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11 December 2019

Contact: *Justine Clarke*Telephone: *02 9865 2402*Our ref: *D2019/143398*

David Way Department of Planning, Industry & Environment 320 Pitt Street SYDNEY NSW 2001

Dear Mr Way,

Exhibition comments - New East Leppington Primary School - SSD-9476

Thank you for your email dated 14 November inviting WaterNSW to comment on the Environmental Impact Statement (EIS) for the New East Leppington Primary School State Significant Development project (SSD 9476; Lot 9001 DP 1206596). WaterNSW understands the development involves the construction of a new public primary school to accommodate 1,012 students.

The subject site adjoins the WaterNSW owned and managed Upper Canal corridor, which is a controlled area declared under the *Water NSW Act 2014* and its associated Regulation. The Upper Canal is a critical component of Sydney's bulk water supply infrastructure and is also a State Heritage listed item. Public access is prohibited unless a written access consent has been issued by WaterNSW.

WaterNSW identified that there is potential for impacts on the Upper Canal corridor if WaterNSW's requirements as stated in this response are not adequately implemented during the final design, construction and operational phases. WaterNSW has reviewed the EIS and associated documents and finds the documentation does not adequately address:

- · water quality and drainage
- heritage
- sediment and erosion control, or
- impacts of vibration on the Upper Canal during construction.

These issues are discussed in further detail below.

Stormwater Management

It is understood that the stormwater drainage has been designed to convey flows for the 1 in 10 year ARI storm event. The overland flow drain is located on the property boundary, directly adjacent to the Upper Canal corridor. All overland flows off the site are expected to be conveyed into the overland flow drain and then to the approved legal point of discharge at the northern extent of the property.

Given the location of the overland flow path, WaterNSW is concerned that waters may not be adequately contained onsite during storm events and stormwater flows may enter the Upper Canal, impacting on water quality.

It is unclear from the documents provided that the proposal will not result in an increase in overland flows into the Upper Canal corridor of either quantity, quality or velocity. The

development must be designed, operated and maintained to ensure post-development flows do not exceed pre-development flows into the Upper Canal corridor.

A site visit by WaterNSW staff on 2 December 2019 identified that the overland flow drain is directing water into the Upper Canal corridor at the headwall. It is expected the design of this drainage line is reviewed and suitable remediation measures outlined to ensure the correct operation, with no flows entering the Upper Canal corridor.

WaterNSW requests that:

- additional modelling is provided to show the stormwater flow properties for the predeveloped and post developed scenarios for each event up to and including the 1% AEP
- during detailed design stage, measures are developed ensure surface water flows leaving the development site do not impact on the water quality of the Upper Canal
- clarification is provided as to the floodway on site (depicted by signage and referenced in the HIA). Reference to a floodway or flooding should be removed where it is not accurately identified (such as the HIA).

Heritage

The impacts of the proposed development on the State Heritage listed Upper Canal (SHR no. 01373) do not adequately reflect WaterNSW requirements or review the impact to this asset as per the correct document.

The HIA (Appendix Y) prepared by CityPlan (September 2019) uses a superseded (2004) version of the Upper Canal Conservation Management Plan (CMP) for its assessment. While there are similarities between the 2004 and updated 2016 documents, the main part of the CMP has been updated. In terms of the inventory of items along the Canal, it is appropriate to use the 2004 version as it was not updated in the 2016 CMP. A copy of the 2016 CMP by Government Architect's Office can be obtained from Heritage NSW or WaterNSW.

The consultants have drawn the wrong conclusion that the development site is located in the Ingleburn Dam Precinct, as per the CMP. That precinct only relates to items 6-19. The site under consideration is near item 38.

WaterNSW requests that:

 the HIA is reviewed and considers the 2016 Upper Canal Conservation Management Plan, as well as recognising WaterNSW as the asset owner and not Sydney Catchment Authority or Sydney Water.

Sediment and erosion control

It is critically important that the bulk earthworks are designed and undertaken in a manner that does not impact on the Upper Canal corridor. Effective erosion and sediment control must be installed prior to any earthworks. The controls should be regularly maintained and retained until works have been completed and the ground surface stabilised or ground cover re-established.

WaterNSW requests that:

• erosion and sediment controls are to be designed, installed and maintained in accordance with the 'Blue Book', Managing Urban Stormwater: Soils and Construction, Landcom (2004).

Vibration Impacts

The Upper Canal is more than 130 years old, and many parts are fragile and at risk of cracking or collapse. Vibration from excavation and construction works occurring close to the Canal can increase the potential for damage to occur.

The EIS and Acoustic Report (Appendix M) prepared by Northrop Consulting Engineers (August 2019) does not addressed the impacts of vibration on the Upper Canal during construction. In addition, the EIS does not specify <u>any</u> mitigation measures to address vibration impacts.

WaterNSW accepts Line 3 of Table 3 from the current *German Standard DIN 4150 – Part 3 - "Structural Vibration Part 3: Effects of vibration in structures"* as the maximum allowable limit of vibration acceptable at WaterNSW assets.

WaterNSW requests:

• the development proposal confirms velocity limits and the impact the works will have on WaterNSW assets and specify any required mitigation measures.

Consultation

No consultation has occurred between the applicant and WaterNSW. Considering WaterNSW owns the property directly adjacent to the school site, WaterNSW requests we are consulted regarding the detailed design of the project to ensure the development is consistent with our requirements for development adjacent to the Upper Canal and to WaterNSW's satisfaction.

Notification of incidents

WaterNSW requires notification of any incident such as a vehicle accident, discovery of any heritage items, contamination, spill or fire that affects or could affect the WaterNSW Upper Canal corridor. Any such incident should be reported to WaterNSW on the incident Notification Number 1800 061 069 (24 hour service) as a matter of urgency.

WaterNSW requests that:

• all incidents that affect or could affect the WaterNSW Upper Canal corridor shall be reported to WaterNSW on the 24 hour Incident Notification Number 1800 061 069 as a matter of urgency.

WaterNSW requests the Department continues to consult with us regarding proposals on land adjacent to and with the potential to impact on WaterNSW infrastructure, land or assets.

WaterNSW expects our concerns to be addressed in the Response to Submissions report and that the Department notify us when this is received. WaterNSW also offers to provide input into the creation of consent conditions should this project be recommended for approval by the Minister. All correspondence should be emailed to

Environmental.Assessments@waternsw.com.au.

If you have any questions regarding this letter, please contact Justine Clarke at justine.clarke@waternsw.com.au.

Yours sincerely

CLAY PRESHAW

Manager Catchment Protection

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