

Engineering Referral Response

Application Number:	DA2023/0976
Proposed Development:	Demolition works, civil and infrastructure works, subdivision into 53 lots and one community title road, the construction of 53 dwellings and associated works.
Date:	02/09/2023
To:	Thomas Prosser
Land to be developed (Address):	Lot 1 DP 592091 , 20 - 22 Macpherson Street WARRIEWOOD NSW 2102

Reasons for referral

This application seeks consent for the following:

- New Dwellings or
- Applications that require OSD where additional impervious area exceeds 50m² or
- Alterations to existing or new driveways or
- Where proposals affect or are adjacent to Council drainage infrastructure incl. watercourses and drainage channels or
- Torrens, Stratum and Community Title Subdivisions or
- All new Commercial and Industrial and RFB Development with the exception of signage or
- Works/uses in flood affected areas

And as such, Council's development engineers are required to consider the likely impacts on drainage regimes.

Officer comments

The proposed 52 lot subdivision and housing application is not supported for the following reasons:

1) On site detention stormwater (OSD) management

a) The applicant is required to submit a drains model with full summary information for councils review to determine the the OSD volume sizing for the below ground tank and bio retention/OSD basin in accordance with Councils water management for development policy and the Warriewood Valley water management specification 2001.

b) State of nature conditions are to be used in the DRAINS model to determine the pre developed site stormwater flows up to the 1/100 AEP plus climate change. The minimum information as required by section 9.1.3 of Councils water management for development policy is to be provided on the stormwater management plans. The current plans are conceptual and require more detail.

c) The design engineer is to demonstrate that the outlet to the creek from the OSD basin is not affected by tail water levels and flooded restricting the OSD basin performance.

d) As recommended by ARR 2019 Council requires the hydrological model in DRAINS is to be a Initial Loss - Continuing Loss model.

e) No proposed level details of the stormwater outlet pipe connection point to the creek have been provided. Councils Catchment and coastal team will have more specific requirements in terms of outlet orientation , location and scour protection requirements.

f) Specifications and design pollutant capture details are to be submitted for the Gross Pollutant Trap

(GPT). The GPT type is to be detailed on the plans accordingly. A draft maintenance and operation manual in regard to the GPT and BIO Retention/detention basin operation is to be submitted for review.

4) The applicant is to prepare a draft community management statement for Councils review and is to feature appropriate by laws /reference to a the operation and maintenance of all gross pollutant traps , the OSD tank and bio retention/OSD basin

2) Internal Road Design /Geometry

Non compliance with the stipulated access road , verge and footpath widths as detailed in the Warriewood Roads Masterplan dated June 2018 .

The required road ,verge and footpath widths are as follows:

Minimum road width (kerb to kerb) required is 7.5m .The minimum verge widths are to be 2.5m and feature a 1.5m width concrete footpath at the back of the kerb which allows for street planting in the turfed area.

The internal access road into Macpherson Street is to feature paved entry thresholds featuring wide laybacks.

Please also refer to waste services requirements in relation to on site waste collection.

The proposal is therefore unsupported.

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

Recommended Engineering Conditions:

Nil.