Dear Ms Moss

WestConnex M4-M5 Link environmental impact statement (EIS) (SSD 7485)
Comment on the Environmental Impact Statement (EIS)

I refer to your email of 16 August 2017 to the Department of Primary Industries (DPI) in respect to the above matter. Comment has been sought from relevant branches of DPI. Views were also sought from NSW Department of Industry - Lands that are now a division of the broader Department and no longer within NSW DPI.

Any further referrals to DPI can be sent by email to landuse.enquiries@dpi.nsw.gov.au.

DPI has reviewed the EIS and provides the following recommendations:

- With respect to Groundwater SEAR 3b, the Department of Planning and Environment should continue to condition groundwater tunnel inflows so they do not exceed 1 L/sec/km. Currently all modelling of groundwater extraction impacts are based on this assumption and has been used to determine where proposed tunnels will be lined and unlined.

- Where tunnelling is designed to occur through shallow sandstone, there is a high risk of fracture and a high degree of connection to the overlying alluvium. The Proponent should further clarify how the long term tunnel inflow rates will be maintained below the recommended rate of 1 L/sec/km specifically for the areas where the juxtaposition of sandstone and alluvium occurs.

- DPI considers that the largely untanked (unlined) sections of tunnel which require continuous dewatering will exceed the Level 1 water quality criteria under the Aquifer Interference Policy and will trigger Level 2. The proponent should demonstrate where salt water intrusion from tidal areas will occur and then re-analyse these impacts on sensitive uses of the groundwater. The proponent should also confirm if the particle tracking component of the groundwater model was sufficient to analyse these overall impacts of salt water ingress to the tunnel.

- The proponent should advise who will be responsible for monitoring and maintaining the constructed wetland at Rozelle for the operational life of the project.

- The proponent should consult with Crown Lands and Water (water.referrals@dpi.nsw.gov.au) on the design and development of groundwater monitoring measures, which should include:
Increased monitoring of groundwater salinity at key monitoring bore sites (acknowledging the Level 2 trigger).
Use of open monitoring bores to monitor groundwater level impacts as well as groundwater quality.
Monitoring during construction and the post-construction operational phase for the life of the development. This will allow gauging of the predicted impacts, allowing mitigation measures to be undertaken in the case of exceedances.
Continuation of baseline groundwater monitoring post EIS until the handover to the construction phase. This background information will assist in assessing groundwater impacts and trigger level guidelines outside seasonal variation.

- The proponent should develop the following in consultation with Crown Lands and Water:
  - Construction Environmental Management Plan; and
  - Operational Environmental Management Plan.
- The proponent should prepare the following in consultation with Crown Lands and Water and DPI Fisheries (ahp.central@dpi.nsw.gov.au):
  - Construction Soil and Water Management Plan; and
  - Sediment Control Plans for activities occurring around Whites Creek and Rozelle Bay.
- The proponent should provide more detailed investigation into treatment during detailed design with details of final expected discharge values to be provided to Crown Lands and Water for review when the design is completed this should include more detailed assessment of discharge of nutrients into Hawthorne Canal.
- The proponent should ensure all works on waterfront land are carried out in accordance with the DPI Water Guidelines for Controlled Activities on Waterfront Land (2012).
- The proponent should liaise with Crown Land and Water to discuss licensing requirements for the ongoing take of groundwater.
- The proponent will need to compulsorily acquire any impacted Crown lands under provisions of the Land Acquisition (Just Terms Compensation Act 1991).

Yours sincerely

Alison Collaros
Director, Planning Policy & Assessment Advice
16 October 2017

DPI appreciates your help to improve our advice to you. Please complete this three minute survey about the advice we have provided to you, here: https://goo.gl/o8TXWz