

## Natural Environment Referral Response - Flood

Application Number:	DA2020/0177
Date:	18/05/2020
To:	Megan Surtees
Land to be developed (Address):	Lot 16 DP 6462 , 5 The Crescent 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 proposed DA generally complies with the flood controls in the LEP and DCP.

The existing single storey dwelling has a floor level at RL 2.90m AHD.

The floor level of the proposed secondary dwelling is at the FPL 3.53m AHD.

Evacuation from the site is not acceptable as it involves entering flood waters.

Shelter in place has been provided above the PMF level (4.87m AHD).

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:

#### Building Components and Structural Soundness – C1

All new development 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 – C2

All new development must be designed and constructed to ensure structural integrity up to the Flood Planning Level (3.53m AHD). The shelter in place must be designed and constructed to ensure structural integrity up to the Probable Maximum Flood (4.87m AHD), taking into account the forces of floodwater, wave action, flowing water with debris, buoyancy and immersion. Structural certification shall be provided confirming the above.

#### Building Components and Structural Soundness – C3

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.

#### Storage of Goods – D1

Hazardous or potentially polluting materials shall not be stored below the Flood Planning Level unless adequately protected from floodwaters in accordance with industry standards.

#### Flood Emergency Response – E2

Appropriate access to the shelter in place refuge should be available from all areas of the new development.

#### Floor Levels – F1

New floor levels within the development shall be set at or above the Flood Planning Level of 3.53m AHD.

#### Floor Levels – F2

The underfloor area of the dwelling below the 1% AEP flood level is to be designed and constructed to allow clear passage of floodwaters. The underfloor perimeter of the dwelling is to have a minimum of 50% open area below the 1% level.

#### Car parking – G6

Car ports are to be designed to allow flood waters to pass through and are to have a minimum of 50% open area below the 1% flood level.

#### Fencing – H1

Fencing (including pool fencing, boundary fencing, balcony balustrades and accessway balustrades) shall be open for passage of flood waters - All new fencing on the property must be design with a minimum of 50% open area between the 1% flood level and natural ground level, to allow flood waters to pass through.

#### Recommendations

The development must refer to:

- The Flood Risk Management Report prepared by Hyten Engineering dated 12/12/2019.

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**

### **Structural Stability Certification**

A suitably qualified structural engineer is to certify the structural stability of the shelter in place considering lateral flood flow, buoyancy, suction effects, and debris load impact of the PMF 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.

### **Undercroft Area**

A restriction shall be imposed on the title of the land, pursuant to S88B of the Conveyancing Act confirming that the undercroft area is not to be enclosed. The terms of such a restriction are to be prepared to Council's standard requirements at the applicant's expense and endorsed by Council prior to lodgement with NSW Land Registry Services. Northern Beaches Council shall be nominated as the party to release, vary or modify such restriction. Details demonstrating compliance are to be submitted to the Principal Certifying Authority 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.