

## Water Management Referral Response

<b>Application Number:</b>	DA2019/0239
<b>To:</b>	Daniel Milliken
<b>Land to be developed (Address):</b>	Lot 1 DP 1001963 , 638 Pittwater Road BROOKVALE NSW 2100

### Reasons for referral

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

### Officer comments

This application was assessed under  
Warringah DCP 2011 C4 – Stormwater  
Warringah DCP 2011 C5 – Erosion and Sedimentation  
Warringah Council PL 850 Water Management Policy

#### Stormwater

The applicant has included adequate stormwater quality treatment for the site. An operation and maintenance plan must be provided and attached to the positive covenant. Conditions apply.

#### Sediment

An appropriate soil and water management plan has been provided. Sediment and erosion controls must be established before any demolition on the site and maintained until all work is complete.

#### Groundwater

The site is located over the coastal sands aquifer "Manly Coastal Sands", which is located in an area of moderately high vulnerability, being a significant source of water to both Curl Curl and Manly Lagoon catchments.

General Terms of Approval have been provided by WaterNSW, and these must be complied with. A dewatering permit must be obtained from Northern Beaches Council prior to any dewatering of groundwater from the site, as this must be included with the application to WaterNSW. The application must include a dewatering management plan that addresses flow rates and water quality monitoring and treatment. Water discharges are only to the stormwater system and must be managed in a way that does not overwhelm the capacity of the local stormwater system. Conditions apply.

Ongoing discharges from this development are not permitted. The basement must be tanked as designed.

### 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**

A certificate from a Civil Engineer, stating that the stormwater quality management system has been designed in accordance with the Stormwater Plans Rev C (Oct 2019) by Alpha Engineering and Development and the Council's Water Management Policy.

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

Reason: Protection of the receiving environment

## CONDITIONS TO BE COMPLIED WITH DURING DEMOLITION AND BUILDING WORK

### **Substitution of Stormwater Treatment Measure**

The substitution of an "equivalent" device for the stormwater treatment measure approved in the Development Application process must first be approved by the Principal Certifying Authority.

Details must be submitted to the Principal Certifying Authority for approval prior to installation.

Reason: To ensure stormwater is appropriately managed and in accordance with the Water Management Policy.

### **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 Alpha Engineering and Development.

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**

If groundwater is encountered during excavations of greater than one metre depth from the existing ground surface level and dewatering is required to continue work, work must cease until the applicant has provided a dewatering management plan to Northern Beaches Council that details planned discharges of groundwater to Council's stormwater network, including expected flow rates and treatment methods. This information must be provided to WaterNSW when making an application for a dewatering permit.

The dewatering management plan must be certified by a suitably qualified civil engineer who has membership of Engineers Australia and appears on the National Engineering Register (NER). Council must issue a permit based on the plan and general terms of approval from WaterNSW, and a dewatering permit provided by WaterNSW prior to dewatering commencing.

Discharges must achieve the following water quality targets in addition to any conditions/documentation of this consent, any requirements of the General Terms of Approval/Controlled Activity permit issued by WaterNSW, and legislation including Protection of The Environment Operations Act 1997 and

Contaminated Lands Act 1997.

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 Solids (TSS)	<50mg/L	Meter/grab sample measures 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.*

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.

Groundwater/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 groundwater aquifers, groundwater dependent ecosystems and receiving environments.

#### **Protection of stormwater treatment measures**

Stormwater treatment measures must not be installed or must be kept offline until the site has been fully stabilised to prevent damage from sediment during construction works.

Reason: Protection of stormwater treatment measures.

### **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 Engineers Australia and the National Engineers Register must be provided, stating that the stormwater treatment measures have been installed in accordance with the Stormwater Plans Rev C (Oct 2019) by Alpha Engineering and Development.

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

Reason: Protection of the receiving environment

#### **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 be attached to the Positive Covenant and contain the following:

- a) Inspection and maintenance schedule of all stormwater treatment measures
- b) Maintenance requirements for establishment period
- c) Routine maintenance requirements

- d) Funding arrangements for the maintenance of all stormwater treatment measures
- e) Identification of maintenance and management responsibilities
- f) Vegetation species list associated with each type of vegetated stormwater treatment measure
- g) Waste management and disposal
- h) Traffic control (if required)
- i) Maintenance and emergency contact information
- j) Renewal, decommissioning and replacement timelines and activities of all stormwater treatment measures (please note that a DA may be required if an alternative stormwater treatment measure is proposed)
- k) Work Health and Safety requirements
- l) Requirements for inspection and maintenance records, noting that these records are required to be maintained and made available to Council upon request.

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:

- a) 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
- b) Have a sign affixed to the tank stating the contents is rainwater
- c) Be constructed or installed in a manner that prevents mosquitoes breeding, such as the use of mesh to protect inlets and overflows
- d) 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
- e) Pumping equipment must be housed in a soundproof enclosure
- f) 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:

- a) 4 star dual-flush toilets  
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- 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.

### **Protection of stormwater treatment measures during construction**

Stormwater treatment measures must not be installed or must be kept offline until the site has been fully stabilised.

A certificate from a Civil Engineer, who has membership to the Engineers Australia and the National Engineers Register must be provided, stating that the stormwater treatment measures are in new condition and do not contain sediment. The certificate shall be submitted to the Principal Certifying Authority prior to the release of the Occupation Certificate.

Reason: Protection of stormwater treatment measures.

### **Positive Covenant, Restriction as to User and Registration of Encumbrances 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 treatment measures in accordance with the standard requirements of Council, the manufacturer and as required by the Stormwater Treatment Measures Operation and Maintenance Plan.

A restriction as to user shall be created on the title over the stormwater treatment measures, restricting any alteration to the measures.

The terms of the positive covenant and restriction as to user 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. 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 as to user is to be submitted to the Principal Certifying Authority prior to the issue of any interim / final Occupation Certificate.

Reason: To identify encumbrances on land, ensure ongoing maintenance, and ensure modification to the stormwater treatment measures is not carried out 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, manufacturer's specifications and as necessary to achieve the required stormwater quality targets for the development.



Northern Beaches Council reserves the right to enter the property and carry out appropriate maintenance of the device at the cost of the property owner.

Reason: Protection of the receiving environment.