



OUT20/12115

David Glasgow
Principal Planning Officer
Key Site Assessments
NSW Department of Planning, Industry and Environment

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Dear Mr Glasgow

**8-10 Lee St, Haymarket
Pre-EIS request for advice**

I refer to your email of 1 September 2020 to the Department of Planning, Industry and Environment (DPIE) Water and the Natural Resources Access Regulator (NRAR) about the above matter.

The following recommendations are provided by DPIE Water.

DPIE Water typically recommends fully-tanked basement designs to reduce future burden of operational requirements as well as limiting potential groundwater impacts for the duration of construction.

In this instance, however, and pending adherence to the specified recommendations in **Attachment A**, DPIE Water will consider a drained basement design due to key points including; site specific ground conditions, potentially low inflows, lesser risk of impacts to neighbouring users and/or Groundwater Dependent Ecosystems, and low potential for ground surface settlement.

Any further referrals to DPIE – Water & NRAR can be sent by email to:
landuse.enquiries@dpi.e.nsw.gov.au.

Yours sincerely

Donna Priestley
Acting Manager, Assessments
Water – Strategic Relations
8 October 2020

**8-10 Lee St, Haymarket
Pre-EIS request
Detailed Advice**

Supplementary SEARs (in addition to those already issued for the project) are recommended below for consideration of key groundwater-related issues in the EIS.

1 Assessment, Monitoring and Reporting Requirements

In order to justify a drained basement design, and to demonstrate appropriate management of potential impacts during construction and occupation, the EIS should include a comprehensive groundwater assessment report incorporating pre-construction (baseline) conditions, as well as predicted impacts, and proposed mitigation and reporting commitments, during construction and occupation phases. This should include, but is not limited to, the following:

- a.** description of pre-development (existing) conditions including baseline groundwater conditions, monitoring record and comprehensive groundwater system description:
 - i.** site and neighbouring area stratigraphy, formation description, site groundwater levels, groundwater flow paths, site aquifer and aquitard (if relevant) hydraulic characterisation
 - ii.** groundwater quality and specific consideration of groundwater potentially affected by contamination from surrounding land uses or acid sulphate soils where they are found to exist
 - iii.** neighbouring users, groundwater dependent ecosystems, water bodies and other relevant features within a one kilometre radius of the subject site
 - iv.** the above site information must not date more than six months prior to the date of lodgement of Environmental Impact Statement to account for climate trends and maintain the currency of groundwater data
- b.** description of predicted impacts, as well as a monitoring and management strategy:
 - i.** predicted impacts (extent, magnitude and duration) that are developed through numerical groundwater modelling covering construction and occupation phases
 - ii.** corresponding trigger levels (levels, quality, flow, volume and ground surface settlement) to manage any potential impacts
 - iii.** construction techniques and approaches that will be used to reduce any ongoing groundwater pumping at the same time as not causing any obstruction to natural groundwater behaviour
 - iv.** details of monitoring (groundwater levels, quality as required, rate of inflows, metered pumping)
 - v.** where a risk of ground settlement is identified due to the proposed dewatering, the proponent should provide a program of monitoring, trigger and responses to relevant consent authority as well as the relevant transport (rail) authority
 - vi.** commitment to installation of metering of ongoing groundwater take prior to application of an occupation certificate. Metering instruments should meet the NSW Government's requirements for water meters and relevant Australian standards.
- c.** proposed dewatering reporting schedule covering duration of construction and including:
 - i.** collation of monitoring records,
 - ii.** analysis of actual impacts compared to predicted impacts, noting that some impacts may be delayed,
 - iii.** magnitude and extent of potential long-term effects from the completed structure

- iv. arrangements for reporting (measurements, technical analysis and future predictions) to the relevant authority
 - d. proposed occupational phase (after building completion) reporting schedule including, at a minimum:
 - i. a description of and schedule for the installation of meters for ongoing monitoring of groundwater take using instruments that meet the NSW Government's requirements for water meters and relevant Australian standards.
 - ii. monthly monitoring to demonstrate the magnitude of groundwater pumping after construction, either through satisfactory photographic and documented evidence of no visible seepage into the building or, if inflows cannot be prevented, measured flow rates into all pump-out sumps
 - iii. a plan for the ongoing measurement, recording and annual reporting of groundwater take, water level and water quality monitoring, and licencing compliance, within the documented building management system for the development. This should include arrangements for the reporting to be provided to the relevant authority.

2 Licencing Requirements

The proponent should confirm with NRAR the licencing arrangements for potential take from the drained basement during construction and during occupation.

END ATTACHMENT A