

Date: 10th November 2021

No. Pages: 2

Project No.: 2021-073

Development Officer
Northern Beaches Council.

Geotechnical Assessment for proposed absorption trench at
142 Ocean Street, Narrabeen

We understand the Development Officer has requested confirmation of design parameters for the proposed absorption trench as part of the approved Development Application (DA2021/1166) within the rear of the above site, No.142 Ocean Street, Narrabeen.

As a result we have reviewed the following documents:

1. Our Report titled "Geotechnical Site Investigation for Proposed New Residential Apartment Block at 142 Ocean Street, Narrabeen", Project No.: 2021-073, Dated: 27/04/2021.
2. Stormwater Management Plan – Project No.: SW21079, Drawing No.: SW001, SW010, SW011, SW020, SW030, ER001, Dated: 8/07/2021
3. Northern Beaches Council Letter, Development Application No.: DA2021/1166, Dated: 27/10/2021

As per the Northern Beaches Council letter response;

A consultant geotechnical engineer must submit a Geotechnical Report providing the following details (where applicable) for the proposed location of the absorption/dispersal trench:

- i. *Depth to rock*
- ii. *Depth to water table*
- iii. *Measured infiltration rate (in litres/square metres/second)*
- iv. *Infiltration rate that can be maintained in the long term*
- v. *Minimum distance any infiltration system should be located clear of property boundaries*
- vi. *Whether the use of infiltration is likely to cause seepage problems to the proposed structure or to any adjoining properties.*

These items are summarised below from Page 9 of our original report.

- i. Depth to rock: Not encountered to 5m depth, (expected at ≥ 15.0 m depth)
- ii. Depth to water table: Not encountered (expected at ≥ 8.0 m depth)
- iii. Determined vertical Infiltration rate: **2.19** L/sec/m².
- iv. Suggested Long term infiltration rate: **2.00** L/sec/m².
- v. Minimum distance of stormwater disposal from boundaries: ≥ 2 m
- vi. Due to the highly permeable nature of the sandy soils underlying the site and the location of the proposed absorption trench, it is envisaged that there will be no seepage problems impacting the proposed structure of adjoining properties from the use of infiltration.

It is understood that the proposed absorption trench is to be positioned in the northern corner of the block >2m from the adjacent boundaries and 1m from the proposed swimming pool. It is considered that the proximity of the absorption trench to the swimming pool will not have any impact on the structure, provided that the swimming pool is founded to appropriate bearing material below the base of the absorption trench.

Hope the above comments meet Council's requirements, if we can be of further assistance in regard to this matter please don't hesitate to contact the undersigned.

Yours faithfully,



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