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Hi Kris,

Further to our discussion with AECOM, we have undertaken some additional flood simulations aimed at assessing the potential for runoff from the land to the north-west of the First Building site to "drain" toward the First Building and present as a flood risk for the development. This has involved the following simulations:

(i) Simulation of the 1% AEP storm assuming all exis ing storages (farm dams) are full

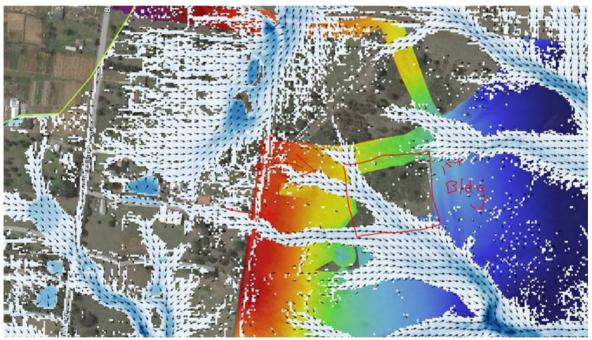
(ii) Simulation of an Extreme Event based on multiplication of the design rainfall in the 1% AEP hyetograph by 5, while also assuming all storages are full

Key Findings:

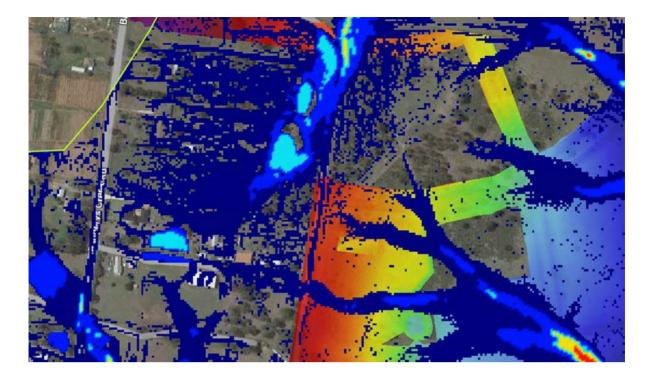
- In the 1% AEP event, water does not spill towards the First Building Site from the flow path draining towards the north. That is, there is no flood risk to he First Building due to overland flows in he 1% AEP event.
- Some water spills towards the First Building in Extreme Event. However, the overtopping would be relatively minor and characterised by the following:
 - Floodwater / runoff depths are generally less than 0.25 metres and therefore could be accommodated in the road reserve > Hazard according to ARR 2019 is H1 to H2
- Assuming the location of the First Building has not changed, flood levels in the immediate vicinity are lower than 77 0 mAHD. Based on the plans you forwarded to me, the minimum FFL is 77.5 mAHD. Therefore, the FFL of the building is at least 500 mm above the predicted peak level of flooding / inundation that could poten ially occur in he worst possible storm event.

Extreme Event Results (as screenshots)

Depth



ARR 2019 Hazard



I believe that the results from this analysis and the rationale employed are sufficient to confirm that inundation of the First Building due to flooding caused by local catchment rainfall is negligible.

Regards

Chris Thomas

Principal Consultant NSW Practice Lead – Water Resources Level 17, 141 Walker Street | North Sydney NSW 2060 P +61284567230 | M +61407063711 E chris.thomas@advisian.com

From: Kris Letsch <<u>Kris.Letsch@wpca.sydney</u>> Sent: Wednesday, 13 July 2022 4:37 PM To: Thomas, Chris (Sydney) <<u>CHRIS.THOMAS@advisian.com</u>> Cc: Bradley Embury <<u>Bradley.Embury@wpca.sydney</u>> Subject: RE: First Building Design & FFL[External Sender]

** [EXTERNAL SENDER] Do not click links or open attachments unless you recognize the sender. **

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Hi Chris,

Just touching base to see how you are going with the updated advice.

Thanks,

Kris

From: Bradley Embury <<u>Bradley.Embury@wpca.sydney</u>> Sent: Monday, 11 July 2022 9:35 AM To: <u>chris.thomas@advisian.com</u> Cc: Kris Letsch <<u>Kris.Letsch@wpca.sydney</u>> Subject: First Building Design & FFL

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