

Natural Environment Referral Response - Flood

Application Number:	DA2024/0944
Proposed Development:	Demolition works and construction of a plant nursery and landscape material supplies premises
Date:	17/09/2024
To:	Anne-Marie Young
Land to be developed (Address):	Lot 3 DP 26902 , 12 Boondah Road WARRIEWOOD NSW 2102 Lot 4 DP 26902 , 10 Boondah Road WARRIEWOOD NSW 2102

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 comprises of a new plant nursery and landscaping material supplies premises including an indoor garden center. The development proposes to import fill to the site and raise the ground level across most of the site to 3.9-4.0mAHD. The floor level of the proposed building is 4.4mAHD.

Flood Information:

1% AEP flood level: 3.03 - 3.22mAHD

1% AEP flood hydraulic category: Affected by Flood storage

1% AEP plus climate change flood level: 3.9mAHD

Flood Planning Level (FPL), including Climate Change level: 4.4mAHD

Probable Maximum Flood (PMF): 4.87mAHD

PMF Hazard Category: Affected by H5

For flood prone land development controls, the development is assessed against the clauses 5.21 and 6.1 of the PLEP. As the development is located in the Warriewood Valley Southern Buffer Area, B3.11, B3.12 and C6.1 of the PDCP and Chapter 4.5 of the Warriewood Valley Urban Land Release Water Management Specification 2001 are all deemed relevant for the DA assessment. A planning proposal (re-zoning) is not proposed so flexibility has been applied when assessing the appropriateness of certain Warriewood Valley flood controls.

As per clause 5.21 of the PLEP, development consent must not be granted unless the consent authority is satisfied the development will not adversely affect flood behaviour in a way that results in detrimental increases in the potential flood affectation of other development or properties. One of the

objectives of this clause 5.21 is to avoid cumulative impacts on flood behaviour. By filling a large portion of the site, floodwaters will be displaced. If all developments were permitted to fill their land, there could be cumulative affects in the form of an increase in peak flood levels across the floodplain. As per prescriptive control A2 of B3.11 of the PDCP, there must be no net loss of flood storage in all flood events up to and including the 1% AEP flood event. The development proposes filling of the site, which will result in significant loss of flood storage. C6.1 of the PDCP indicates that development can either demonstrate no loss of flood storage or demonstrate no adverse flood impact to surrounding properties. For the Warriewood Valley Land Release Area (areas outside of the southern buffer and Sectors 172-174), the flooding mechanism is overland flow or creek flooding. For the southern buffer and Sectors 172-174, the flooding mechanism is lagoon flooding. Lagoon flooding could be affected by the cumulative effects of filling resulting in adverse flood conditions. Therefore, the development must be consistent with control A2 of B3.11 of the PDCP unless it is demonstrated that there would not be cumulative effect if all rural, residential and commercial, etc lots in the Narrabeen Lagoon Floodplain were filled.

If a design is proposed where no fill is brought onsite, some flexibility in enforcement of the 1% AEP requirements of Table 4.3 of the Warriewood Valley Urban Land Release Water Management Specification 2001 could be supported by the Flood Referral body due to the site constraints and the development not being a subdivision or planning proposal (re-zoning). Subject to conditions, the flood referral body would consider supporting a rural-permitted development where the outdoor ground levels were at or above the 20% AEP (1 in 5 year ARI) flood level (generally 2.5mAHD for the site) assuming there is no loss of flood storage below the 20% AEP flood level.

As per prescriptive control E1 of B3.11 of the Pittwater DCP, a shelter in place flood refuge is required where flood free evacuation is not possible at the PMF level of 4.87mAHD. Flood free evacuation is deemed to not be possible at the PMF flood level, therefore a shelter in place refuge is required in accordance with prescriptive control E1 of B3.11 of the Pittwater DCP. If raising of Boondah Rd is proposed, then it must be designed and modelled so there are no adverse flood impacts to any neighbouring properties (increase of more than 20mm in peak flood level in the 1% AEP flood), including on Warriewood Wastewater Treatment Plant. If shelter in place is provided, the raising of Boondah Rd may not be required.

The storage and sale of landscaping materials below the FPL must consider possible erosion and siltation issues as per 5.21(2)(e) of the Pittwater LEP. Types of soils or other materials that are prone to erosion must be avoided from being sited below the 1% AEP flood level. Potentially hazardous polluting materials, such as pesticides or fertiliser must be stored or displayed at or above the FPL.

Regarding requirements of 5.21 of the Pittwater LEP, the proposed development is considered to:

- not be compatible with the flood function of the land; and
- adversely affect flood behaviour in a way that results in detrimental increases in the potential flood affectation of other development or properties with consideration of cumulative impacts, and
- not incorporate appropriate measures to manage risk to life in the event of a flood; and
- adversely affect the environment or cause avoidable erosion or siltation.

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:

Nil.