

Natural Environment Referral Response - Flood

Application Number:	DA2021/2656
Date:	08/06/2022
To:	Dean Pattalis
Land to be developed (Address):	<p>Lot 2 DP 527582 , 12 Lagoon Street NARRABEEN NSW 2101</p> <p>Lot 4 DP 656541 , 12 Lagoon Street NARRABEEN NSW 2101</p> <p>Lot A DP 371672 , 12 Lagoon Street NARRABEEN NSW 2101</p> <p>Lot 1 DP 1078838 , 12 Lagoon Street NARRABEEN NSW 2101</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

The proposed development includes the building of a "click and collect" facility, attached to the south-eastern part the existing building and extending into the car park. The existing external trolley area in this location (with a much smaller footprint than the proposed development) will be removed as part of these works. There will also be slight regrading of the upper part of the car park.

The area is very flood affected, with the following relevant flood information:

5% AEP flood level: 2.67m AHD

1% AEP flood level: 3.03m AHD

Flood Planning Level (FPL): 3.53m AHD

Probable Maximum Flood (PMF) level: 4.91m AHD

Flood Risk Precinct: Most of the car park is in the High Flood Risk Precinct, and most of the existing building is in the Medium Flood Risk Precinct.

Hydraulic Category: The car park is entirely within the Flood Storage Area.

The proposed floor level of the "click and collect" facility is 2.62m AHD (the same as for the existing building).

The proposed development complies with the flood requirements of the DCP and LEP, subject to conditions. Compensation for the loss of flood storage due to the enclosure of the "click and collect" facility as well as due to the regrading of the upper part of the car park is to be provided with the underground flood storage tank with a minimum volume of 18.72m³. The development is also be protected up to the FPL with the flood door and concealed, self-actuating flood barrier.

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 of 3.03m AHD, other than as marked on the Detail Plan, Drawing 21Q72_DA_C101/04.

Compensatory flood storage is to be provided with the underground flood storage tank, as detailed on the Flood Controls Detail Plan, Drawing 21Q72_DA_C400/02. The tank is to have a volume of at least 18.72m³ as shown on the drawing, and be free draining to the existing pit at a level above the connecting downstream pipe.

Building Components and Structural Soundness – B1

All new development below the Flood Planning Level of 3.53m AHD shall be designed and constructed with flood compatible materials.

Building Components and Structural Soundness – B2

All new development must be designed to ensure structural integrity up to the Probable Maximum Flood of 4.91m AHD, 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 or any other service pipes and connections must be waterproofed and/or located above the Flood Planning Level of 3.53m AHD.

Floor Levels – C1

New floor levels within the development are to be protected up to the Flood Planning Level of 3.53m AHD with a flood door between the proposed development and the existing shop and a concealed, self-actuating flood barrier on the western opening, both in accordance with details shown on Drawing 21Q72_DA_C101/04, Drawing 21Q72_DA_C400/02 and Appendix 4 of the Flood Planning Letter from Henry & Hymas dated 20.05.2022.

Flood Emergency Response – E1

The proposed development must have appropriate access to the exit on Lagoon St or to a shelter in place refuge above the PMF level of 4.91m AHD. This exit or shelter in place refuge must 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 an elevator.

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.

CONDITIONS WHICH MUST BE COMPLIED WITH PRIOR TO THE ISSUE OF THE OCCUPATION CERTIFICATE

Certification of the Structural Stability of the Building (B2)

A suitably qualified structural engineer is to certify the structural stability of the proposed development considering lateral flood flow, buoyancy, suction effects, wave action and debris load impact of the Probable Maximum Flood (PMF) 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.

Certification of Services (B3)

A suitably qualified electrical engineer or contractor is to certify that all new electrical equipment, power points, wiring or any other service pipes and connections are located above the Flood Planning Level or have residual current devices installed to cut electricity supply during flood events.

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.

Restriction as to User and Positive Covenant over the self-actuating flood gate

A restriction as to user shall be created on the title over the self-actuating flood gate in order to:

1. Prohibit the removal or modification of the self-actuating flood gate.
2. The flood protection offered by the self-actuating flood gate must be continuous and at a minimum level of 3.53m AHD. Such levels are to be detailed to Australian Height Datum on the Section 88B instrument and submitted to Council for approval.

Northern Beaches Council shall be nominated as the sole authority empowered to release, vary or modify such restriction.

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.

Positive Covenant for self-actuating flood gate

The Applicant shall submit a positive covenant (under the provisions of Section 88B of the Conveyancing Act 1919) to be created on the final plans and accompanying 88B instrument, requiring the proprietor of the land to maintain the self-actuating flood gate structures in accordance with the industry and manufacturing standards to ensure ongoing flood protection.

The terms of the positive covenant are to be prepared to Council's standard requirements, which are available from Northern Beaches Council. Northern Beaches Council shall be nominated as the sole authority empowered to release, vary or modify such covenant.

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.

ON-GOING CONDITIONS THAT MUST BE COMPLIED WITH AT ALL TIMES

Flood Management

Flood Effects Caused by Development (A2)

There shall be no filling of the land below the 1% AEP flood level of 3.03m AHD, or obstruction of flow paths through the property, outside of what is allowed as part of this DA.

Flood Emergency Response (E1)

Appropriate access to the exit on Lagoon St or to a shelter in place refuge above the PMF level of 4.91m AHD is to be maintained at all times from all areas within the development and it must contain as a minimum: sufficient clean water for all occupants; portable radio with spare batteries; torch with spare batteries; and a first aid kit.

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.