

Water Management Referral Response

Application Number:	DA2018/1924
To:	David Auster
Land to be developed (Address):	Lot 20 DP 1209801 , Forest Way FRENCHS FOREST NSW 2086

Reasons for referral

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

Officer comments

The application has been assessed under
 Warringah DCP 2011 C4 – Stormwater
 Warringah DCP 2011 C5 – Erosion and Sedimentation
 Warringah Council PL 850 Water Management Policy
 Northern Beaches Council Public Domain Design Guidelines

The proposed method for treating stormwater runoff is the use of SPEL hydrosystems. While these effectively treat all flows up to the designed bypass, they are not considered water sensitive urban design and do not meet the objectives of Northern Beaches Council for significant developments such as this.

The subject site is located in an area marked as Phase 3 of the Frenchs Forest Precinct Development. A significant objective of this precinct is the incorporation of water sensitive urban design elements into building design. This is also a significant objective of Council's current Water Management Policy. Council's policy includes the following principles:

"Integrate water sensitive urban design measures into the built form to maximise amenity"

"Encourage the reuse of water and alternative water sources"

"Align development controls with the objectives of the Water Sensitive Warringah Strategic Plan".

SPEL Hydrosystem filters do not reduce the quantity of runoff, and therefore do not minimise the impacts of increased flows or extended periods of flows (due to detention facilities). By using green infrastructure such as bio-filtration, permeable paving and green walls to treat stormwater runoff, additional water will infiltrate and evaporate, thus reducing the quantity of runoff and therefore reducing erosion of the downstream catchment. The proposal includes the use of green walls, however they have missed an opportunity for treatment by irrigating them with the potable water supply.

Council's Public Domain Guidelines B.1.14-18 Street Trees, WSUD and Landscape Treatments recommend that street tree surrounds be designed to incorporate WSUD to receive water runoff, WSUD treatments be incorporated in public spaces, and planted or turf verge treatments used to reduce paved surfaces and provide separation between the footpath and roadway (to reduce runoff to the gutter). There is sufficient landscaped areas around the perimeter of the development to incorporate these recommendations. Plantings in bio-filters do not need to be specifically directed at water treatment; there are many suitable native ornamentals that may be considered (see <https://waterbydesign.com.au/wsud-plant-database/bioretenion-plants>).

The applicant must:

1. Provide a MUSIC model for the development (.sqz file)

2. Revise the stormwater treatment strategy to incorporate additional green infrastructure (WSUD) elements rather than relying entirely on filter devices. Using the proposed green walls to reuse stormwater, and incorporating tree pits, infiltration strips and permeable paving is strongly encouraged.

The proposal is therefore unsupported.

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

Recommended Water Management Conditions:

Nil.