

Engineering Referral Response

Application Number:	DA2022/2018
Proposed Development:	Construction of a dwelling house
Date:	01/03/2023
To:	Dean Pattalis
Land to be developed (Address):	Lot 9 DP 271326 , 9 Raven Circuit 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

16/01/2023:

Access

Raven Circuit is a private road. As such there is no requirement for driveway levels.

Stormwater

As per consent condition 1 of subdivision DA2019/0887, Future housing development on individual lots is to provide on-site stormwater detention in accordance with Northern Beaches Council's –Warriewood Valley Urban Release -Water Management specification and generally in accordance with the concept drainage plans prepared by A T and L , drawing number SKC 014, dated 21/6/20. Detailed drainage plans for future housing development are to be prepared by a suitably qualified Civil Engineer, who has membership to the Institution of Engineers Australia, National Professional Engineers Register (NER) or RPENG (Civil). The individual lot site storage and permissible site discharges are to be in accordance with the values specified on the concept drainage plan. Underground storage tanks are to be Lattice (LU5000) tanks or equivalent .(internal Reference 2020/363144 and 2020/457164)

Requesting amended stormwater plans to account for OSD

- Site Storage Requirements: LOT 9 - 9.0m³
- PSD Requirements 1%: LOT 9 - 3.40 L/sec

1/03/2023:

Stormwater

The applicant has proposed an alternative solution which departs from the lattice OSD tank design located underneath the driveway as originally approved in DA2019/0887.
The proposed tanks at the rear of the property would not be supported.

Please consider other alternatives such as tanks under the driveway, and/or front yard, and/or garage which also meets the the proposed OSD volumes and discharge rate as per DA2019/0887.
If feasible, a direct connection to council's pit or pipe would lower the invert at council's stormwater system. This would increase the depth of the underground tank and may achieve more volume to meet the necessary SSR requirements.

Council will only accept above ground tanks if the applicant can demonstrate it's not feasible from an engineering perspective to drain via gravity from underground tanks to council's stormwater system.

Requesting amended plans which reflects what was originally approved in the AT&L Concept design. If not feasible, requesting evidence to show that underground tanks draining via gravity to the kerb or council's stormwater system can not achieve the SSR and PSD requirements.
A DRAINS model is required to back up any altered design which demonstrates compliance to the SSR and PSD requirements. This is because a relocation of tanks would increase the bypass flows. All calculations will need to be shown.

In accordance with Councils Water management policy for development a DRAINS model is to be submitted to Council for review.

For Planner:

As above ground OSD tanks are proposed at the rear of the site which is taking 9-10sqm of landscaped area, comments from council's landscape officer on this set up are required.

The proposed solution is not acceptable and there is insufficient information for Council's Development Engineering Team to assess the application.

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.