



XAVIER
KNIGHT

19 November 2021

Attn: Kate Azzopardi – Britely

STORMWATER ENGINEERING STATEMENT

PROJECT NO. 200709

Address: 76B St Georges Crescent, Drummoyne

This statement has been prepared to support the Development Application submitted at the above property address. More specifically, this statement outlines the overall design intent to manage the stormwater drainage internal to the site, given that the site is potentially impacted by elevated estuarine levels.

It has been determined that the estuarine still water level (also referred to as a tailwater level in this statement) that will impact the site is RL 2.38m (AHD) in a 2100 year event with a conservative 5% exceedance sea level rise assumption. To ensure that the proposed development is not impacted by the estuarine level, a low-level solid barrier is proposed with the top of wall at RL 2.4m (AHD) minimum. The barrier has been specifically located approximately 44m from the rear (estuary) boundary of the site. In the event that the estuarine level rises to RL 2.38m (AHD), it is expected that the eastern side of the barrier wall will be inundated, while the western side of the barrier will be protected and not inundated.

To manage the internal drainage system on the western side of the barrier at the time of the tailwater level at RL2.38m (AHD) on the eastern side of the barrier, the following has been designed:

1. surface runoff on the western side of the flood barrier is conveyed to a pump out system through a pit and pipe network sized for the 1% AEP event
2. the pit and pipe system sized for the 1% AEP event discharges stormwater into a pump out tank that is sized for the 1% AEP volume
3. the pump out tank, through a dual pump operating system, will discharge to the eastern side of the flood barrier at IL 2.40 m AHD (above the tailwater level) into a pit riser, which will allow gravity fed discharge to the eastern boundary at the foreshore

For and on behalf of Xavier Knight Pty Ltd

Scott Sharma

PROJECT DIRECTOR

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