

## Natural Environment Referral Response - Flood

<b>Application Number:</b>	DA2024/0934
<b>Proposed Development:</b>	Demolition works and construction of a dwelling house including swimming pool
<b>Date:</b>	18/07/2024
<b>To:</b>	Anaiis Sarkissian
<b>Land to be developed (Address):</b>	Lot 26 DP 19380 , 26 Trevor Road NEWPORT NSW 2106

### 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 demolition of the existing dwelling and construction of a new two storey dwelling. The works include the construction of a garage, swimming pool and associated fencing.

The property is within Medium Risk Flood Precinct. The site has the following flood characteristics:

- Flood Planning Level: 9.12m AHD
- 1% AEP Flood Level: 8.62m AHD
- 1% AEP Hydraulic Category: Flood Fringe and Flood Storage
- Probable Maximum Flood (PMF) Level: 9.25m AHD
- PMF Life Hazard Category: H5

Subject to the following conditions, the proposal 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 8.62m 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 9.12m AHD shall be designed and constructed from flood compatible materials.

B2 - All new development must be designed to ensure structural integrity up to the Probable Maximum Flood level 9.25m 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 9.12m 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 9.12m AHD.

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.

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.

### **Car parking**

D5 - The floor level of the proposed garage shall be set at or above the 1% AEP flood level of 8.62m 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.

### **Emergency response**

E1 - The shelter-in-place refuge must:

- a) Have a floor level at or above the Probable Maximum Flood level of 9.25m AHD; and
- b) Have a floor space that provides at least 1m<sup>2</sup> per person; and
- c) Be 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 electrical means.

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.

### **Fencing**

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 along any straight length, from the natural ground level up to the 1% AEP flood level. Openings shall be a minimum of 75mm x 75mm.

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.

### **Pools**

The pool's coping is to be less than 150mm above natural ground level.

All electrical equipment associated with the pool (including pool pumps) is to be waterproofed and/or located at or above the Flood Planning Level of 9.12m AHD.

All chemicals associated with the pool are to be stored at or above the Flood Planning Level of 9.12m 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.

## **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 for ground floor, shelter in place refuge and garage are set at or above the required level
2. Openings are provided in fencing where required for the free passage of flood waters
3. There has been no filling on the land other than what has been approved
4. Openings are provided under floor areas where required for the free passage of flood waters

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 Probable Maximum Flood level 9.25m 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 9.12m 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.