



Your ref: SSD-39587022
Our ref: DOC24/659108

Mr David Glasgow
A/Team Leader
Department of Planning, Housing and Infrastructure
4 Parramatta Square, 12 Darcy Street
PARRAMATTA NSW 2050

20 September 2024

Subject: Flooding impacts for the Central Barangaroo Early Works - Hickson Road Interface (SSD-39587022)

Dear Mr Glasgow,

Thank you for your email received 14 August 2024 seeking comment from the Biodiversity, Conservation and Science Group (BCS) on additional information received in response to comments for the Central Barangaroo Early Works - Hickson Road Interface (SSD-39587022).

BCS has reviewed the 'Letter to Department of Planning, Housing & Infrastructure - Central Barangaroo Early Works - Hickson Road Interface (SSD-39587022) – Aqualand SSDA01 Revision:08' (WSCE, 5 August 2024) (WSCE response) against BCS's 21 June advice (DOC24/459880 provided at Attachment A) and considers Issues 3, 5, 7 and 8 have been satisfactorily addressed.

The advice provided by BCS for Issues 2, 4 and 6 have not been adequately addressed and BCS provides further comment on these matters below.

Issue 2

The WSCE response explains that model updates were made to best reflect existing conditions.

BCS remains concerned that the development as a whole has never been modelled to assess the impacts of the final developed conditions. The modelling approach used can only demonstrate incremental impacts as the works progress. This could result in true or cumulative impacts associated with the development not being predicted.

Recommendation:

BCS considers it would be prudent to model the final developed scenario and compare this to the pre-existing scenario with relevant stormwater pipes in place to check for impacts. BCS recommends this be undertaken prior to determination.

Without modelling for the ultimate final built conditions of the Central Precinct, BCS is unable to provide any further advice on this matter.

Issue 4

The WSCE response provides commentary, including that impacts are minor and that the site inflow is only 0.1m³/s in the 1% AEP event.

Recommendation:

BCS recommends that consideration be given to the risk of pipe surcharge due to the reliance on the pipe to mitigate flood impacts and the lack of suitable freeboard in pits. The lack of suitable freeboard indicates that there is no tolerance or factor of safety for modelling errors, data limitations, etc. This should be considered when considering flow rates and the potential for errors in their estimation. Small flows can still result in flooding and drainage problems, particularly in areas of shallow grade such as Hickson Road.

BCS considers it would be prudent to demonstrate a mitigation measure design with appropriate freeboard. BCS recommends this be resolved prior to determination.

Issue 6

The WSCE response refers to the flow rate in the 1% AEP event without due consideration of the full context.

Recommendation:

Refer to the recommendations for Issues 2 and 4 above.

Without addressing the outstanding recommendations, BCS is unable to provide any further advice on this matter. BCS requests that the Department of Planning, Housing and Infrastructure (DPHI) seek the agreement of BCS for any draft conditions of consents which include a post approval role for BCS.

If you have any further questions about this issue, please contact Liz Peterson, Senior Conservation Planning Officer at elizabeth.peterson@environment.nsw.gov.au.

Yours sincerely



Louisa Clark

**Director, Greater Sydney
Regional Delivery
Biodiversity, Conservation and Science**

Attachment A – DOC24/459880 – BCS Advice 21 June 2024 - Flooding impacts for the Central Barangaroo Early Works - Hickson Road Interface (SSD-39587022)