

Our ref: DOC21/407920 Senders ref: SSD-10831778

Megan Fu Principal Planning Officer Infrastructure Assessments, DPIE Locked Bag 5022 PARRAMATTA NSW 2124

Dear Ms Fu

Subject: Exhibition – Sydney Children's Hospital Stage 1 and Children's Comprehensive Cancer Centre (SSD-10831778)

Thank you for your email received 17 May 2021 requesting comments on the above proposal.

Environment, Energy and Science Group (EES) has reviewed the documents provided and is concerned about the proposed use of hospital buildings as flood barriers. Detailed EES comments and recommendations regarding flooding are at Attachment 1.

EES notes that the site has been cleared of buildings and vegetation as part of the Randwick Campus Redevelopment and has no comments in relation to biodiversity.

If you have any queries please contact Dana Alderson, Senior Project Officer Planning via Dana.Alderson@environment.nsw.gov.au or 02 8837 6304.

Yours sincerely

1 17/6/202*1*

Marnie Stewart

A/Senior Team Leader Planning Greater Sydney Branch Biodiversity and Conservation

Attachment 1: EES comments on Exhibition of Sydney Children's Hospital Stage 1 and Children's Comprehensive Cancer Centre (SSD-10831778)

Floodplain Risk Management

The emergency department and car park for Sydney Children's Hospital Stage 1 and Children's Comprehensive Cancer Centre are proposed below ground level and below the relevant flood level. The Flood Modelling Assessment (Meinhardt Bonacci, 27 April 2021) notes correctly that a flood barrier 500mm above the probable maximum flood (PMF) of 1.4m in High Street will be required to protect the building from flooding. The subject development and the adjoining Health Transition Hub (SSD-10822510) buildings are proposed to be the flood barrier.

EES does not support the use of new hospital buildings as a flood barrier – any required barrier should be separate and independent to any building wall. EES requests additional information be provided on the flooding issues, including revised reporting and drawings as follows.

- 1. A description of the flood barrier, including the following:
 - Material type
 - Finished surface levels at suitable intervals along the top of the barrier
 - How the barrier would tie in to surrounding ground to prevent outflanking, i.e. floodwater making its way around the barrier, and
 - How the barrier would interface with the building, e.g. whether any footings are likely to be required and if these can feasibly be provided separately to the hospital building.
- 2. The Flood Modelling Assessment states that the flood barrier must be watertight and able to resist hydrostatic pressures. In addition, the flood barrier below the PMF level must be designed to achieve the following:
 - withstand the impact of likely debris, such as floating cars
 - accommodate predicted scour, and
 - withstand buoyancy and drawdown forces, if applicable.
- 3. For all potential flood ingress points to below ground levels of the development, the level of the entry and relevant flood level must be stated (preferably tabulated to allow ease of comparison), and a description provided of how it will be protected against the ingress of floodwater. This will include, but is not limited to:
 - Basement carparks (the PMF event or 1% AEP event plus 500 mm freeboard would apply)
 - The driveway from Botany Street, and
 - Air vents/louvre openings along the north elevation, including specification of the minimum permissible level(s) for any such openings on architectural drawings.

END OF SUBMISSION