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Our ref: D2017/90397

The Northern Road Upgrade
Roads and Maritime Services
PO Box 973
Parramatta NSW 2124

Dear Sir/Madam

Environmental Impact Statement – The Northern Road Upgrade (SSI 7127)

Thank you for the opportunity to comment on the Environmental Impact Statement (EIS) for the proposed upgrade of The Northern Road.

The proposal is located between Mersey Road Bringelly and Glenmore Parkway, and includes widening the crossing of the Warragamba Pipelines corridor. There is the potential for impacts on Pipelines No.1 and No.2, as well as Anchor blocks 35A-38A and 30A-31A, two air valves and the major cross-connection No.2. The Pipelines corridor is a Controlled Area declared under the *Water NSW Act 2014*, owned and managed by WaterNSW. Access is prohibited without written consent from WaterNSW.

It is understood the proposal:

- requires the acquisition or temporary lease of some WaterNSW land on both sides of the current road alignment, as well as an easement for drainage works
- includes changing the access to the Pipelines corridor to left-in and left-out only from both sides of The Northern Road
- is at-grade over the Pipelines (ie no bridge) as they are buried and concrete encased, and the road will be built up a further 1.5 metres.

Consultation by RMS with WaterNSW has been occurring since 2011, and this section in particular since 2015. WaterNSW also attended a recent Northern Road Upgrade workshop hosted by RMS.

WaterNSW has reviewed the EIS (Jacobs Australia for RMS; June 2017), and makes the following comments:

Stormwater

- Table 5.1 of Appendix K (p.26) notes the potential project related impacts include an increase in the rate and volume of runoff discharging to the open trenches of the Warragamba Pipelines, which could increase the likelihood of bank instability and also cause added wetting of the ground around the concrete support plinths.

WaterNSW requires that there is no increase in stormwater flows into the Pipelines corridor over the pre-development state. While it is WaterNSW's preference that any additional runoff or increase in peak flow hydrographs (for any storm) due to the increase in impervious area due to road widening be drained away from the WaterNSW corridor, WaterNSW supports the proposal for the provision of a new pipes trunk drainage line conveying the runoff to discharge to drainage line BLC DL06 via and armoured spreader on DEOH land, as identified on Figure

6.2 Sheet 2 of Appendix K, and in Vol.1 of the EIS (s5.2.7; Table 5-5; p.107). The headwall is to be located on DEOH land, and not within the WaterNSW boundary.

- Additional discharge to rural dams in the area surrounding the project resulting in increased flows into the Pipelines corridor must also be addressed, for example:
 - into drainage line BLC DL03 from the works in the vicinity of Gates Road on Lot 23 DP 207317 (Appendix K; Figure 6.2; Sheet 2)
 - the diversion of flow from a section of the new six-lane road west along Littlefields Road where it would discharge to an existing dam located on the southern side of the road adjacent to the limit of works, which flows into the Pipeline corridor further west (Appendix K; Figure 6.1; Sheet 1).
- The EIS (Vol.1; s8.2.6; Figure 8-7; p.488) identifies that a sediment basin is proposed for near the intersection of Gates Road and The Northern Road. The overflow drainage path for this basin has not been identified. Any spill or overflow from this basin must be directed away from the Warragamba Pipelines corridor to avoid the possibility of sediment laden water entering the corridor.
- All areas of WaterNSW land impacted by the proposal should be stabilised and restored after construction is concluded.

Vibration Impacts and Geotechnical Considerations

- WaterNSW notes the proposal includes adding an extra 1.5 metres of fill to form the road above the Warragamba Pipelines. The acceptability of this method – as opposed to installing an ‘at-grade’ bridge – should be verified with geotechnical sampling, and reviewed by WaterNSW’s engineers.
- Section 7.2.3 of the EIS (Vol.1; p.234) discusses vibration criteria, including for structural damage, and the German DIN Standard 4150-3 is proposed only for use where heritage structures are impacted. It should be noted the Pipelines are concrete lined and the potential for vibration from construction to impact the lining should not be underestimated. A precondition survey, including of the drainage works beside the pipeline stockpile site on the eastern side of the corridor, and vibration monitoring during construction is considered necessary, with the German Standard being applied. Mitigation measures should be incorporated in the Construction Noise and Vibration Management Plan (CNVMP), with the use of rock-breaking machinery excluded in close proximity to the Pipelines.

Property Acquisition and Temporary Leases

- In Section 5.2.14 (Vol.1; Table 5-9) it is noted that the RMS proposes to acquire parts of lots currently owned and managed by WaterNSW as part of the Warragamba Pipelines corridor:
 - land parcel 70 (RMS ID) is known as Lot A DP 341893
 - land parcel 71 Lot A DP 341629 is incorrectly identified as Crown Land (road reserve). This lot is under the ownership of WaterNSW, and should be identified as such
 - WaterNSW lots subject to acquisition and temporary leases have not been identified in Tables 5-9 or 5-10, but include Lot 1 DP 226972 and others according to previous correspondence between RMS and WaterNSW
 - the Project Area on various figures (eg Figure 7-1 p.195 EIS Vol.1) identifies further WaterNSW lots will be impacted (Lot A DP 347475 and/ or Lot A DP 359606), however these lots are not listed in the EIS for either acquisition or lease.
 - proposed lease areas must not interfere with WaterNSW access to and operation of the pipeline stockpile compound located on Lot 1 DP 226972.

WaterNSW's preference is for the acquisition to occur post-construction to allow accurate survey and acquisition to the new boundaries, with an access, works and services lease in place during the construction period to protect WaterNSW's interests.

Utilities and Services

- WaterNSW notes Section 5.4.10 (Vol.1) of the EIS discusses utilities and services, but does not identify the 11kV power supply crossing The Northern Road to supply the operation of WaterNSW's critical Cross Connection 2 (CC2). CC2 must be able to be operated during any water quality or quantity incidents, or where an issue with the integrity of one of the Pipelines arises requiring isolation of one or the other Pipelines. The power supply is also required to operate a sump pump for the pit containing the connecting valve and electrical controls. WaterNSW would require a 415 Volt generator to be hard-wired into the CC2 electrical switch room if the power were to be interrupted for a long period.

There is also a safety issue arising from the road being raised 1.5 metres closer to the power supply at this point. Depending on timing of works, this issue may be able to be addressed through the proposal by Cardno, acting for the Sydney Science Park development, to upgrade the power supply and underground it. Preliminary advice has been provided to Cardno on the basis the feeder will be accommodated in the widened Northern Road, i.e. that it is not located on land that will remain under the ownership of WaterNSW after acquisitions by RMS and subsequent boundary adjustments.

- Table 5-14 in the EIS (Vol.1; s5.4.10; p.136) states "The water main crossing would need to have sufficient protection, otherwise there would be a need to relocate or replace the crossing so that connection to water mains are maintained." The proposal may result in Sydney Water temporarily not being able to pump water up to the Blue Mountains if the 450 mm and 900 mm rising mains are relocated. Depending upon the timing, an interruption to supply from the Orchard Hills Water Treatment Plant to the Blue Mountains storages may result in the depletion of available supplies. Close consultation with WaterNSW and Sydney Water is required regarding this aspect of the proposal.

Access and Security

- WaterNSW owns and manages the Warragamba to Prospect Water Supply Pipelines corridor as a Controlled Area declared under the *Water NSW Act 2014*. Access is prohibited unless a written access consent has been obtained from WaterNSW. More information regarding access consents is available on WaterNSW's website at <http://www.waternsw.com.au/water-quality/catchment/manage/special-areas/access>.
- WaterNSW access to the Pipelines corridor must be maintained at all times during construction for security and maintenance purposes. As previously specified, WaterNSW requires an 8.8 metre design turn path for service vehicles, and a 12.5 metre turn path for a truck.
- WaterNSW requires security fencing to be installed to WaterNSW standards along the new boundaries. Any existing security fencing along boundaries that are not proposed to change must be maintained. Should the fencing be damaged, any repairs or replacement must occur to WaterNSW's standards and at RMS's expense. Any existing fencing proposed to be replaced must be removed and disposed of at a facility licenced to accept such waste.

Incident Notification

- WaterNSW requests that all refuelling, oil changes and vehicle wash-downs are conducted within the construction compounds and appropriate mitigation measures are adopted to prevent spills and leaks at all other operational locations.
- A tested emergency response plan must be in place in the event of damage/breakage of the Pipeline during bulk earthworks and road construction works.

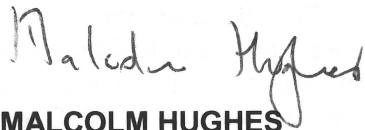
- WaterNSW requires notification of any incident such as a vehicle accident, discovery of any heritage items, spill or fire that affects or could affect the Warragamba Pipelines including the corridor. Any such incident should be reported to Water NSW on the Incident Notification Number 1800 061 069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

WaterNSW requests that if there are any amendments to the project arising from further assessment, and if these amendments have potential implications for WaterNSW, that the RMS consult with us on these amendments prior to making decisions.

WaterNSW would appreciate being provided with a copy of the submissions report.

If you have any queries on this matter, please contact Alison Kniha, Catchment Protection Planning Manager on 02 9865 2505 or at alison.kniha@waternsw.com.au.

Yours sincerely



MALCOLM HUGHES
Manager Catchment Protection