Water Management Referral Response

Application Number:	DA2019/0268

To:	David Auster
Land to be developed (Address):	Lot 202 DP 1019363 , 15 Jubilee Avenue WARRIEWOOD NSW 2102

Reasons for referral

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

Officer comments

This application was assessed under Pittwater 21 DCP C6.1 and the Warriewood Valley Water Management Specification (2001).

No information was provided that related to stormwater management, despite the significant increase in impervious area proposed. An open drainage channel runs alongside the site adjacent to the courts. It is assumed that the intention was to grade the courts slightly towards the open channel, allowing the stormwater to sheet off the courts and run overland into the channel.

In order to satisfy the controls, the applicant is required to incorporate a buffer strip along the western boundary to capture the majority of sediment carried by stormwater from the site towards the drainage channel. The buffer strip must be at least three metres wide and must extend the length of the western boundary. A key requirement in the design of the buffer strip is that stormwater crossing the strip is well distributed, to prevent channelisation and erosion pathways. Flow spreaders may be used to assist maintaining well distributed flows. The buffer strip should have a maximum slope of 5%, with maximum velocities of overland flows maintained below 0.4 m/s. The buffer strip should be maintained regularly to avoid build-up of sediment.

Sediment and erosion controls must be installed along the western boundary prior to any work on site and maintained until work is complete and groundcover re-established.

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 following:
1. A buffer strip is incorporated along the western boundary, adjacent to the stormwater drainage

channel that:
a) extends the full length of the western boundary
b) is at least three metres wide
c) allows stormwater entry to the buffer strip to be
well distributed, with flow spreaders incorporated if necessary
d) has a maximum slope of 5% graded towards the drainage channel
e) has maximum velocities for overland flows maintained below 0.4m/s.

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

Installation and Maintenance of Sediment and Erosion Control
Sediment and erosion controls must be installed along the western boundary of the site in accordance with Landcom's 'Managing Urban Stormwater: Soils and Construction' (2004).

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

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 detailed design submitted to satisfy the Construction Certificate.

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.