

Water Management Referral Response

Application Number:	DA2021/1039
Date:	30/07/2021
To:	Adam Mitchell
Land to be developed (Address):	Lot 2566 DP 752038 , 16 Wyatt Avenue BELROSE NSW 2085 Lot 2597 DP 752038 , 16 Wyatt Avenue BELROSE NSW 2085

Reasons for referral

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

Officer comments

This application has been assessed against relevant legislation and policy relating to water management.

The proposed stormwater treatment chain includes a bioretention filtration system and a vegetated OSD basin prior to discharge via a spreader.

Adequate erosion and sediment controls must be installed prior to any disturbance of soil on site and maintained until all work is complete and groundcover reestablished. An erosion and sediment control plan has been provided however it is not adequate. A soil and water management plan must be provided that contains more detail, as outlined in the conditions below. It needs to show the proposed building footprint. It also needs to show how the driveway batters will be stabilised.

With the application of the conditions below the application is supported.

The proposal is therefore supported.

Note: Should you have any concerns with the referral comments above, please discuss these with the Responsible Officer.

Recommended Water Management Conditions:

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

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 Engineers Australia, National Engineers Register 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, 4th Edition (2004) and Council's Water Management for Development 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;
- Demonstrated staging of works including stormwater management and sediment control;
- 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 Certifying Authority prior to the issue of the Construction Certificate.

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

Detailed Design of Stormwater Treatment Measures

A certificate from a Civil Engineer, stating that the stormwater treatment measures have been designed in accordance with the approved plans and Council's Water Management for Development 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

Installation and Maintenance of Sediment and Erosion Controls

Council proactively regulates construction sites for sediment management.

Sediment and erosion controls must be installed in accordance with Landcom's 'Managing Urban Stormwater: Soils and Construction' (2004) and the soil and water management plan upgrade from the Erosion and Sediment Control Plan prepared by Acor Consulting and prior to commencement of any other works on site.

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 vegetation cover has been re-established across 70 percent of the site, and the remaining areas have been stabilised with ongoing measures such as jute mesh or matting.

The discharge of sediment-laden waters from the site may result in clean-up orders and/or fines under Council's Compliance and Enforcement Policy and legislation including Protection of the Environment Operations Act 1997 and Contaminated Lands Act 1997.

Reason: Protection of the receiving environment.

Substitution of Stormwater Treatment Measures

The substitution of an "equivalent" device for the stormwater treatment measure approved under the Development Consent 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 for Development Policy.

Stormwater Treatment Measures Commissioning and Maintenance

Filter media and vegetation must not be installed in the stormwater treatment measures until construction work is 80 percent complete.

The stormwater treatment measures may be used as sediment settling basins during construction work on the site. Sediment basins should be periodically emptied of sediment where sediment levels are likely to impact downstream environments in large rainfall events (ie 70% of basin capacity). All sediment (100%) must be removed prior to installing the filter media.

Reason: Protection of the stormwater treatment measures and the receiving environment

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

Certification for the Installation of Stormwater Treatment Measures

A certificate from a Civil Engineer, who has membership to Engineers Australia and the National Engineers Register must be provided, stating that the stormwater treatment measures have been installed in accordance with the plans prepared by Acor. The certificate must confirm:

- that stormwater treatment measures are completed, online, in good condition and are not impacted by sediment
- vegetated measures must exhibit an 80 percent survival rate of plantings
- the Stormwater Treatment Measures Operations and Maintenance plan will allow the measures to perform to the design criteria.

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, Restriction as to User and Registration of Encumbrances for Stormwater Treatment Measures

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 the 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.

Stormwater Treatment Measures Operation and Maintenance Plan

An Operation and Maintenance Plan is to be prepared to ensure the proposed stormwater treatment measures remain effective.

The Plan must be attached to the Positive Covenant (and the community or strata management statement if applicable) and contain the following:

1. Detail on the stormwater treatment measures:

- a) Work as executed drawings
- b) Intent of the stormwater treatment measures including modelled pollutant removal rates
- c) Site detail showing catchment for each device
- d) Vegetation species list associated with each type of vegetated stormwater treatment measure
- e) Impervious area restrictions to maintain the water balance for the site
- f) Funding arrangements for the maintenance of all stormwater treatment measures
- g) Identification of maintenance and management responsibilities
- h) Maintenance and emergency contact information

2. Maintenance schedule and procedure - establishment period of one year following commissioning of the stormwater treatment measure:

- a) Activity description, and duration and frequency of visits

Additionally for vegetated devices:

- b) Monitoring and assessment to achieve an 80 percent survival rate for plantings
- c) Management of weeds, pests and erosion, with weed and sediment cover limited to a maximum of 5 percent of the total area of the stormwater treatment measure

3. Maintenance schedule and procedure - ongoing

- a) Activity description, and duration and frequency of visits
- b) Routine maintenance requirements
- c) Work Health and Safety requirements
- d) Waste management and disposal
- e) Traffic control (if required)
- f) 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)
- g) 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 Subdivision/Occupation ~~DA~~ Certificate.

Reason: Protection of the receiving environment.

Works as Executed Drawings - Stormwater Treatment Measures

Works as Executed Drawings for the stormwater treatment measures 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.

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

Maintenance of Stormwater Treatment Measures

Stormwater treatment measures must be maintained at all times in accordance with the Stormwater Treatment Measure Operation and Maintenance Plan, manufacturer's specifications and as necessary to achieve the required stormwater quality targets for the development.

Vegetated stormwater treatment measures must maintain an 80 percent survival rate of plantings and limit weed cover to no more than 10 percent of the total area of the stormwater treatment measure.

If any necessary components for the system become unavailable, an alternative system is required to be retrofitted into the development to achieve an equivalent pollutant reduction outcome. Evidence supporting the replacement must be retained on site and made available to Council as required.

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.