

Natural Environment Referral Response - Flood

Application Number:	DA2023/1692
Proposed Development:	Alterations and additions to a dwelling house
Date:	28/02/2024
To:	Megan Surtees
Land to be developed (Address):	Lot 5 DP 26744 , 11 Catalina Crescent AVALON BEACH NSW 2107

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 proposal is for the alteration of two cabin structures in the rear of the property. The development includes the construction of an ancillary structure to join the two cabins, the addition of a toilet and extensions to the existing cabins.

The development site is mostly within the Medium Risk Flood Planning Precinct. The western end of the proposed development is within the High Risk Flood Planning Precinct. The site has the following flood characteristics:

- Flood Planning Level (FPL): 4.02m AHD
- 1% AEP Flood Level: 3.52m AHD
- 1% AEP Hydraulic Category: Flood Fringe, Flood Storage, Floodway
- Probable Maximum Flood (PMF) Level: 5.56m AHD
- PMF Life Hazard Category: H5

The revised architectural plans show an excavated area under the deck, on the western end of the cabins. These plans show no net loss of flood storage and do not negatively impact flood behaviour. Successfully demonstrating compliance with the flood behaviour development controls.

The updated flood emergency plan successfully demonstrates compliance with flood emergency development controls.

Subject to the following conditions, the proposal generally complies with section B3.11 of the Pittwater DCP and Clause 5.21 of the Pittwater LEP.

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

Flood effects caused by development

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 3.52m AHD.

Details demonstrating compliance are to be submitted to the Principal Certifier 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.

Building components and structural soundness

B1 - All new development below the Flood Planning Level of 4.02m AHD shall be designed and constructed from flood compatible materials.

B2 - All new development must be designed to ensure structural integrity up to the Flood Planning Level of 4.02m AHD, taking into account the forces of floodwater, debris load, wave action, buoyancy and immersion.

B3 - All new and existing electrical equipment, power points, wiring and connections must be located above the Flood Planning Level of 4.02m AHD, protected from flood water or have residual current devices installed to cut electricity supply during flood events.

Details demonstrating compliance are to be submitted to the Principal Certifier 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.

Floor levels

C1 - New floor levels within the development shall be set at or above the Flood Planning Level of 4.02m AHD.

C3 - The underfloor area of the new development below the 1% AEP flood level is to be designed to allow clear passage of floodwaters. At least 50% of the perimeter of the underfloor area must be of an open design from the natural ground level up to the 1% AEP flood level.

Details demonstrating compliance are to be submitted to the Principal Certifier 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.

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

Certification of Works as Executed

A suitably qualified engineer and/or registered surveyor is to certify that the completed works have been constructed in accordance with this consent and the approved plans with respect to the following:

1. Floor levels are set at or above the required level.
2. There has been no filling on the land other than what has been approved.
3. Openings are provided under floor areas where required for the free passage of flood waters.
4. A copy of the Flood Emergency Evacuation Plan is located within the proposed cabin structure in a location known and accessible to all occupants.

Details demonstrating compliance are to be submitted to the Principal Certifier prior to the issue of the Occupation 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.

Building Components and Structural Soundness

B2 - A suitably qualified structural engineer is to certify the structural integrity of the new development up to the Flood Planning Level of 4.02m AHD. The depth, velocity, debris load, wave action, buoyancy and immersion must all be considered.

B3 - A suitably qualified electrician or contractor is to certify that all new and existing electrical equipment, power points, wiring and connections are located above the Flood Planning Level of 4.02m AHD, are protected from flood water or have residual current devices installed to cut electricity supply during flood events.

Details demonstrating compliance are to be submitted to the Principal Certifier prior to the issue of the Occupation 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.