

17 Moore Street, Clontarf

Assessment of Proposed Stormwater System

Scope

To determine the suitability of the location of the proposed stormwater system in terms of potential impact on slope stability. The system will dispose of stormwater from new and additional roofing for the proposed alterations and additions.

The details of the proposed stormwater system are shown on 5 stormwater plans prepared by NB Consulting Engineers, job number 2301041, drawings numbered D01 to D05, Issue A, dated 23/8/23.

The site was inspected on the 5th October, 2023 and previously on the 6th March, 2023.

Location and Recommendations

The proposed dispersion trench will come close to flush with a mortared sandstone block retaining wall up to ~2.5m high along the downhill common boundary (Photo 1). The wall shows no significant signs of movement.

Given the steep grade of the slope, the geology / ground materials across the site and the proximity to the downhill property and downhill common boundary retaining wall, the proposed location is not considered suitable for an infiltration/dispersion trench.

Ideally, all stormwater is to be piped to the road below the downhill neighbouring property by obtaining an easement or piped to Moore Street with the use of a charged stormwater system, provided council approve.

As a third less desirable option, a level spreader may be possible by reducing the stormwater runoff to less than the 'natural rate for the site' with the use of onsite detention, provided council approve. In this case, as the proposed spreader will only be placed across ~40% of the width of S common boundary, the calculated rate will need to be reduced to account for this

(i.e.~40% of the natural runoff rate for the site). We assess discharge from the proposed level spreader, controlled to the natural flow rate, will not lead to slope instability on the slope immediately below the system.

As shown on the stormwater plans, the structural engineer will need to certify that the downhill boundary retaining wall (Photo 1) is structurally adequate and can cope with water released from the spreader pipe and the associated surcharge loads that will act on the wall.

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Photo 1