

## Natural Environment Referral Response - Flood

<b>Application Number:</b>	DA2021/2524
<b>Date:</b>	12/10/2022
<b>To:</b>	Thomas Prosser
<b>Land to be developed (Address):</b>	Lot 17 DP 17768 , 73 Wimbledon 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

12/10/2022 Comments

No change to previous comments.

8/8/2022 Comments

The development proposes to construct a new two storey dwelling with double lock up garage. Revised plans indicate that the garage floor is set at 3.05m AHD and is acceptable.

Previous Comments

The development proposes to construct a new two storey dwelling with double lock up garage.

Openings under the ground floor will allow flood waters to flow under the house. Revised plans indicate that the garage floor is set at RL 2.7m AHD. This is below the 1% AEP level (3.05m AHD) and is not acceptable. The garage floor must be raised to the 1% AEP level.

Previous Comments

The development proposes to construct a new two storey dwelling with double lock up garage. Apart from the proposed garage, the proposal generally adopts the existing building footprint. The proposed enclosed garage is above the flood planning level.

The site is located in a high flood risk precinct.

Strip footings on an infill slab is proposed with openings (800x400 wide) on the north and south side of the alfresco area. It is unclear how the strip footings will allow for the free flow of storm water. Pier and beam structural design with open subfloor is the preferred construction method as it allows for the free passage of water in all directions.

The architectural plans and structural details need to be updated to clearly show that flood conveyance is not impeded and that there is no loss of 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.

##### 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 Flood Planning Level, 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 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 Flood Planning Level.

##### Floor Levels – C3

The underfloor area of the dwelling 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.

##### 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.