



Ms Liz Kimbell
Manager, Place & Infrastructure – Central (Western)
Department of Planning, Housing and Industry

By email: elizabeth.kimbell@environment.nsw.gov.au

Dear Ms Kimbell

Thank you for your email received 22 December 2023 requesting early consultation with the Environment and Heritage Group (EHG) on a Planning Proposal to provide for the development of 21 terrace dwellings and 319 apartments on Site D at Georges Cove Marina (Site D), located at 146 Newbridge Road, Moorebank (proposal).

From 1 January 2024, the former EHG is known as the Biodiversity, Conservation and Science Group (BCS) as part of the NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW).

The Georges Cove Marina Modified Planning Proposal report (EMM Consulting, September 2023) and Mirvac Georges Cove Marina (Site D) Modified Planning Proposal Flood Impact Assessment and Flood Emergency Response Plan (Tooker and Associates, August 2023) do not demonstrate that the proposal is compatible with the flood risk at the site.

Should the planning proposal proceed to Gateway determination, BCS recommends that it demonstrate that the proposal is an appropriate use of the site via:

- preparation of a Flood Impact and Risk Assessment pursuant to the [Flood Risk Management Manual 2023](#) (DCCEEW 2023; NSW Flood Manual) *Flood Impact and Risk Assessment - Flood Risk Management Guideline LU01* with reference to the Georges River Flood Study (BMT 2020)
- in relation to emergency management, addressing the advice of the NSW State Emergency Service and the NSW Flood Manual's *Support for Emergency Management Planning Guideline EM01*.

BCS further recommends that Liverpool City Council undertakes a review of the evacuation constraints and emergency conditions for the Liverpool CBD and adjoining areas including the Georges Cove Marina and Moore Point sites having regard to the evacuation modelling undertaken by Molino Stewart dated March 2022: *Georges River Evacuation Modelling – Flood Evacuation Analysis, Final*.

Detailed BCS advice is provided at Attachment A.

If you have any further questions about this issue, please contact Dana Alderson, Senior Project Officer Planning at dana.alderon@environment.nsw.gov.au.

Yours sincerely

A handwritten signature in black ink that reads "S. Harrison". The script is cursive and fluid.

09/02/2024

Susan Harrison
Senior Team Leader Planning
Greater Sydney

Attachment A – DCCEEW advice on pre-Gateway planning proposal for 146 Newbridge Road, Moorebank

BCS has reviewed the:

- Georges Cove Marina Modified Planning Proposal prepared by EMM Consulting dated September 2023 (Planning Proposal document)
- Mirvac Georges Cove Marina (Site D) Modified Planning Proposal Flood Impact Assessment (FIRA) and Flood Emergency Response Plan (FERP) prepared by Tooker and Associates and dated August 2023
- Liverpool City Council Report PLAN 01 to the Ordinary Meeting of Council dated 13 December 2023 (Council report)
- NSW State Emergency Service advice on Planning Proposal for 146 Newbridge Road, Moorebank dated 29 January 2024 (SES advice).

Flooding

The flood data and recently completed flood studies including the Georges River Flood Study (BMT, 2020) indicate that the proposed future development may not be compatible with the flood risk of the site.

BCS recommendations are provided below and guidance for Council and DPHI in planning for flood risk is available in the supporting guideline to the NSW Flood Manual entitled *Understanding and managing flood risk - Flood risk management guideline FB01*, available at: [Understanding and managing \(nsw.gov.au\)](https://www.nsw.gov.au/understanding-and-managing-flood-risk).

Adaptive planning

BCS previously provided advice to the Department of Planning, Housing and Industry (DPHI) on rezoning of the broader Georges Cove Marina site, with the most recent advice dated 28 April 2022 being supportive of an adaptive planning approach (or development sequencing) for planning proposals within the Liverpool Collaboration Area to address and mitigate flooding impacts under major and extreme flooding events.

BCS recommends that Council undertakes a review of the evacuation constraints and emergency conditions for the Liverpool CBD and adjoining areas (including Moorebank Marina and Moore Point) having regard to the evacuation modelling undertaken by Molino Stewart dated March 2022: *Georges River Evacuation Modelling – Flood Evacuation Analysis, Final*.

This review would provide an improved understanding of the compatibility of the proposal with the sites flood risk, constraints and gaps in infrastructure and systems, and the requirement for scaling, staging and sequencing of developments in an adaptive manner.

Flood Impact and Risk Assessment

The FIRA does not meet the requirements of the NSW Flood Manual and must be updated to include the information for a 'Detailed' flood impact and risk assessment as described in the *Flood Impact and Risk Assessment - Flood Risk Management Guideline LU01*, available at: [Flood impact and risk assessment \(nsw.gov.au\)](https://www.nsw.gov.au/flood-impact-and-risk-assessment).

For example, the FIRA and FERP does not include:

- the flooding impacts under the full range of flooding events including the Probable Maximum Flood (PMF), and is only based on the changes in flooding characteristics from pre- to post-development conditions of the site under the 5% AEP and 1% AEP events
- the compatibility of the proposed development site under these flooding events (i.e., depth and duration of flooding and its hazards and the extent of isolation during major flooding events).

The revised FIRA is required to show the change in flooding risks from existing to post-development conditions including the exposure of future communities to flooding risks and to illustrate whether the proposal is an appropriate use of the site.

Flood Emergency Response Plan

The proposed future residential development of approximately 1,000 residents is likely to be isolated for 24 to 36 hours or even longer under extreme flooding events.

The FERP includes a three-tier strategy (vehicular evacuation, pedestrian evacuation, and Shelter-in-Place). The plan proposes a site-specific FERP whereby the site manager and floor wardens of future developments would be responsible for the operation and management of the response. The NSW Flood Manual *Support for Emergency Management Planning Guideline EM01* does not support site-specific flood response plans because they 'are not considered by the NSW SES to be an effective measure to strategically and effectively manage emergency management risks to the community during flooding' (see Sections A2.4 and 2.4.2, p.5-7).

The NSW State Emergency Service (SES) provided a comprehensive emergency management response to the proposal in its letter dated 29 January 2024. The SES advice highlights existing and projected flooding risks to communities and the environment, limitations of existing infrastructure and systems (such as transport networks), and the functionality of the FERP proposed by the proponent. BCS agrees with the SES advice including the parameters and assumptions to be considered in the assessment of emergency conditions and the development of an emergency response plan to address and manage flooding risks during major flooding events (such as the PMF).

Biodiversity

BCS notes that the proposal is supported by a biodiversity assessment prepared by Biosis dated 30 April 2018 in relation to a previous planning proposal for the site. Since this assessment was prepared, the boundaries of the proposal may have changed, and six years have lapsed, BCS recommends that the biodiversity assessment be updated for the new proposal.

End of Submission