

Natural Environment Referral Response - Flood

Application Number:	DA2024/1091
Proposed Development:	Demolition works and construction of a mixed use development with basement parking comprising of retail uses and a childcare centre, including signage
Date:	20/09/2024
To:	Anne-Marie Young
Land to be developed (Address):	<p>Lot 5 S/P 32656 , 5 / 1 Careel Head Road AVALON BEACH NSW 2107</p> <p>Lot 5 S/P 32656 , 5 / 1 Careel Head Road AVALON BEACH NSW 2107</p> <p>Lot B DP 385973 , 3 Careel Head Road AVALON BEACH NSW 2107</p> <p>Lot 3 S/P 32656 , 3 / 1 Careel Head Road AVALON BEACH NSW 2107</p> <p>Lot 3 S/P 32656 , 3 / 1 Careel Head Road AVALON BEACH NSW 2107</p> <p>Lot 7 S/P 32656 , 7 / 1 Careel Head Road AVALON BEACH NSW 2107</p> <p>Lot 7 S/P 32656 , 7 / 1 Careel Head Road AVALON BEACH NSW 2107</p> <p>Lot 1 S/P 32656 , 1 / 1 Careel Head Road AVALON BEACH NSW 2107</p> <p>Lot 1 S/P 32656 , 1 / 1 Careel Head Road AVALON BEACH NSW 2107</p> <p>Lot 4 S/P 32656 , 4 / 1 Careel Head Road AVALON BEACH NSW 2107</p> <p>Lot 4 S/P 32656 , 4 / 1 Careel Head Road AVALON BEACH NSW 2107</p> <p>Lot 6 S/P 32656 , 6 / 1 Careel Head Road AVALON BEACH NSW 2107</p> <p>Lot 6 S/P 32656 , 6 / 1 Careel Head Road AVALON BEACH NSW 2107</p> <p>Lot 2 S/P 32656 , 2 / 1 Careel Head Road AVALON BEACH NSW 2107</p> <p>Lot 2 S/P 32656 , 2 / 1 Careel Head Road AVALON BEACH NSW 2107</p> <p>Lot CP SP 32656 , 1 Careel Head Road AVALON BEACH NSW 2107</p>

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

This proposal is for demolition of an existing shopping centre, construction of basement car parking, ground level retail and first floor childcare facility. The proposal must satisfy the controls for both Vulnerable & Critical Use and Business & Industrial Use. This proposal has been assessed against Section B3.11 of the Pittwater DCP and Clause 5.21 of the Pittwater LEP.

The proposal is located within the Medium and Low Flood Risk precincts. The relevant flood characteristics are as follows:

Flood Planning Level: 3.70m AHD

1% AEP (Climate Change & Sea Level Rise) Flood Level: 3.20m AHD

1% AEP Hydraulic Category: Flood Storage / Flood Fringe

Probable Maximum Flood (PMF) Level: 4.91m AHD

Max PMF Life Hazard Category: H4

The proposed crest height for the entry to the Basement Car Park is 3.05m AHD which is below the FPL and the PMF. In the location of the crest the FPL and the PMF height are both 3.70m AHD.

Control D6 and D7 of the DCP both apply to the development due to a vulnerable use (Childcare) being proposed in the building.

Control D6 of the DCP states:

"All enclosed car parks (including basement carparks) must be protected from inundation up to the Flood Planning Level. All access, ventilation, driveway crests and any other potential water entry points to any enclosed car parking shall be above the Flood Planning Level. Council will not accept any options that rely on electrical, mechanical or manual exclusion of the floodwaters from entering the enclosed carpark".

Control D7 of the DCP states:

"All enclosed car parks must be protected from inundation up to the Probable Maximum Flood level or Flood Planning Level whichever is higher. For example, basement carpark driveways must be provided with a crest at or above the relevant Probable Maximum Flood level or Flood Planning Level whichever is higher. All access, ventilation and any other potential water entry points to any enclosed car parking shall be at or above the relevant Probable Maximum Flood level or Flood Planning Level whichever is higher."

For areas of backwater flooding, floodgates including self-actuating flood gates are not deemed an appropriate measure to manage flood risk, due to the risk of failure. The site appears to allow for the potential to modify the proposed building and incorporate a driveway crest that is at or above the PMF level.

The proposal is deemed to be inconsistent with Section B3.11 of the Pittwater DCP and Clause 5.21 of the Pittwater LEP.

The proposal is therefore unsupported.

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 XXm 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 XXm 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 / Probable Maximum Flood level (~~delete one~~) of XXm AHD, taking into account the forces of floodwater, debris load, wave action, buoyancy and immersion.

OR

B2 -The shelter in place refuge must be designed to ensure structural integrity up to the Probable Maximum Flood level of XXm AHD, with the remainder of the new development designed to ensure structural integrity up to the Flood Planning Level of XXm AHD. The forces of floodwater, debris load, wave action, buoyancy and immersion must all be considered.

B3 - All new and existing electrical equipment, power points, wiring and connections must be located above the Flood Planning Level of XXm 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.