

Natural Environment Referral Response - Flood

Application Number:	DA2022/0145
Date:	31/05/2022
To:	Adam Susko
Land to be developed (Address):	Lot CP SP 32072 , 812 Pittwater Road DEE WHY NSW 2099 Lot CP SP 32071 , 4 Delmar Parade DEE WHY NSW 2099

Reasons for referral

This application seeks consent for the following:

- All Development Applications on land below the 1 in100 year flood level;
- All Development Applications located on land below the Probable Maximum Flood levels.

And as such, Council's Natural Environment Unit officers are required to consider the likely impacts on drainage regimes.

Officer comments

The proposed mixed-use development is currently affected by overland flow emanating from the Botanic Garden to the south of the site. The overland flow enters the site on the south and south-eastern side. From the south it then travels in the northwest direction to Pittwater Road, whilst on the southeast it travels along the eastern boundary to Delmar Parade. The site is currently burden by a council's drainage easement carrying a 1050 diameter trunk drainage line.

To facilitate the development, the applicant's engineer has proposed to amplify and relocate Council's trunk drainage line to the eastern boundary and also collect both overland flow as they enter the site at the south and south-eastern boundary and convey them to Delmar Parade via a an underground drainage system and a dedicated overland flow channel located adjacent to the eastern boundary.

The proposal, in principle could be supported, if all existing flood characteristics are not to be exacerbated in both 1% AEP and PMF events and that the development proposal will comply with Section B3.11 of DCP.

The submitted flood impact assessment report did not appear to have address the requirements as tabulated under section B3.11 of DCP, furthermore the flood maps provided are lacking in detail and clarity, especially adjacent to neighbouring and downstream properties for accurate assessment.

Irrespective of this, it is clear from the results provided, that by collecting and conveying the entire overland flow to a single discharge point in Delmar Parade has exacerbated existing flood behaviour at various locations, e.g flood depths increased by at least 0.1m and velocity x depth now has increased to above 0.4 etc See figures below. This resulted increased flood risks to existing properties and road users in Delmar Parade, Accordingly, does not comply with item A1 of section B3.11 of DCP.

In view of the above, the application is not supported in its current form and the following information is to be provided for further assessment:

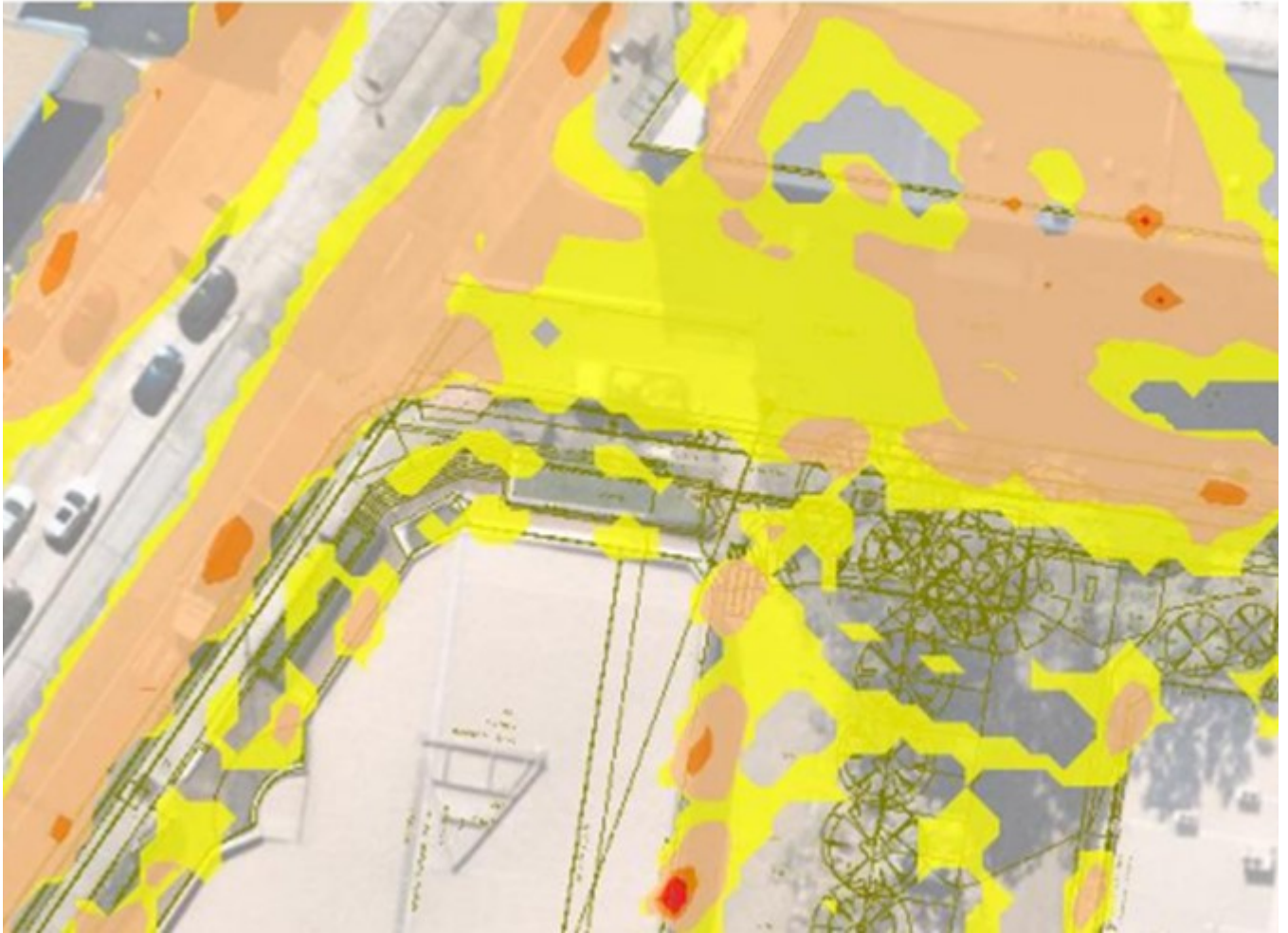
- a. Submit sufficient information in quantity and clarity that will enable accurate, detailed assessment of the likely flood impacts to upstream, neighbouring and downstream properties. It is suggested that flood maps should show information on the differences between pre and post development conditions for a range of flood behaviour characteristics, including life hazards parameters etc.
- b. Amended flood report must assess and demonstrate clearly the proposal will satisfy all criteria as specified under section B3.11 of DCP.
- c. Revised architectural plans are to be submitted, clearly showing in plan view, long and cross-sections of proposed flood path, including design invert and top of retaining walls levels etc.



1% AEP flood contours Predevelopment



1% AEP flood contours Post Development



1% AEP Vxd Predevelopment



1 % AEP Vxd Post Development

The proposal is therefore unsupported.

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

Recommended Natural Environment Conditions:

Nil.