

Natural Environment Referral Response - Flood

Application Number:	DA2022/0145
Proposed Development:	Demolition works and construction of a mixed-use development comprising a residential flat building and shop top housing, basement parking, lot consolidation and torrens title subdivision
Date:	19/04/2023
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.

Flood documentation related to the application includes the following:

- Flood Management Report - SGC Consulting Engineers (dated 01.12.21)
- Referral comments - Council (dated 31.05.22)
- Flood study addendum letter - SGC Consulting Engineers (dated 05.12.22)
- Referral comments - Council (dated 15.02.23)
- Flood study addendum letter - SGC Consulting Engineers (dated 23.03.23)
- Flood Planning Level Information email - SGC Consulting Engineers (sent 18.04.23)

SGC engineers have now further amended the flood report to provide details based on Council's comments on 15.02.2.

The development appropriately manages risk to life from flooding. It is compatible with the flood function and behaviour of the land. Adverse flood impacts on public land are minimised. There are no significant adverse impacts on private land as a result of the development. No objections 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 Natural Environment Conditions:

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

Flooding

In order to protect property and occupants from flood risk the following is required:

Flood Effects Caused by Development – A2

There is to be no filling of the land or any other reduction of the available flood storage which results in a net loss of storage below the 1% AEP flood level .

Building Components and Structural Soundness – B1

All new development below the Flood Planning Level (various levels) shall be designed and constructed as flood compatible buildings in accordance with Reducing Vulnerability of Buildings to Flood Damage: Guidance on Building in Flood Prone Areas, Hawkesbury-Nepean Floodplain Management Steering Committee (2006).

Building Components and Structural Soundness – B2

All new development must be designed to ensure structural integrity up to the Flood Planning Level (various levels), taking into account the forces of floodwater, wave action, flowing water with debris, buoyancy and immersion.

Building Components and Structural Soundness – B3

All new electrical equipment, power points, wiring, fuel lines, sewerage systems or any other service pipes and connections must be waterproofed and/or located above the Flood Planning Level. All existing electrical equipment and power points located below the Flood Planning Level (various levels) must have residual current devices installed to cut electricity supply during flood events.

Floor Levels – C1

New floor levels within the development shall be set at or above the various Flood Planning Level. The Flood Planning Level is 27.84 at m AHD at the northern boundary and 32.20m AHD at the southern boundary.

Car parking – D6

All access, ventilation and any other potential water entry points, including entry ramp crests to the basement car park shall be at or above the Flood Planning Level. The Flood Planning Level is 27.84 at m AHD at the northern boundary and 32.20m AHD at the southern boundary. Along the eastern boundary, the Flood Planning Level varies from 32.2m AHD to 28.5m AHD. Therefore the barrier wall protecting the basement carpark driveway from the overland flow path must extend to a height of 28.5m AHD.

Fencing – F1

New fencing (including pool fencing, boundary fencing, balcony balustrades and accessway balustrades) shall be open to allow for the unimpeded movement of flood waters. It must be designed with a minimum of 50% open area from the natural ground level up to the 1% AEP flood level.

Openings should be a minimum of 75mm x 75mm.

Storage of Goods – G1

Storage areas for hazardous or potentially polluting materials shall not be located below the Flood Planning Level unless adequately protected from floodwaters in accordance with industry standards.

Details demonstrating compliance are to be submitted to the Certifying Authority prior to the issue of the Construction Certificate.

Reason: To reduce the impact of flooding and flood liability on owners and occupiers of flood-prone property and reduce public and private losses in accordance with Council and NSW Government policy.