

Natural Environment Referral Response - Flood

Application Number:	DA2021/1061
Date:	21/07/2021
To:	Thomas Prosser
Land to be developed (Address):	Lot 280 DP 16719 , 3 Lido Avenue NORTH NARRABEEN NSW 2101

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 development is for alterations and additions to an existing dwelling. The existing ground floor level is at 2.56m AHD, this is just under 0.5m below the 1% level of 3.03m AHD. A ground floor addition of less than 10m² is proposed at the existing floor level of 2.56m AHD. Whilst this is permissible under Clause B3.11 of the Pittwater DCP, it will result in a reduction in flood storage. Conditions are included that the plans be updated prior to construction certificate to offset this reduction in flood storage.

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 of 3.03m AHD. Compensatory works must be undertaken to offset the expected reduction in flood storage, including the addition 4.6 cubic metres of reduction associated with the area of the ground floor addition.

Building Components and Structural Soundness – B1

All new development below the Flood Planning Level of 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 Probable Maximum Flood level of 4.90m AHD, 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 of 3.53m AHD. All existing electrical equipment and power points located below the Flood Planning Level must have residual current devices installed to cut electricity supply during flood events.

Car parking – D3

Car ports are to be designed to allow flood waters to pass through and are to have a minimum of 50% of the perimeter open.

Car parking – D4

Vehicle barriers or restraints are to be installed so as to prevent vehicles leaving the site. Protection must be provided for all events up to the 1% AEP flood event.

Perimeter walls/louvres installed as vehicle barriers or restraints are to be designed to allow flood waters to pass through and are to have a minimum of 50% open area from the natural ground level up to the 1% AEP flood level.

Flood Emergency Response – E1

The shelter-in-place refuge must:

- a) Have a floor level at or above the Probable Maximum Flood level; and
- b) Have a floor space that provides at least 2m² per person where the flood duration is long (6 or more hours) in the Probable Maximum Flood event, or 1m² per person for less than 6 hours;
- c) Is intrinsically accessible to all people on the site, plainly evident, and self-directing, with sufficient capacity of access routes for all occupants without reliance on an elevator.

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 of 3.03m AHD. 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 of 3.53m AHD 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.

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

Certification of the Structural Stability of the Building (B2)

A suitably qualified structural engineer is to certify the structural stability of the shelter in place refuge considering lateral flood flow, buoyancy, suction effects, wave action and debris load impact of the Probable Maximum Flood (PMF) event up to 4.90m AHD and associated design flood depths and velocities.

Details demonstrating compliance are to be submitted to the Certifying Authority for approval.

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.