

Engineering Referral Response

Application Number:	DA2019/1429
Date:	13/03/2020
То:	Tony Collier
Land to be developed (Address):	Lot 187 DP 752017 , 187 / 752017 Tooronga Road TERREY HILLS NSW 2084

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 application was referred to Council's Development Engineer for review. The following comments have been provided:

Referral Response 1 (21/01/2020)

Overland Flow

The property is shown on Council's best available flood mapping as affected by overland flow flooding. Insufficient information has been provided to address the impact of overland flow flooding. In accordance with Council's Warringah Water Management Policy Section 9.3, any future submission shall include, but not be limited to, an address of the following:

- The site survey and all levels shall be provided to Australian Height Datum (AHD).
- Catchment plan highlighting the full upstream catchment(s).
- Calculations indicating existing 1% AEP flows of any overland flow paths and capacity of the existing creeks/dams.
- Calculations indicating existing 1% AEP flood levels and extents of any overland flow path.
- Demonstration of compliance with flood related development controls, in particular Warringah LEP 2011 Section 6.3 and DCP 2011 Section E11.
- Appropriate freeboard above the 1% AEP flood level shall be applied for the proposed future



floor levels and carpark entry levels. This is to ensure that the proposed future dwellings and car parking areas are protected in major storm events.

The proposed application cannot be supported by Development Engineering due to lack of information to address:

• Stormwater drainage for the development in accordance with clause C4 Stormwater.

The applicant submitted an External Catchment Assessment Report and Stormwater Drainage Plans on 4 March 2020 and referred to Council's Development Engineer for review. The following comments have been provided:

Referral Response 2

A site inspection has been undertaken in assessment of the submitted overland flow report.

No objections are raised to the proposed development, subject to conditions.

The proposal is therefore supported.

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

Recommended Engineering Conditions:

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

Stormwater Disposal

The applicant is to demonstrate how stormwater from the new development within this consent is disposed of in accordance with Northern Beaches Council's Warringah Water Management Policy PL850. Details by an appropriately qualified and practicing Civil Engineer demonstrating compliance with the Council's specification are to be submitted to the Certifying Authority for approval prior to the issue of the Construction Certificate.

Reason: To ensure appropriate provision for disposal and stormwater management arising from development.

Construction Certificate Drainage Details

The Applicant is to provide drainage plans including specifications and details showing stormwater and overland flow management within this development consent generally in accordance with the External Catchment Assessment Report, prepared by Engineering Studio, reference 19670-001-r, revision A, dated February 2020 and the concept drainage plans prepared by Engineering Studio, job number 19670, revision A, dated 3/3/20. Detailed drainage plans are to be prepared by a suitably qualified Civil Engineer, who has membership to Engineers Australia, National Engineers Register (NER) and registered in the General Area of Practice for civil engineering.



Detailed drainage plans, including engineering certification, are to be submitted to the Certifying Authority for approval prior to the issue of the Construction Certificate.

Reason: To ensure appropriate provision for the disposal of stormwater and stormwater management arising from the development.

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

Stormwater Disposal

The stormwater drainage works shall be certified as compliant with all relevant Australian Standards and Codes by a suitably qualified person. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of any interim / final Occupation Certificate.

Reason: To ensure appropriate provision for the disposal of stormwater arising from the development.