

Our Ref: Stormwater Conveyance Certificate.docx
Enquiries to: Lucas Faulkner

10 March 2023

EDQ Assessment Team
PO Box 2202
BRISBANE QLD 4001

Attention: Mr. Michael Fallon

Dear Sir

**Re: 4733-4743 Mount Lindesay Highway, North Maclean
Certification of Stormwater Conveyance
Your Ref: PRE2022/621**

This letter has been prepared to address the management of external runoffs for all events up to 1% AEP storms for the above proposed development at 4733-4743 Mount Lindesay Highway, North Maclean. This is required to satisfy the following condition in the pre-lodgement advice addendum issued by EDQ on 24 January 2023.

“The applicant is required to identify the extent of the external catchment, ultimate developed flow, 1% AEP extent, and demonstrate how the external runoffs for all events up to 1% AEP storms would be managed through the site without causing obstruction. A drainage swale (without incurring fill) and/or combination of minor and major drainage systems may be provided subject to assessment by EDQ.”

Burchills Engineering Solutions has identified the extent of the external catchment, ultimate developed flow, 1% AEP extent, and has demonstrated in Figure 1 using the Arcadis Hydraulic Impact Assessment report (EAG002-30139050-AAR-03). The flood model produced for the Arcadis report was used to extract flood levels around the perimeter of the subject site being RL25.159m as demonstrated in Figure 1 over page.

The model validates the local flooding is a backwater effect, with runoff conveyed along the western site boundary to the north and between Lot 3 and Lot 4 RP137101 before discharging to the proposed channel on the Maclean Estates land (Lot 1 RP113251).

The Arcadis flood model results demonstrate there are no impacts from this flood conveyance regime therefore it is proposed to retain these arrangements and provide a 20m wide drainage reserve on the western site boundary to maintain the conveyance to the north.



Figure 1 – Flood Level Extracts for the Subject Site

The drainage reserve should be continued on the adjoining properties to the north as they are developed, and / or could be dedicated as road reserve in accordance with the approved North Maclean Enterprise Context Plan Land Use and Road Network (DEV201896) and the future road utilised for stormwater drainage and overland flow purposes. This will ensure an integrated master plan development strategy that can be implemented progressively as development occurs.

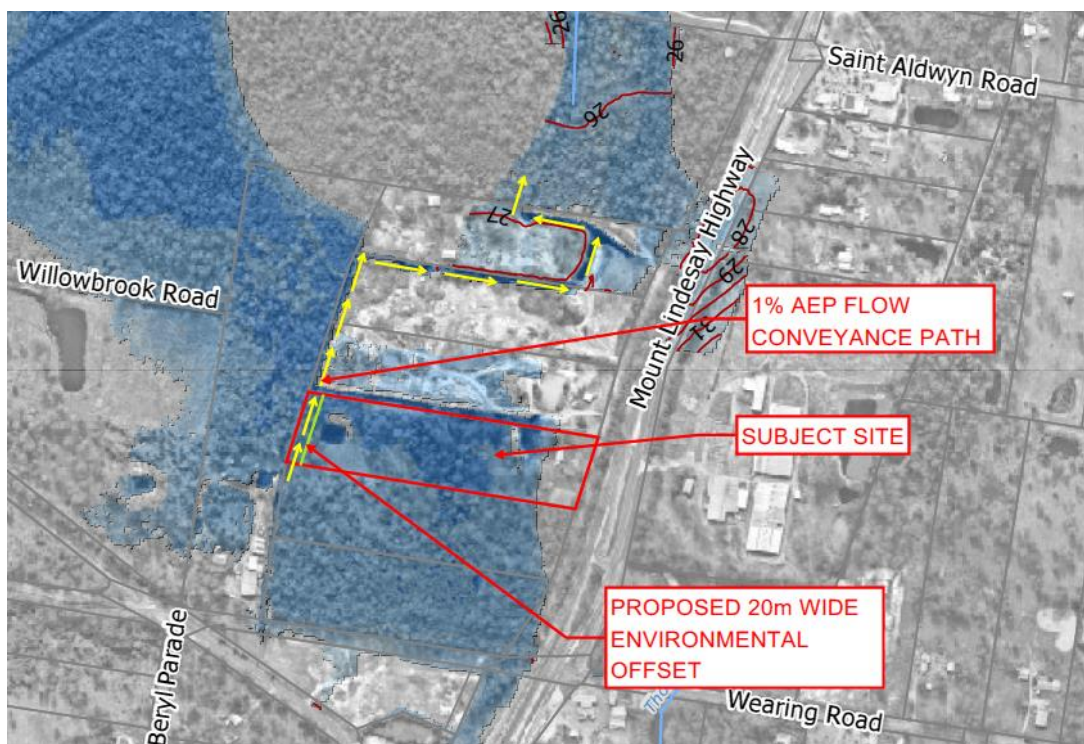


Figure 2 – Demonstrated 1% AEP Stormwater Flow Conveyance

This flood conveyance regime will meet the intent of the and demonstrate compliance with the pre-lodgement meeting addendum condition. The proposed drainage swale and/or drainage systems are appropriate for managing the external runoffs without causing obstruction, as required by the condition, and will ensure an integrated master plan development strategy that can be implemented progressively as development occurs.

If you would like to discuss anything further, please do not hesitate to contact myself on (07) 5509 6400.

Yours sincerely,



Lucas Faulkner (RPEQ: 8093)

Project Director – Urban & Infrastructure

Encl.

Arcadis Hydraulic Impact Assessment report (EAG002-30139050-AAR-03)

North Maclean Enterprise Context Plan Land Use and Road Network (DEV201896)