

# Natural Environment Referral Response - Flood

Application Number:	DA2020/1217
Date:	30/10/2020
То:	Maxwell Duncan
Land to be developed (Address):	Lot 329 DP 16719 , 10 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 proposed development is for alterations and additions to an existing flood prone property, including the construction of a new in-ground pool and secondary dwelling. The proposal includes a minor addition on the ground floor, however this is offset by the overall reduction in the footprint of the dwelling below the Flood Planning Level. The proposed pool has the coping set at natural ground level thereby not reducing the overall flood storage available and the secondary dwelling has it's floor level set at or above the Flood Planning Level. On merit the application is considered compliant 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:

#### 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 of 3.53m 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. All existing electrical equipment and power points located below the Flood Planning Level must have residual current devices installed cut electricity supply during flood events.

#### 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 – E1

- The minimum floor space of the shelter-in-place refuge shall be as outlined in Section B3.13 of the Pittwater 21 Development Control Plan.
- The shelter-in-place refuge shall remain accessible at all times.
- The minimum floor level of the shelter-in-place refuge shall set at or above the Probable Maximum Flood Level

#### Floor Levels – F1

New floor levels within the proposed secondary dwelling shall be set at or above the Flood Planning Level of 3.53m AHD

#### Floor Levels – F2

The underfloor area of the secondary 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 – G4

Vehicle barriers or restraints are to be installed to protect vehicle movement up to a minimum height of the Flood Planning Level.

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 below the 1% flood 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

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



# Flood Storage

Cut and fill calculations, including the installation of the proposed pool, must be provided to demonstrate that the proposed development will result in zero loss of flood storage in a 1% AEP flood event.

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.