

Natural Environment Referral Response - Riparian

Application Number:	Mod2020/0611
Date:	08/01/2021
To:	Lashta Haidari
Land to be developed (Address):	Lot 1 DP 1220196 , 4 - 10 Inman Road CROMER NSW 2099

Reasons for referral

This application seeks consent for the following:

- All Development Applications on land, and located within 40 metres of land, containing a watercourse, or
- All Development Applications on land containing a wetland, or located within 100m of land containing a wetland,
- All Development Applications on land that is mapped as "DCP Map Waterways and Riparian Land".

And as such, Council's Natural Environment Unit officers are required to consider the likely impacts on drainage regimes.

Officer comments

This application has been assessed under relevant legislation for protection of waterways and groundwater. It is noted that it is a modification of DA2019/1346, and that modifications relate to treatment of stormwater and to control of erosion and sedimentation.

The proposal reduces the impact on groundwater by decreasing the depth of excavations. The footprint of the building is similar and therefore the sizing of the stormwater controls remains the same. The drainage into the bio-retention basin has changed. A condition has been added to address removal of sediment from basement drainage prior to discharge into the basin, as this will be heavily contaminated by vehicles and will unnecessarily load the basin if it discharges directly into it. All stormwater quality conditions have been updated and replaced the conditions relating to stormwater treatment issued for DA2019/1346, as controls and policies have since been updated.

The groundwater conditions remain unchanged from DA2019/1346. Conditions relating to the naturalised creek have been added, specifying size of rock and placement and requiring detailed design to be submitted with the CC.

Sediment and erosion controls apply.

The proposal is therefore supported.

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

Recommended Natural Environment Conditions:

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

Design of Stormwater Outlet Structure to Creek

Stormwater outlet structures to the creek must be designed in accordance with DPI Water's Guidelines for Outlet Structures on Waterfront land. Guidelines can be found on Water NSW website.

No mortar is to be used on the outlet. Rocks must be placed using an interlocking system with varying rock sizes. Rock size should range from 80-300mm and be placed to 300mm deep (with a keystone downslope) according to the following specifications:

Dmin= 20mm

D10 = 80mm

D50 = 150mm

D90 = 300mm

The surface should be a textured finish to break up and dissipate sheet flows.

This design is to be submitted to the Certifying Authority prior to the release of the Construction Certificate.

Reason: To protect the surrounding creek bank from the effects of localised erosion.

Detailed Design of Creek Works

A certificate from a suitably qualified engineer who has membership of Engineers Australia and the National Engineering Register (NER), stating that the creek works have been designed in accordance with the plans prepared by Costin Roe Consulting and dated 20 October 2020 and Council's Riparian and Waterways Protection Policy.

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

Reason: To ensure creek works are completed in accordance with the consent approval.

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 plans by Costin Roe Consulting and Council's Water Management for Development Policy. The design must incorporate a sediment trap on the basement drainage prior to discharge into the bio-retention basin.

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 Erosion and Sediment Control Plan prepared by Costin Roe Consulting 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

Sediment and erosion controls (in-stream works)

For in-stream works a Staked Straw Bale Barrier is to be installed immediately downstream of the proposed site prior to any disturbance of soil in or beside the waterway. A staked straw bale barrier may only be used when works will be completed and banks stabilised prior to forecast rain and within five days of starting in-stream work.

Controls can be removed once in-stream work has been completed and banks have been appropriately stabilised.

Reason: Protection of the receiving environment.

Substitution of Stormwater Treatment Measure

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

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

Maintenance contract for stormwater treatment measures

A minimum of a five-year contract with a suitably qualified provider is required for the maintenance of the bio-retention basin.

A copy of the maintenance contract must be submitted to the Principal Certifying Authority prior to the issue of the final Occupation Certificate.

Reason: To ensure maintenance of the stormwater treatment measures.

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

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 Costin Roe Consulting. 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 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 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.

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