

Water Management Referral Response

Application Number:	DA2018/1989
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To:	Alex Keller
Land to be developed (Address):	Lot 8 DP 629464 , 102 Cabarita Road AVALON BEACH NSW 2107 Lot 15 DP 858130 , 100 Cabarita Road AVALON BEACH NSW 2107 Lot 14 DP 858130 , 96 Cabarita Road AVALON BEACH NSW 2107 Lot 9 DP 629464 , 104 Cabarita Road AVALON BEACH NSW 2107

Reasons for referral

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

Officer comments

This application is recommended for approval with a number of conditions.

Overall the approach to stormwater quality management is very good and satisfies the requirements of both Pittwater 21 DCP B5.9 and the *State Environmental Planning Policy (Coastal Management) 2018 - Div 3 Coastal Environment Area*. The individual property DAs have been conditioned to retain and maintain their boundary pits. None of the stormwater devices, including the stormwater tanks have high flow bypasses designed in, but analysis of the MUSIC model shows this has only a small impact on water quality outcomes. A change to the design of the bio-retention basin is required, incorporating a splitter in the upstream pit, spreading flows to all three basins, designed so that once the inlet to the first basin is at capacity, flows are directed to the second and then the third basin. The reason for this is to reduce high flow impacts on the first basin, including scour and higher levels of sediment. By splitting the flows, the maintenance load is spread evenly between all three basins, and aims to lengthen the period between required maintenance cleans. This reduces the cost of maintenance of the system for the properties under community title.

Installation of the filter media and planting of the bio-retention must not be completed until development of the individual lots on the subdivision is 90 percent complete, or four years after the subdivision certificate is issued. A bond will be placed on this application to ensure this happens, as the dwellings on the individual lots are being constructed under separate development applications.

The Community Management Statement must specifically list under the definition of 'Community Property' the stormwater system and all its parts ie. basins, GPT, filter baskets etc that will be maintained under community title, so that this is clear for the managing committee/agent. The statement must also include an operation and maintenance plan for the stormwater infrastructure, which could go in the Optional Matters section alongside the conservation area maintenance. This operation and maintenance plan must also be attached to the positive covenant for the common property.

The Soil and Water Management Plan provided by NB Consulting Engineers meets requirements. The applicant is required to implement this plan and Section 5 of the Construction and Site Management Plan. Sediment and Erosion controls must be installed prior to any development on the entire site and

maintained until all individual dwelling sites and complete and groundcover has been re-established.

Groundwater was not observed in test drills conducted by JK Geotechnics (Report 30/11/18) and therefore does not need to be considered.

The existing pipe and outlet through the seawall into Pittwater is proposed to be used. If this changes because the seawall is replaced, the new outlet to Pittwater must be approved by Council.

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

Design of the bio-retention basin

The design of the bio-retention basin must be revised to incorporate a splitter in the upstream pit that spreads upstream flows to all three basins.

Details demonstrating compliance are to be submitted to the Certifying Authority for approval prior to the issue of the Construction Certificate. Certification is to be provided by a suitably qualified and experienced Water Engineer.

Reason: To reduce the necessity for frequent maintenance of the basin.

CONDITIONS TO BE COMPLIED WITH DURING DEMOLITION AND BUILDING WORK

Soil and Water Management Plan Implementation

All site drainage and sediment and erosion control works and measures as described in the Soil and Water Management Plan, the Construction and Site Management Plan and any other pollution controls as required by these conditions must be implemented prior to commencement of any work at the site and maintained until all development activities, including those for individual dwellings, have been completed and the site is sufficiently stabilised.

Reason: Protection of the receiving environment

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.

CONDITIONS THAT MUST BE COMPLIED WITH PRIOR TO THE ISSUE OF ANY STRATA SUBDIVISION OR SUBDIVISION CERTIFICATE

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 quality system in accordance with the standard requirements of Council, the manufacturer and as required by the Stormwater Quality Operation and Maintenance Plan.

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

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 the Subdivision Certificate.

Reason: To identify encumbrances on land, ensure ongoing maintenance, and ensure modification of the stormwater quality system is not carried out without Council's approval.

Certification for the Installation of Stormwater Quality Management System

A certificate from a Civil Engineer, who has membership to the Institution of Engineers Australia, National Professional Engineers Register (NPER-3) must be provided, stating that the stormwater quality management system has been installed in accordance with the plans prepared by NB Consulting Engineers.

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

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

Reason: Protection of the receiving environment

Stormwater Quality Operation and Maintenance Plan

An Operation and Maintenance Plan is to be prepared to ensure the proposed stormwater quality system remains 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 Subdivision Certificate.

Reason: Protection of the receiving environment

Community Management Statement

The Community Management Statement must specifically list under the definition of 'Community Property' the stormwater system and all its parts ie. basins, GPT, filter baskets etc that will be maintained under community title. The statement must also include an operation and maintenance plan for the stormwater infrastructure.

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

Reason: To ensure maintenance of all stormwater management assets and protection of the receiving environment.

Completion of bio-retention basin(s)

Installation of filter media and planting of the bio-retention basin(s) (series of three basins on common property) must not be completed until one of the following is met: construction on the individual lots of the subdivision is 90 percent complete, or four years after the subdivision certificate is issued.

Details demonstrating compliance are to be submitted to the Principal Certifying Authority for approval. Certification is to be provided by a suitably qualified and experienced Water Engineer.

The applicant is to lodge a bond with Council of \$150,000 as security to ensure the basin is completed as designed under this approval and its conditions. Details demonstrating payment of the bond are to be submitted to the Principal Certifying Authority prior to the issue of the Subdivision Certificate.



Reason: Protection of bio-retention basin(s)/water quality infrastructure from the impacts of sediment.