
From: Sue Young
Sent: 3/11/2021 10:16:28 AM
To: Council Northernbeaches Mailbox
Subject: DA2021/1862 Submission
Attachments: submission 102 Iluka Rd.pdf;

Dear Sir/Madam

Please see attached submission on DA2021/1862, 102 Iluka Road, Palm Beach.

Regards

Susan Young

104 Iluka Road
Palm Beach

2 November 2021

Submission on Development Application No: 2021/1862

102 Iluka Road, Palm Beach

Demolition of existing dwelling and garage and construction of a new dwelling, garage and studio.

Dear Anne-Marie Young

My primary concern with the current DA is the construction of a ~300 square metre basement 3 metres below existing ground level within the water table and the likely impact of the shoring, dewatering and excavation on the adjacent residence at 104.

Bores on the property confirmed the presence of high porosity and high permeability marine and estuarine sands and did not encounter bedrock to the 18 metres depth of penetration of the bores. Groundwater levels measured in the bores were at about 2.2 metres below ground level. Groundwater levels will be strongly influenced by groundwater flows off the escarpment to the east of the property and tidal variations in Pittwater. The groundwater measurements in the bores were taken during a period of relatively low rainfall and moderate tides and therefore the depth of shoring and amount of excavation within the water table may increase. The impact of spring tides and storm surges on the groundwater flow and subsurface sand movement should be taken into consideration as the basement is only 15 to 20 metres from the Pittwater waterway.

Excavation to about 3 metres below ground level will be required for basement construction. Due to the high groundwater level and the high permeability sands, either sheet piles or secant piles will be required to act as a temporary cut-off wall to allow dewatering during excavation and construction of the basement. This shoring wall will be 1 metre from both the north and south boundary of the property. Ground anchors in the sand are likely to be required and, with the proximity of the shoring wall to the boundary, would be installed under my property and also under the Council laneway and stormwater pipe. No consent will be given for sand anchors to be placed under 104 Iluka Road.

Dewatering of the tank will be required during excavation and construction of the basement. My concern is that dewatering the tank so close to the property boundary will cause dewatering outside the shoring wall and settlement induced by the dewatering on the adjoining brick boundary fence and rafted concrete slab under the residence at 104. It may also be a concern for Council due to dewatering settlement on the adjoining laneway and stormwater pipe. Drawdown outside the excavation area should be monitored and a

system implemented for replacement of the water drawdown on the adjacent properties to prevent settlement and subsidence under the rafted concrete slab at 104.

If the current proposal is approved, the shoring wall, dewatering and excavation for the basement tank only 1 metre from the side boundaries will require specialist, tier 1 contractors to carry out the installation of the shoring wall and dewatering of the basement tank.

If this DA were to proceed, I believe that continuous monitoring of the residence at 104 for both lateral and vertical movement should be carried out during the shoring, dewatering and excavation for the basement tank. Continuous vibration and noise monitoring should also be carried out during the excavation process, particularly during the shoring process. Dilapidation surveys and reports on the brick boundary fence and residence at 104 (particularly as the boat shed on the western end of 104 is on the north boundary of 102) would be required pre commencement, during and post completion of any work.

In the longer term, the proposed basement tank located only 1 metre from the north and south boundaries may have a significant effect on the strong groundwater flows to Pittwater resulting in subsurface movement and erosion of the unconsolidated sands located around the basement and under the adjoining properties, leading to differential compaction/settlement and surface subsidence.

Further to my main concern:

- The landscape plans show two trees planted on the northwest corner of the Council road reserve that will block pedestrian access along the verge.
- The proposed landscape area does not comply with the Pittwater DCP.
- The front and southern side setbacks are not compatible with the Pittwater DCP.
- The screening of the bulk and scale of the proposed development is completely reliant on plantings on the Council road reserve.
- As stated in the Statement of Environmental Effects that the proposed studio not be utilised for any form of separate accommodation. This should be made a Condition of Consent.

Regards

Susan Young