

Engineering Referral Response

Application Number:	Mod2022/0460
Proposed Development:	Modification of Development Consent DA2020/0014 granted for Demolition works and construction of a dwelling house including a swimming pool
Date:	09/02/2023
To:	Stephanie Gelder
Land to be developed (Address):	Lot 51 DP 740538 , 1772 Pittwater Road BAYVIEW NSW 2104

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 proposal seeks to modify the Consent conditions of DA2020/0014 to delete the requirement for a drainage channel through the site via providing kerb and guttering along Pittwater Road such that the overland flow is directed to the Council stormwater system.

Based on the Overland Flow Civil Works Plan & Detailing prepared by Barrenjoey Consulting Engineers, the proposed kerb and gutter works are only across No 1772 and No 1770 Pittwater Rd. This is insufficient as it will concentrate overland flow directly into the property at 1768 Pittwater Rd.

Any proposed kerb and gutter system will need to connect directly into the Council stormwater system outside No 1762 Pittwater Rd. Council's stormwater Asset Engineer has provided the following options to that can be investigated:

- Constructing a new stormwater kerb inlet and pipeline outside of number 1768 Pittwater Road, Bayview which then connects to the existing stormwater system located to the east outside of 1762 Pittwater Road, Bayview; or
- Extending the proposed kerb and gutter to the stormwater pit outside 1762 Pittwater Road, Bayview. The kerb and gutter will need to connect into the existing kerb inlet pit (SPP54339). All downstream properties are low-lying properties, and as such all driveway crests along the extent of kerb works will need to match the Reduced Levels of the new Kerb and Gutter.

Either option will require overland flow modeling to demonstrate that there will be no adverse flooding impacts to adjoining properties. Additionally Hydraulic Modelling for the proposed and existing stormwater system will need to be completed demonstrating that there will be no adverse impacts upstream and downstream.

Concurrence from Council's Road Asset team will be required regarding the alignment of the proposed kerb and gutter works. Additionally Council's Landscape team will be required to provide comments on the potential impacts on all street trees.

Amended plans and modeling are to be submitted prior to further assessment.

Note to Planner: It is considered that comments from Road Asset team and Landscape team should be sought based on the above advice prior to requesting additional information.

Additional Information Provided on 7/12/2022

Council's Stormwater Engineer has provided the following comments regarding the proposal to extend the kerb and gutter up to the exiting driveway of No 1768:

- The proposal concentrates the surface flows from the road to the nature strip towards the property boundary and relies on the property boundary wall to direct the runoff to the existing Council pit and cannot be supported as any blockage of the pit is likely to cause flooding to private properties.
- Connecting to the stormwater system located outside the downstream property at 1762 Pittwater Road is not an ideal solution as the property is located at a sag, and the properties has no driveway crest meaning that water will overtop and flow towards the property if the pit blocks.
- Additionally, during the site inspection, the pits were observed as being completely full of leaf litter which means they will be prone to blockage which is likely going to result with localised flooding if flows are concentrated to this point, and subsequent flooding to the property at 1762 Pittwater Road.

Any proposed kerb and gutter system will need to connect directly into a stormwater system with adequate capacity. If the applicant proposes to connect into the existing system, hydraulic studies will need to be completed for the existing system which demonstrates that the system can cope with the additional flows without causing adverse impacts upstream and downstream.

If any new stormwater assets are proposed, they will need to be designed in accordance with Council's Water Management for Development Policy and AUS-SPEC #1.

The Applicant shall provide amended plans to address the above comments prior to Development Engineering finalising the assessment.

Amended Plans Provided on 6/2/2023

The amended plans have deleted the proposed changes to the previously approved drainage channel and hence conditions provided in Consent DA2020/0014 are to remain.

Other proposed modifications do not require additional conditions. No objections to approval.

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:

Nil.