

OUT15/33503

Ms Pilar Aberasturi Metropolitan Projects NSW Department of Planning and Environment GPO Box 39 SYDNEY NSW 2001

Pilar.Aberasturi@planning.nsw.gov.au

Dear Ms Aberasturi,

Staged Commercial Precinct, West Hoxton [SSD_6407] Response to exhibition of Environmental Impact Statement

I refer to your email dated 28 October 2015 requesting advice from the Department of Primary Industries (DPI) in respect to the above matter.

Comment by DPI Water

Western Sydney Parklands Trust seeks approval for a staged commercial precinct to be located at 185 & 195 Fifteenth Avenue, West Hoxton at the corner of Fifteenth Avenue and Twenty-Seventh Avenue. The McKenzie Group Consulting Planning (NSW) Pty Ltd has prepared the Environmental Impact Statement (EIS) for the Western Sydney Parklands Trust.

The Department of Primary Industries Water (DPI Water) has reviewed the EIS and relevant appendices for Hoxton Park Commercial Development prepared by McKenzie Group Consulting Planning Pty Ltd and provide the following key comments with detailed comments in the **Attachment A**.

- It is unclear at this stage whether water licences will be required for individual developments within the proposed commercial precinct, as details of the excavations required for each building are not available. Where groundwater is likely to be encountered by an individual development, DPI Water must be consulted to determine if a licence is needed. The requirement for consultation with DPI Water is recommended as part of further detailed design, assessment and management for the project.
- Two dams are proposed to be drained and filled in as part of the project. No detail however is provided in regards to the volumes to be removed, disposal and licensing requirements, and impacts on aquatic flora and fauna both within the existing dams and the potential disposal area. The removal of the dams will also need to be considered in the revised stormwater management for the

site. It is recommended this be addressed as part of detailed design for the project.

Should you require further information please contact Dr Anisul Afsar on (02) 8838 7561 or email anisul.afsar@dpi.nsw.gov.au.

Yours sincerely

Mitchell Isaacs

Director, Planning Policy & Assessment Advice

2/12/2015

Attachment A

Staged Commercial Precinct, West Hoxton [SSD_6407] Response to exhibition of EIS Detailed comments - DPI Water

DPI Water has reviewed the Environmental Impact Statement (EIS) including Preliminary Environmental Site Assessment of 185 & 195 Fifteenth Ave, Detailed Site Investigation (Contaminated) of 185 Fifteenth Avenue, Civil Engineering Report, Flora & Fauna Assessment, Geotechnical Assessment of 185 & 195 Fifteenth Ave, and Preliminary Construction Management Plan prepared by the McKenzie Group Consulting Planning Pty Ltd and other consultants for the Western Sydney Parklands Trust. DPI Water provides following comments on EIS and associated reports.

Part F: Environmental Assessment

The Civil Engineering Report provided a summary of the design principles and planning objectives for the Earthworks & Retaining Walls, Stormwater Management including stormwater quantity and quality, Ecologically Sustainable Development (ESD), and Erosion & Sediment Control of the project.

Water Quantity Management is provided in the form of a detention basin located in the north western corner of the development site. The basin will be closely aligned with the existing 750mm RCP culvert beneath Twenty Seventh Avenue. Water Quality Management is provided in the form of a water quality treatment train comprising proprietary treatment via a gross pollutant trap which will remove sediments, litter, hydrocarbons and some nutrients. Final polishing of stormwater including coarse and fine sediments, nutrients and hydrocarbons will be made within the proposed bio-retention basin (rain-garden).

It is proposed that water from the existing two dams will be drained or pumped out and the dams will be filled by earth work. However, no detail assessments were provided about the volume of water in the existing dams and the impact of dewatering on aquatic flora and fauna. DPI Water would like to seek further information from Western Sydney Parkland Trust on the issues listed below:

- Estimated volume of water to be dewatered/pumped from existing two dams,
- Approval requirements to dispose of pumped water,
- Impacts on aquatic flora and fauna those living/settled in the dams,
- Rehabilitation plan of impacted flora and fauna,
- Impacts of potential excess storm water and catchment water (in the absence of two existing dams) on the newly constructed detention basin, 750mm RCP culvert beneath Twenty Seventh Avenue, and Sydney Water's Upper Canal,
- Monitoring plan for surface and groundwater.

Groundwater:

The proposed development extends across two neighbouring properties currently used by a construction contractor, manure packaging business and an adjoining bus depot. Three underground storage tanks, associated with the use of the bus depot, are reported to have been removed. The development site is situated in close proximity to the state heritage listed Sydney Water Upper Canal.

As the application is for staged development and approval is sought for conceptual layout and indicative building envelopes it is not known at this time whether substantial excavation for individual proposals will be required.

Some mottling of the clays encountered during the geotechnical investigations suggests the possibility of salinity impacts arising from the earthworks proposed for the development. Given the occurrence of the mottled clays immediately above the upper boundary of the weathered shale, there is a high likelihood that saline groundwater flow occurs within that zone and will need to be taken into account during detailed design to prevent building and environmental impacts.

It is expected that the ongoing monitoring of groundwater for the detection of impacts from the proposed service station will be carried out in accordance with the *Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation 2014.* Therefore, DPI Water is unlikely to require specific controls in regard to groundwater contamination or monitoring that might arise from that type of development.

However, care is required in the design of individual developments to recognise the potential saline groundwater system above the uppermost weathered shale boundary (as evidenced by the presence of mottled clays) so that adverse impacts are not initiated or exacerbated. Potential impacts that should be considered include:

- Deterioration of building components or infrastructure within the precinct due to exposure to groundwater aggressive to concrete materials (i.e. sodicity or salinity effects).
- Damage to the state heritage listed Upper Canal outside of the precinct due to changed hydraulic flows and subsequent exposure to saline groundwater.
- Waterlogging and progressive scalding of ground within and outside the precinct as a result of obstruction or diversion of hydraulic flow paths by building basement structures.
- The development of saline seeps or soil scalds in low lying areas within the precinct formed by the remodelling of the land surface during bulk earthworks.
- Impacts to groundwater dependent terrestrial ecosystems outside the precinct that could be impacted by changed hydraulic flows, waterlogging or altered groundwater quality.

As the current investigations are preliminary and for conceptual layout only, it is recommended the applicant consult with DPI Water once details of proposed excavations for the individual developments are known so that the need for licences and/or further detailed assessment and the development of mitigating measures for each of the works can be determined at the appropriate time.

End Attachment A