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14 May 2025

Icon Oceania

c/- RP Infrastructure
(sent via email)

Your Ref:

Our Ref: LTR010-02-21-860 Response to DPHI RFI re Flooding.docx

Attention: Matthew Murphy
(RP Infrastructure)

Email: matthew.murphy@rpinfrastructure.com.au

Dear Matthew,

RE: WESTGATE KEMPS CREEK – 253-267 ALDINGTON ROAD, KEMPS CREEK
SSD-23480429 – RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

This letter outlines a response to a request for additional information further to a letter from the Department of Planning, Housing and Infrastructure (DPHI) dated 28 March 2025 in relation to SSD-23480429. AT&I's response to the following DPHI additional comments is outlined herein:

Flooding

1. Provide a response, including any additional modelling, to address Sydney Water's comments outlined in Appendix 2 of Sydney Water's letter dated 29 January 2025 in relation to the interim stormwater arrangement.
2. Clarify whether the interim stormwater measures proposed for the Stage 1 development would effectively maintain the current flood conditions within the precinct, in alignment with the flood maps provided in the *Mamre Road Flood, Riparian Corridor, and Integrated Water Cycle Management Report*.

Specifically, the following comment from Sydney Water in their letter dated 29 January 2025 has been addressed by additional flood modelling undertaken by AT&I:

- In relation to Section 5.4.2, Sydney Water highlight to the Department that as part of the ultimate strategy for the Precinct:
 - We will be conveying the diverted catchment through 949-965 Mamre Road as shown in the Mamre Road Stormwater Scheme Plan.
 - This does not exempt the proponent having to demonstrate acceptable impacts downstream of their site whilst no trunk drainage is available and is a matter for DPHI to determine.
 - It is up to the proponent to demonstrate to DPHI that there will be an acceptable impact on the downstream properties during the interim up until the downstream waterway is constructed.
 - Sydney Water will not accept responsibility for any negative downstream impacts that may arise in the interim without hydraulic verification.

Further to the [Flood Impact and Risk Assessment](#) (FIRA) prepared by AT&L in support of SSD-23480429 (Rev 5, 25/10/2024), AT&L has setup and run two additional TUFLOW model scenarios to assess the potential impact of the proposed interim arrangement within Westgate Kemps Creek. The two additional scenarios are as follows:

- a) **Pre-development of Westgate Kemps Creek** – with the property at 253-267 Aldington Road in an undeveloped (existing) condition.
- b) **Post-development of Westgate Kemps Creek** – simulating flood behaviour through and downstream of 253-267 Aldington Road under the proposed interim arrangement of Westgate Kemps Creek, including:
 - i. Development of proposed Lots 1A, 1B and 1C
 - ii. Construction of Roads 1 and 2
 - iii. Construction of naturalised trunk drainage channels
 - iv. Retention of proposed Lot 2 in its existing condition, including an interim stormwater harvesting pond that is required to meet interim stormwater quality and flow volume controls in advance of connection to Sydney Water’s regional stormwater scheme infrastructure.

The additional TUFLOW model scenarios have been setup consistent with the parameters documented in the FIRA that supports the SSDA, as well as advice from Sydney Water pertaining to:

- The assumed state of external catchments that drain through Westgate Kemps Creek (further details outlined below).
- Extension of the TUFLOW model domain west of Mamre Road towards Kemps Creek.
- Hydraulic roughness being consistent with Sydney Water’s *Stormwater Scheme Guidelines* (August 2024), including roughness value of 0.08 within the proposed naturalised trunk drainage channel through Westgate Kemps Creek.

A description of the assumed state of the external (upstream) catchments that currently drain through Westgate Kemps Creek is presented in **Table 1**. The extent of these external catchments is presented in **Figure 1**. The assumed state of the external catchment has been applied to both the Pre-Development and Post-Development scenarios.

Table 1: Summary of flood model scenarios to address Sydney Water / DPHI Request for Additional Information

Catchment ID / Location (refer to Figure 1)	Status of development and adopted state of catchment
A. 155-251 Aldington Road, Kemps Creek Edge Estate (Frasers Property Industrial)	SSD-17552047 currently under assessment by NSW DPHI. Approval imminent, likely to be in May 2025. Assumed developed to “Phase 4A” condition (with interim stormwater arrangements prior to connection to Westgate Kemps Creek, including maintaining existing point of discharge to 930 Mamre Road).
B. 141-153 Aldington Road, Kemps Creek (part) Dexus Warehouse and Distribution Centre	SSD-32722834 currently under assessment by NSW DPHI. Assumed undeveloped (existing condition) on the basis that development consent has not been granted.

Catchment ID / Location (refer to Figure 1)	Status of development and adopted state of catchment
C. 200 Aldington Road Industrial Estate (Stockland Fife Kemps Creek)	SSD-10479 approved by NSW DPHI (currently at MOD 3). Assumed partially developed (Lot J and estate roads), based on interim arrangement that needs to be in place to satisfy stormwater quality and flow volume targets prior to connection to Sydney Water's regional scheme.
D. 230-242 Aldington Road, Kemps Creek (BAPS Shri Swaminarayan Mandir)	Construction nearing completion. Assumed fully developed.
E. 244-270 Aldington Road, Kemps Creek (Stockland Fife Kemps Creek)	DA24/0268 currently under assessment by Penrith City Council. Assumed undeveloped (existing condition) on the basis that development consent has not been granted.
F. 272-288 Aldington Road, Kemps Creek (part)	Timeframe for development unknown. Assumed undeveloped (existing condition).
G. 269 Aldington Road, Kemps Creek (part)	Timeframe for development unknown. Assumed undeveloped (existing condition).
H. Aldington Road	Road upgrade works approved under SSD-10479 MOD 3. Assumed completed.

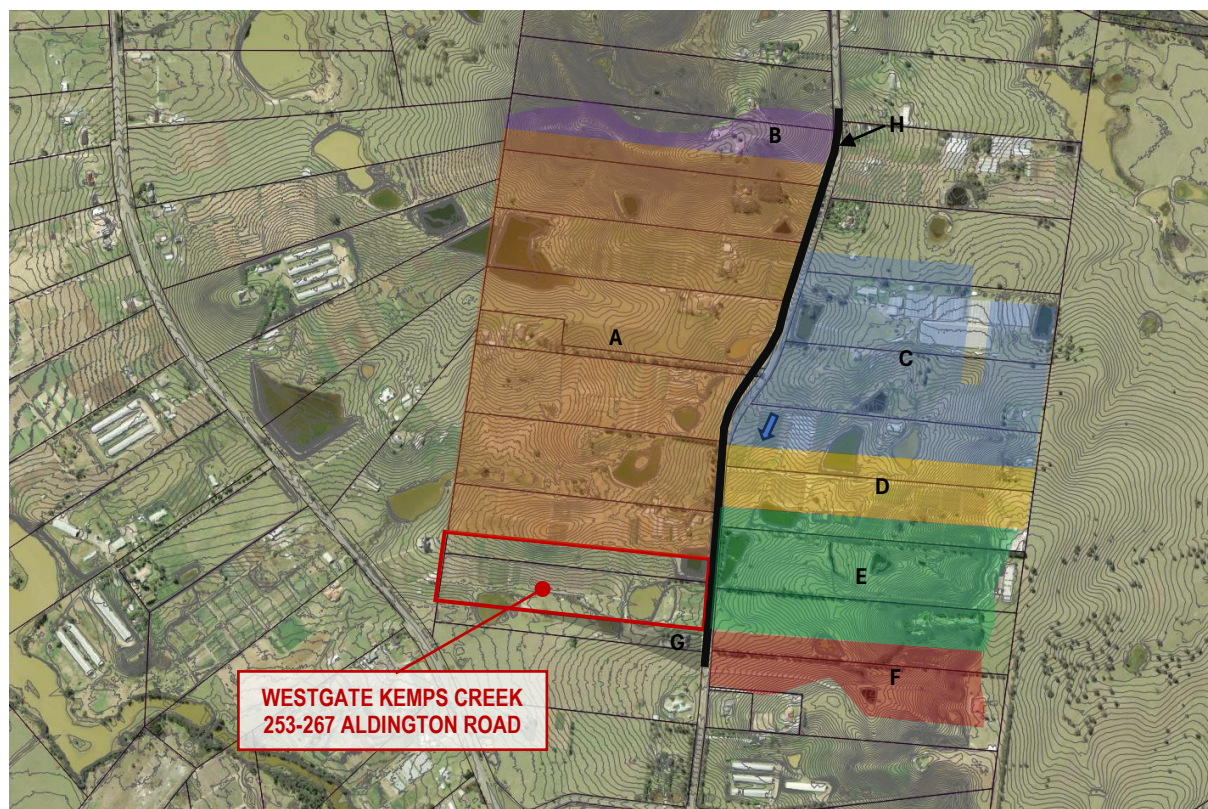


Figure 1: External catchments discharging through Westgate Kemps Creek

The TUFLOW model results for the 1% AEP design event are presented in maps included in **Attachment 1**. A summary of the flood model results is outlined below:

- The flood extents and depths under the Pre-Development condition are generally consistent with the mapped flood extents presented in Sydney Water's *Mamre Road Flood, Riparian Corridor and Integrated Water Cycle Management Strategy* (October 2020), however noting that minor differences in flood extent are expected due to the nature of assumptions that have been incorporated into AT&L's model for external catchments upstream of Westgate Kemps Creek (as described in **Table 1**).
- Under the Post-Development condition, the flood extents downstream of the site are shown to be generally less than the Pre-Development condition (including within the property at 269 Aldington Road and through properties west of Mamre Road). The nature of the reduction in flood extent is expected to be due to the formalisation of the trunk drainage channel through the Westgate Kemps Creek site, as well as the incorporation of on-site stormwater detention (OSD) tanks within proposed lots 1A, 1B and 1C.
- The model results indicate a minor localised increase in flood level within the property at 285 Aldington Road, Kemps Creek (around 20mm increase). This change in flood level is likely to be due to changes in storm duration simulated in TUFLOW that are unrelated to the proposed development of Westgate Kemps Creek. It is also noted that ESR Developments (Australia) Pty Ltd lodged a Development Application ([DA24/0703](#)) in September 2024 for a proposed development of the site, including demolition of existing structures, bulk earthworks and construction of two warehouse buildings.

Based on the results of additional flood modelling undertaken by AT&L:

- The proposed interim stormwater measures for Stage 1 development of Westgate Kemps Creek would effectively maintain the existing flood conditions adjacent to the site.
- The proposed Stage 1 development, with the adopted state of the external catchments that drain through Westgate Kemps Creek, would result in a decrease in flood extent compared to the Pre-Development condition.

Should you have any questions, please don't hesitate to contact the undersigned.

Yours sincerely,



Tim Michel

Associate Civil Engineer

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ATTACHMENT 1:

- 21-860-D-100-A: Pre-Development of Westgate, 1% AEP Event, Flood Depth
- 21-860-D-100-B: Post-Development of Westgate, 1% AEP Event, Flood Depth
- 21-860-D-100-C: Post-Development of Westgate, 1% AEP Event, Flood Level Difference



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Client:
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Project Name:
Westgate Kemps Creek - SSD-23480429

Drawing Title:
**Pre-Development of Westgate Scenario
1% AEP Event
Flood Depth**

Scale at A3
0 50 100 m
1:5,000 (A3)

Status:
DRAFT FOR SSDA

Drawing Name:	Issue:
21-860-D-100-A	1

Rev	Date	By	Approved
1	13.05.25	IS	JA

Legend

Site Extent

Advisian1% AEP Flood Extent (1%TW)

Cadastre

1% AEP
 FLOOD LEVEL CONTOURS (mAHD)

FLOOD DEPTH (m)

- 0.00 to 0.25
- 0.25 to 0.50
- 0.50 to 0.75
- 0.75 to 1.00
- 1.00 to 1.25
- 1.25 to 1.50
- 1.50 to 1.75
- 1.75 to 2.00
- > 2.00



Client:
Icon Oceania

Project Name:
Westgate Kemps Creek - SSD-23480429

Drawing Title:
**Post-Development of Westgate Scenario
1% AEP Event
Flood Depth**

Scale at A3
0 50 100 m
1:5,000 (A3)

Status:
DRAFT FOR SSDA

Drawing Name:
21-860-D-100-B

Issue:
1

Rev	Date	By	Approved
1	13.05.25	IS	JA

Legend

Site Extent

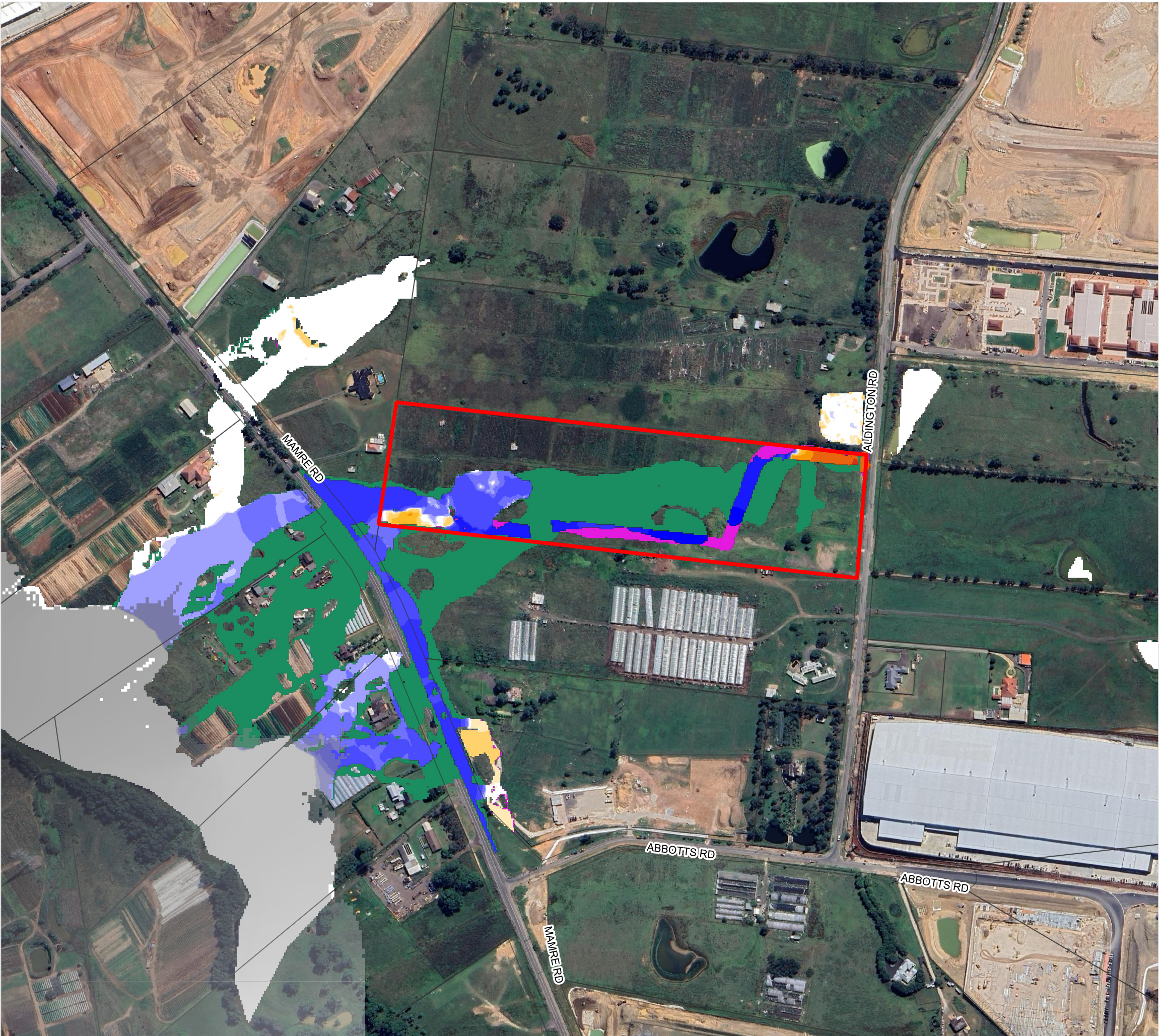
Advisian1% AEP Flood Extent (1%TW)

Cadastre

1% AEP
 FLOOD LEVEL CONTOURS (mAHD)

FLOOD DEPTH (m)

- 0.00 to 0.25
- 0.25 to 0.50
- 0.50 to 0.75
- 0.75 to 1.00
- 1.00 to 1.25
- 1.25 to 1.50
- 1.50 to 1.75
- 1.75 to 2.00
- > 2.00



Client:
Icon Oceania

Project Name:
Westgate Kemps Creek - SSD-23480429

Drawing Title:
**Post-Development of Westgate Scenario
1% AEP Event
Flood Level Difference**

Scale at A3
0 50 100 m
1:5,000 (A3)

Status:
DRAFT FOR SSDA

Drawing Name:
21-860-D-100-C

Issue:
1

Rev	Date	By	Approved
1	13.05.25	IS	JA

Legend

Site Extent

Advisian1% AEP Flood Extent (1%TW)

Cadastre

1% AEP

FLOOD LEVEL DIFFERENCE (m)

- < -1.00
- 1.00 - -0.50
- 0.50 - -0.20
- 0.20 - -0.10
- 0.10 - -0.05
- 0.05 - -0.02
- 0.02 - -0.01
- 0.01 - 0.01
- 0.01 - 0.02
- 0.02 - 0.05
- 0.05 - 0.10
- 0.10 - 0.20
- 0.20 - 0.50
- 0.50 - 1.00
- > 1.00
- Was Wet, Now Dry
- Was Dry, Now Wet