

Water Management Referral Response

Application Number:	DA2018/1514
To:	Luke Perry
Land to be developed (Address):	Lot 100 DP 1015283 , 145 Old Pittwater Road BROOKVALE NSW 2100

Reasons for referral

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

Officer comments

The MUSIC Model results show that Total Phosphorous is approx. 5% below the required target. However, it is considered the targets can be achieved through a minor amendment via conditions of consent.

No objection to the proposed development subject to conditions.

Referral Body Recommendation

Recommended for approval, subject to conditions

Refusal comments

Recommended Water Management Conditions:

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

Detailed Design of Stormwater Quality System

The Stormwater Management Report prepared by Cardno dated 17 August 2018, Concept Civil Design Project Reference D11754 and associated MUSIC Model must be updated to achieve the General Stormwater Quality Requirements in Table 4 of the Council's Water Management Policy.

A certificate from a Civil Engineer, stating that the stormwater quality management system has been designed in accordance with the approved plans and as modified by this condition of consent.

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

Reason: Protection of the receiving environment

Soil and Water Management Plan

A Soil and Water Management Plan (SWMP) shall be prepared by a suitably qualified Civil Engineer, who has membership to the Institution of Engineers Australia, National Professional Engineers Register (NPER-3) and implemented onsite prior to commencement. The SWMP must meet the requirements outlined in the Landcom publication Managing Urban Stormwater: Soils and Construction - Volume 1,
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4th Edition (2004) and Council's Water Management Policy. The SWMP must include the following as a minimum:-

- Site boundaries and contours;
- Vehicle access points, proposed roads and other impervious areas (e.g. parking areas and site facilities)
- Location of all drains, pits, downpipes and waterways on and nearby the site;
- Planned stages of excavation, site disturbance and building;
- Stormwater management and discharge points;
- Integration with onsite detention/infiltration;
- Sediment control basin locations and volume (if proposed);
- Proposed erosion and sediment controls and their locations;
- Location of washdown and stockpile areas including covering materials and methods;
- Vegetation management including removal and revegetation;
- A schedule and programme of the sequence of the sediment and erosion control works or devices to be installed and maintained.
- Inspection and maintenance program;
- North point and scale.

All Site drainage and sediment and erosion control works and measures as described in the SWMP, and any other pollution controls, as required by these conditions, shall be implemented prior to commencement of any other works at the Site.

Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of the Construction Certificate.

Reason: To promote the long-term sustainability of ecosystem functions.

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 Stormwater Management Report prepared by Cardno dated 17 August 2018, Concept Civil Design Project Reference D11754.

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.

Dewatering Management

Discharge of tailwater must not occur until the above water quality parameters are met.

Parameter	Criterion	Method	Time Prior to Discharge
Oil and grease	No visible	Visual inspection	<1 hour
pH	6.5- 8.5	Probe/meter	<1 hour
Total Suspended	<50mg/L	Meter/grab sample	<1 hour

Solids (TSS)		measures as NTU	
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NOTE: The correlation between NTU and TSS must be established by a NATA accredited laboratory prior to the commencement of dewatering activities.

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 the nearest stormwater pit in accordance with Council's Auspec1 Design Manual and must not spread over any road, footpath and the like. Discharge to the kerb and gutter will not be accepted.

Reason: Protection of the receiving environment.

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

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 (NPER-3) 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 Stormwater Management Report prepared by Cardno dated 17 August 2018, Concept Civil Design Project Reference D11754.

The certificate shall be submitted to the Principal Certifying Authority prior to the release of the Occupation 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 NSW Land Registry Services. 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.

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 Water Efficient Fittings

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

installed:

- a) 4 star dual-flush toilets
- b) 3 star showerheads
- c) 4 star taps (for all taps other than bath outlets and garden taps)
- d) 3 star urinals
- e) 3.5 star washing machines
- f) 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.

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, manufacturer's specifications and as necessary to achieve the required stormwater quality targets for the development.

Reason: Protection of the receiving environment.