions

Refusal comments

Recommended Water Management Conditions:

DEVELOPMENT CONSENT OPERATIONAL CONDITIONS

Temporary Dewatering

Discharge from the sediment basin must achieve the following water quality targets in addition to any conditions/documentation of this consent and legislation including Protection of The Environment Operations Act 1997.

| Parameter | Criterion | Method | Time Prior to Discharge |
|------------------------------|--------------|-----------------------------------|-------------------------|
| Oil and grease | None visible | Visual inspection | <1 hour |
| pH | 6.5- 8.5 | Probe/meter | <1 hour |
| Total Suspended Solids (TSS) | <50mg/L | Meter/grab sample measured as NTU | <1 hour |

Note: The correlation between NTU and TSS must be established by a NATA accredited laboratory prior to the commencement of dewatering activities.

Dewatering must not occur until the above water quality parameters are met.

All records of water discharges and monitoring results are to be documented and kept on site. Copies of all records shall be provided to the appropriate regulatory authority, including Council, upon request.

Tailwater must be discharged to a stormwater pit and not spread over any road, footpath and the like.

Reason: Protection of the receiving environment

CONDITIONS TO BE SATISFIED PRIOR TO THE ISSUE OF THE CONSTRUCTION CERTIFICATE

Detailed Design of Stormwater Quality System

A certificate from a Civil Engineer, stating that the stormwater quality management system has been designed in accordance with the Civil & Stormwater Service Plans prepared by AJ Whipps Consulting Group dated December 2017 and the Council's Water Management Policy.

The certificate shall be submitted to the Principal Certifying Authority prior to the release of the Construction Certificate.

Reason:

Reason: Protection of the receiving environment

CONDITIONS TO BE COMPLIED WITH DURING DEMOLITION AND BUILDING WORK

Installation and Maintenance of Sediment and Erosion Control

Sediment and erosion controls must be installed in accordance with Landcom's 'Managing Urban Stormwater: Soils and Construction' (2004) and the Erosion and Sediment Control Plan prepared by Civil & Stormwater Service Plans prepared by AJ Whipps Consulting Group dated December 2017.

Erosion and sediment controls are to be adequately maintained and monitored at all times, particularly after periods of rain, and shall remain in proper operation until all development activities have been completed and the site is sufficiently stabilised with vegetation.

Reason: To protect the surrounding environment from the effects of sedimentation and erosion from the site

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

Stormwater Quality Operation and Maintenance Plan

An Operation and Maintenance Plan is to be prepared to ensure proposed stormwater quality system remain effective.

The Plan must contain the following:

- a) Maintenance schedule of all stormwater quality treatment devices
- b) Identification of maintenance and management responsibilities
- c) Maintenance requirements for establishment period
- d) Routine maintenance requirements
- e) Inspection and maintenance record and reporting
- f) Funding arrangements for the maintenance of all stormwater quality treatment devices
- g) Vegetation species list associated with each type of vegetated stormwater treatment device
- h) Waste management and disposal

- i) Traffic control measures (if required)
- j) Maintenance and emergency contact information
- k) Renewal, decommissioning and replacement timelines and activities of all stormwater quality treatment devices
- l) Work Health and Safety requirements

Details demonstrating compliance shall be submitted to the Principal Certifying Authority prior to the release of the Occupation Certificate.

Reason: Protection of the receiving environment

Works as Executed Drawings - Stormwater Quality System

Works as Executed Drawings for the stormwater quality system must be prepared in accordance with Council's Guideline for Preparing Works as Executed Data for Council Stormwater Assets.

The drawings shall be submitted to the Principal Certifying Authority prior to the release of the Occupation Certificate.

Reason: Protection of the receiving environment

Installation of Rainwater Tanks

Rainwater tanks shall comply with the following:

1. Be fitted with a first-flush device that causes initial rainwater run-off to bypass the tank and must drain to a landscaped area. The first flush device will not be permitted to connect to the stormwater system
2. Have a sign affixed to the tank stating the contents is rainwater
3. Be constructed or installed in a manner that prevents mosquitoes breeding, such as the use of mesh to protect inlets and overflows
4. Have its overflow connected to an existing stormwater drainage system that does not discharge to an adjoining property, or cause a nuisance to adjoining owners
5. Pumping equipment must be housed in a soundproof enclosure
6. Where the rainwater tank is interconnected to a reticulated water supply, it must be installed in accordance with Plumbing Code of Australia, particularly backflow/cross connection prevention requirements.

A certificate from a licenced plumber shall be submitted to the Principal Certifying Authority prior to the release of the Occupation Certificate.

Reason: To conserve potable water

Installation of Water Efficient Fittings

The following Water Efficiency Labelling and Standards (WELS) Scheme rated fittings must be installed:

- i. 4 star dual-flush toilets
- ii. 3 star showerheads
- iii. 4 star taps (for all taps other than bath outlets and garden taps)
- iv. 3 star urinals

- v. 3.5 star washing machines
- vi. 4 star dishwashers.

A certificate from a licenced plumber shall be submitted to the Principal Certifying Authority prior to the release of the Occupation Certificate demonstrating compliance with this condition.

Reason: To conserve potable water

Certification for the Installation of Stormwater Quality System

A certificate from a Civil Engineer, who has membership to the Institution of Engineers Australia, National Professional Engineers Register (NER) shall be submitted to the Principal Certifying Authority prior to the release of the Occupation Certificate, stating that the stormwater quality management system has been installed in accordance with the (Insert Plans) and Council's Water Management Policy.

The certificate shall be submitted to the Principal Certifying Authority prior to the release of the Construction Certificate.

Reason: Protection of the receiving environment

Positive Covenant for Stormwater Quality System

A positive covenant shall be created on the title of the land requiring the proprietor of the land to maintain the stormwater quality system in accordance with the standard requirements of Council, the manufacturer and as required by the Stormwater Quality Operation and Maintenance Plan.

The terms of the positive covenant are to be prepared to Council's standard requirements, (available from Council), at the applicant's expense and endorsed by the Northern Beaches Council's delegate prior to lodgement with the Department of Lands. The Northern Beaches Council shall be nominated as the party to release, vary or modify such covenant.

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 ongoing maintenance of the on-site stormwater detention system

Registration of Encumbrances for Stormwater Quality System

A copy of the certificate of title demonstrating the creation of the positive covenant and restriction for stormwater quality system 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

Restriction as to User for Stormwater Quality System

A restriction as to user shall be created on the title over the stormwater quality system, restricting any alteration to system. The terms of such restriction are to be prepared to Council's standard

requirements, (available from Northern Beaches Council), at the applicant's expense and endorsed by Council prior to lodgement with the Department of Lands. 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 modification to the on-site stormwater detention structure is not carried without Council's approval

ON-GOING CONDITIONS THAT MUST BE COMPLIED WITH AT ALL TIMES

Maintenance of Stormwater Quality System

The stormwater quality system must be maintained at all times in accordance with the Stormwater Quality Operation and Maintenance Plan, manufacturers specifications and as necessary to achieve the required stormwater quality targets for the development.

Reason: Protection of the receiving environment